Georgia Gwinnett

COLLEGE

## Georgia Gwinnett College Catalog

2015-2016

Georgia Gwinnett College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 300334097 or call 404-679-4500 for questions about the accreditation of Georgia Gwinnett College.

The Commission should further be contacted to file a third-party comment at the time of the institution's decennial review or regarding alleged non-compliance with a requirement or standard. Normal inquiries about the institution, such as admissions requirements, financial aid, educational programs, etc., should be addressed directly to the institution and not to the Commission's office.

The authoritative source of information concerning Board approved policies and procedures governing academic and administrative matters is the Policy Manual of the Board of Regents. In cases of inconsistency, Board of Regents policy takes precedence. The Administrative Policy Manual is Georgia Gwinnett College's primary policy manual. In the event of a conflict between this Catalog and the Administrative Policy Manual, the Administrative Policy Manual prevails.

The statements set forth in this catalog are for informational purposes only and should not be construed as the basis of a contract between a student and the institution. While the provisions of this catalog will ordinarily be applied as stated, Georgia Gwinnett College reserves the right to change any provision listed in this catalog, including but not limited to academic requirements for graduation, without actual notice to individual students. Every effort will be made to keep students advised of any such changes. Information on changes will be available in the various academic and administrative offices or the Registrar's Office and on-line at http://www.ggc.usg.edu/index.php/Admissions-RegistrarMain.html. Students are responsible for information regarding catalog changes and current graduation requirements.

# G <br> Georgia Gwinnett <br> COLLEGE 

## Catalog <br> 2015-2016

Georgia Gwinnett College is an Equal Opportunity College open to any qualified individual without regard to race, religion, sex, age, color, national or ethnic origin, or disability. Pursuant to all applicable federal anti-discrimination laws and regulations, Georgia Gwinnett College does not discriminate against any of the protected categories of individuals in the administration of its policies, programs or activities. This non-discriminatory policy includes admission policies, scholarship and loan programs, employment practices and athletics and other school-administered programs.

Georgia Gwinnett College<br>1000 University Center Lane<br>Lawrenceville, GA 30043<br>(678) 407-5000<br>(800) 252-5119<br>www.ggc.edu

## Table of Contents

Georgia Gwinnett College Catalog ..... 1
Catalog 2015-2016 ..... 3
Table of Contents ..... 4
2015-2016 Calendar of Academic Activities .....  .6
Tentative Academic Calendars for 2015-2019 ..... 8
General Information. ..... 9
Vision. ..... 10
Mission ..... 10
Operating Principles ..... 10
History of Georgia Gwinnett College ..... 11
Hours of Operation ..... 12
Admission PoliciesAdmissions Policies and Procedures ..... 13
International Students ..... 25
Financial Information ..... 27
Financial Aid ..... 35
Policies and Procedures ..... 44
Disability Services ..... 45
Academic Freedom ..... 45
Acceptable Use of Information Technology Resources ..... 46
Security and Confidentiality of Records ..... 47
Student Records Management and Security Policy ..... 48
Research ..... 53
Academic Policies and Procedures ..... 61
Student Success Courses ..... 62
Policies for Students with Student Success Requirements ..... 62
Student Success Courses in English for Academic Purposes/English as a Second Language ..... 66
GGC Honors Program ..... 67
Student Study Abroad Policy and Procedures ..... 68
GLOBAL STUDIES CERTIFICATION ..... 74
I-Courses ..... 75
Student Attendance Policy ..... 75
Student Field Trip and Off Campus Event Policy ..... 76
Mandatory Participation in Alert Notification System ..... 76
Academic Standards of Progress ..... 76
Grade Point Average upon Academic Renewal. ..... 80
Registration ..... 81
Academic Advising and Mentoring ..... 82
Georgia Gwinnett College Students Enrolling at Other Institutions as Transient Status ..... 84
ARCHE - Cross Registration ..... 85
Auditing Courses ..... 85
Repeated Courses ..... 85
Academic Standing. ..... 86
Transcript Requests ..... 88
Academic Integrity ..... 88
Program Completion ..... 89
Graduation with Honors ..... 90
General Education ..... 90
Core Curriculum ..... 91
Upper Division Major Requirements ..... 93
Demonstration of English/Reading Competency and Regents Writing Competency ..... 93
United States and Georgia History and Constitution ..... 93
Multiple Majors ..... 94
Multiple Concentrations ..... 95
Academic Minors Policy ..... 95
University System and Technical College System of Articulation Agreement ..... 96
Associate Degrees, Diplomas \& Certificates ..... 96
General Education Course Transfer ..... 96
Georgia Gwinnett College Credit Granting Policy ..... 96
Programs of Study ..... 98
School of Business ..... 99
School of Education ..... 109
School of Health Sciences ..... 113
School of Liberal Arts ..... 117
School of Science and Technology ..... 156
GGC COURSE LISTING ..... 198

## 2015-2016 Calendar of Academic Activities

## FALL 2015 CALENDAR

| June 1 | Deadline to Apply for Admission for Fall 2015 |
| :--- | :--- |
| June 8 | Document Deadline for Admission for Fall 2015 |
| July 29 | Deadline for Fall 2015 Tuition Payments and Housing Fees for Continuing Students |
| July 29 | Deadline for Fall 2014 Tuition Payment and Housing Fees for New Students Attending Bear Essentials <br> Orientation prior to July 24 |
| August 1 | Deadline for Petitions for In-State Residency |
| August 17 | Classes Begin |
| August 23 | Final Deadline for Fall 2014 Tuition Payment and Housing Fees |
| August 23 | Drop/Add Ends Full and Session A |
| September 7 | Labor Day Holiday |
| September 9 | Mid-term grades due (Session A - PHED courses only) |
| September 10 | Last day to withdraw with "W"" Session A - PHED courses only) |
| October 1 | Applications for Spring 2015 Graduation Due |
| October 5 | Mid-term Grades Due (Full Session) |
| October 7 | Mid-term - Last Day to Withdraw with a "W"' at 5:00 pm (Full Session) |
| October 7 | Classes end (Session A - PHED courses only) |
| October 8 | Classes begin (Session B - PHED courses only) |
| October 13 | Drop/Add ends (Session B - PHED courses only) |
| October 30 | Mid-term grades due (Session B - PHED courses only) |
| November 3 | Last day to withdraw with "W"" (Session B - PHED courses only) |
| November 24-29 | Thanksgiving Holidays |
| December 5 | Classes End (Full Session and Session B) |
| December 6-12 | Final Examinations |
| December 17 | Commencement |

## SPRING 2016 CALENDAR

| November 15 | Deadline to Apply for Admission for Spring 2016 |
| :--- | :--- |
| November 22 | Document Deadline for Admission for Spring 2016 |
| December 1 | Deadline for Petitions for In-State Residency |
| January 11 | Classes Begin |
| January 17 | Drop/Add Ends Full and Session A |
| January 18 | Martin Luther King, Jr. Holiday NO CLASSES |
| February 1 | Mid-term grades due (Session A - PHED courses only) |
| February 4 | Last day to withdraw with "W"" (Session A - PHED courses only) |
| March 1 | Applications for Summer or Fall 2016 Graduation Due |
| February 29 | Mid-term grades due (Full Session) |
| March 4 | Mid-term - Last Day to Withdraw with a "W"' at 5 pm (Full Session) |
| March 1 | Classes end (Session A - PHED courses only) |
| March 3 | Mid-term - Last Day to Withdraw with a "W" at 5 pm (Full Session) |
| March 7-13 | Spring Break - NO CLASSES |
| March 14 | Classes begin (Session B - PHED courses only) |
| March 20 | Drop/Add ends (Session B - PHED courses only) |
| March 22 | Assessment Day |
| April 4 | Mid-term grades due (Session B - PHED courses only) |
| April 6 | Last day to withdraw with "W" (Session B - PHED courses only)* |
| May 3 | Classes End (Full Session and Session B) |
| May 4 - 10 | Final Examinations |
| May 12 | Commencement - GGC Library Lawn |

## SUMMER 2016 CALENDAR

| Month Date | Description |
| :--- | :--- |
| May 1 | Deadline for Petitions for In-State Residency |
| May 23 | Classes Begin for Summer Full and Summer A Session |
| May 24 | Drop/Add Ends for Summer Full and Summer A Session |
| May 30 | Memorial Day Holiday - NO CLASSES |
| June 1 | Mid-term Grades Due Session A |
| June 6 | Mid-term Session A - Last Day to Withdraw with a "W" for Summer Session A |
| June 14 | Mid-term Grades Due Summer Full |
| June 16 | Midterm Full Summer Session - Last Day to Withdraw with a "W"' for Summer Full |
| June 16 | Last Day of Classes for Session A |
| June 20-21 | Final Examinations for Session A |
| June 22 | Classes Begin for Summer Session B |
| June 23 | Drop/Add Ends for Session B |
| July 1 | Mid-term Grades Due Session B |
| July 4-5 | Independence Day Holiday - NO CLASSES |
| July 6 | Mid-term Session B - Last Day to Withdraw with a "W" for Summer Session B |
| July 18 | Last Day of Classes for Full Summer Session |
| July 19 - 21 | Final Exams for Summer Session Full |
| July 20 | Last Day of Classes for Session B |
| July 21 and 25 | Final exams for Summer Session B |
| August 2 | Commencement |

## Tentative Academic Calendars for 2015-2019

2016-2017

| Fall 2016 |  |
| :---: | :---: |
| Classes begin | August 22 |
| Labor Day | September 5 |
| Thanksgiving | November 21-26 |
| Classes end | December 10 |
| Exams | December 12-17 |
| Spring 2017 |  |
| Classes begin | January 9 |
| MLK | January 16 |
| Spring Break | March 5-12 |
| Classes end | May 1 |
| Exams | May 3-8 |
| Summer 2017 |  |
| Classes begin | May 22 (Session A and full) Memorial |
| Day | May 29 |
| Session A ends | June 19 |
| Exams Session A | June 20-21 |
| Classes begin B | June 26 |
| July 4th Holiday | July 4 |
| Classes end | July24 (Session B and full) |
| Exams | July 25-26 |
| (Session B and full) |  |
| 2017-2018 |  |
| Fall 2017 |  |
| Classes begin | August 21 |
| Labor Day | September 4 |
| Thanksgiving | November 20-25 |
| Classes end | December 9 |
| Exams | December 11-16 |
| Spring 2018 |  |
| Classes begin | January 8 |
| MLK | January 15 |
| Spring Break | March 4-11 |
| Classes end | April 30 |
| Exams | May 2-7 |
| Summer 2018 |  |
| Classes begin | May 21 (Session A and full) Memorial |
| Day | May 28 |
| Session A ends | June 18 |
| Exams Session A | June 19-20 |
| Classes begin B | June 25 |
| July 4th Holiday | July 4 |
| Classes end | July23 |
| (Session B and full) |  |
| Exams | July 24-25 |
| (Session B and full) |  |


| 2018-2019 |  |
| :--- | :--- |
| Fall 2018 |  |
| Classes begin | August 20 |
| Labor Day | September 3 |
| Thanksgiving | November 19-24 |
| Classes end | December 8 |
| Exams | December 10-15 |
| Spring 2019 |  |
| Classes begin | January 7 |
| MLK | January 21 |
| Spring Break | March 3-10 |
| Classes end | April 29 |
| Exams | May 1-6 |
|  |  |
| Summer 2019 |  |
| Classes begin | May 20 |
| (Session A and full) |  |
| Memorial Day | May 27 |
| Session A ends | June 17 |
| Exams Session A | June 18-19 |
| Classes begin B | June 24 |
| July 4th Holiday | July 4 |
| Classes end | July22 |
| (Session B and full) |  |
| Exams | July 23-24 |
| (Session B and full) |  |
| 2019-20 |  |
| Fall 2019 |  |
| Classes begin | August 19 |
| Labor Day | September 2 |
| Thanksgiving | November 26-December 1 |
| Classes end | December 7 |
| Exams | December 9-14 |
| Spring 2020 |  |
| Classes begin | January 13 |
| MLK | January 20 |
| Spring Break | March 9-15 |
| Classes end | April 30 |
| Exams | May 2-7 |
| Summer 2020 |  |
| Classes begin | May 20 (Session A and full) |
| Memorial Day | May 25 |
| Session A ends | June 16 |
| Exams Session A | June 17-18 |
| Classes begin B | June 22 |
| July 4th Holiday | July 4 |
| Classes end | July 16 |
| (Session B and full) |  |
| Exams |  |
| (Session B and full) |  |

## General Information

# ( <br> <br> Georgia Gwinnett 

 <br> <br> Georgia Gwinnett}

## COLLEGE


#### Abstract

Vision Georgia Gwinnett College will be a premier 21st Century Liberal Arts college where learning will take place continuously in and beyond the confines of the traditional classroom. Its cornerstones will be innovative use of educational technology and a commitment to an integrated educational experience that develops the whole person. Georgia Gwinnett College will be a wellspring of educational innovation. It will be a dynamic learning community where faculty engagement in teaching and mentoring students will be the hallmark. It will be a driving force for change in student success. As such, it will be a model for innovative approaches to education, faculty engagement with students and highly efficient student, facility and administrative services.


## Mission

Georgia Gwinnett College provides access to targeted baccalaureate level degrees that meet the economic development needs of the growing and diverse population of the northeast Atlanta metropolitan region. It emphasizes the innovative use of technology and active-learning environments to provide students enhanced learning experiences, practical opportunities to apply knowledge, increased scheduling flexibility and a variety of course delivery options. Georgia Gwinnett College's outstanding faculty and staff actively engage students in various learning environments serve as mentors and advisors and assist students through programs designed to enhance their academic, social and personal development. Georgia Gwinnett College produces contributing citizens and future leaders for Georgia and the nation. Its graduates are inspired to contribute to the local, state, national and international communities and are prepared to anticipate and respond effectively to an uncertain and changing world.

## Operating Principles

Georgia Gwinnett College is committed to:

- Continuous review, assessment, change and experimentation
- Holistic development of students
- Building partnerships with its business and community constituents
- Developing a workforce of highly competent teachers and staff who are also action oriented and innovative
- Innovatively integrating technology into educational experiences
- Diversity and building a multicultural environment to prepare students to succeed in a global society
- Being the community of choice to work for faculty, administrators and staff
- Providing a supportive work environment that encompasses involvement, open communications, a spirit of collegiality and an appropriate reward system


## History of Georgia Gwinnett College

Georgia Gwinnett College opened its doors on August 18, 2006, as the nation's first four-year public college founded in the 21 st century and the first four-year public institution created in Georgia in more than 100 years.

In October of 2004, the University System of Georgia Board of Regents voted to create a new four-year college in Gwinnett County. The new college would inhabit the Gwinnett University Center campus and replace the four institutions then offering courses on the site.

In March of 2005, the Georgia General Assembly passed Senate Resolution 33, authored by Sen. Don Balfour, establishing a new college in Gwinnett County. That same year, Gov. Sonny Perdue deferred a $\$ 5$ million appropriation in the 2006 state budget for a 29,000 square-foot classroom building. In September of 2005, the Board of Regents hired Dr. Daniel J. Kaufman, a retired Army brigadier general, as the College's inaugural president. A month later, the Regents voted to name the institution, "Georgia Gwinnett College."

In 2006, Georgia Gwinnett College welcomed 118 juniors as its first students, and in 2007, its first freshman class. In 2008, the College held its inaugural commencement ceremony, graduating 17 students. In January of 2009, GGC held its first winter graduation ceremony, and that spring, it graduated 38 students. It added a summer commencement ceremony in 2013.

In June 2009, the Commission on Colleges of the Southern Association of Colleges and Schools granted Georgia Gwinnett its initial accreditation in record time, giving the college the ability to apply for research grants and awards from foundations for students and faculty members, and expand its degree programs. When the doors opened for fall semester 2009, more than 3,000 students were on campus.

In the summer of 2010, GGC celebrated the opening of its new Library and Learning Center and its first student residence halls, transforming the commuter college into a residential campus. More than 5,300 students enrolled for the 2010 fall semester. The new GGC Student Center opened in January 2011. A new laboratory building opened in August 2011 to serve the college's dramatically expanding enrollment, which reached 9,400 in fall 2012.

The 2012-13 academic year was the Grizzlies' first season of official intercollegiate competition in the National Association of Intercollegiate Athletics, and marked the completion of the varsity athletics facilities. In early 2013, the college broke ground on its Allied Health and Sciences Building, future home of the School of Science and Technology, the newly formed School of Health Sciences and its nursing program. The building will open for the fall 2014 semester.

President Kaufman departed GGC for the presidency of the Gwinnett Chamber of Commerce as of July 1, 2013 and Dr. Stanley "Stas"" Preczewski, formerly vice president for Academic and Student Affairs, served as interim president for about a year before being named president in May of 2014.

With almost 10,000 students on campus during the fall of 2013 , GGC was ranked the \#5 top Southern regional public college by U.S. News \& World Report magazine. It is also a College of Distinction and was designated military-friendly by multiple service member organizations.

## Hours of Operation

> Georgia Gwinnett College is open for classes between the following times:
> Monday through Friday - 7:00 a.m. to 11:00 p.m. Saturday - 7:00 a.m. to 7:00 p.m. Sunday - 1:00 p.m. to 6:00 p.m.
> Administrative Offices at Georgia Gwinnett College are open between the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday.
> Fitness Center-Monday through Thursday - 7:00 a.m. to 7:00 p.m.
> Friday - 7:00 a.m. to 4:00 p.m. and Saturday - 9:00 a.m. to $12 \mathrm{p} . \mathrm{m}$.

## Observation of Religious Holidays By Students

In accordance with the University System of Georgia policies and procedures, Georgia Gwinnett College provides students the option of observing religious holidays unless doing so would impose an undue hardship on the college. Students who miss class to observe a religious holiday during scheduled class times must make arrangements in advance with the faculty member. Faculty should be sensitive to the student issues regarding religious holidays and are encouraged to provide an alternative option for making up class work.

This policy is aligned with that of the USG Academic Affairs Handbook, Section 2.1, "Semester System, Uniform Academic Calendar, Cancellation of Classes, and Religious Holidays." An excerpt dealing with the observance of religious holidays by students is provided below:

## Religious Holiday Schedule

Decisions as to which religious holidays are covered by institutional policy are left to the discretion of individual USG institutions since the characteristics of the student body and faculty may vary considerably among institutions.

COLLEGE

## Admission Policies

## Admissions Policies and Procedures

## Application Deadlines

All application materials must be submitted by the dates below for each semester.

| Fall Semester | May 2 |
| :--- | :--- |
| Spring Semester | November 15 |
| Summer Semester | April 1 |

All documents must be submitted by the dates below for each semester.

| Fall Semester | May 9 |
| :--- | :--- |
| Spring Semester | November 22 |
| Summer Semester | April 8 |

## Admission Policy

It is the policy of Georgia Gwinnett College to create admissions requirements that fulfill the stated mission of the college, by encouraging students of diverse levels of preparation, ethnicity and age to attend this institution and develop their full potential as individuals and members of the community. These guidelines are in keeping with Georgia Gwinnett College's strong commitment to student success, a process that begins when students first apply to the college and continues through graduation and job placement. Georgia Gwinnett College complies with the access mission institution admission standards established under University System of Georgia Board of Regents policies and is committed to ensuring that the admissions procedures implement these standards.

## Application Procedures

All students applying for admission to Georgia Gwinnett College must complete the following procedures:

1. Complete an electronic Application for Admission, available at
https://start.ggc.edu/Datatel.ERecruiting.Web.External/Pages/Welcom.aspx. Students who are unable to complete the electronic application should contact the Georgia Gwinnett College Admissions Office at 678-407-5313.
2. Submit the required $\$ 20$ application fee electronically with the application.
3. Freshmen and applicants with fewer than 30 transfer hours must request that their most recently-attended high school submit an official bigh school transcript to Georgia Gwinnett College.
4. Applicants who have attended any college (as a transfer student or as a HOPE-MOWR student) must request official college transcripts from all colleges previously attended. These official transcripts must be sent directly to Georgia Gwinnett College.
5. Students must submit the Georgia Gwinnett College Immunization Form completed and signed by a physician.

For more details on the specific immunizations required for admission to Georgia Gwinnett College, consult the Georgia Gwinnett College Immunization Form available on the Georgia Gwinnett College Admissions website.
6. Applicants who indicate that they have a criminal conviction or criminal charges pending will be asked to provide supplemental information in consideration of the applicant's eligibility for admission to Georgia Gwinnett College. Failure to provide this information may impact the applicant's eligibility for admission.
7. Admission of students with disabilities follows Board of Regents policy. Because the core curriculum of each institution requires students to complete college-level courses in English, mathematics, social science and science, all students must complete the Required High School Curriculum in these areas. Students with disabilities that preclude the acquisition of a foreign language may petition for admission without this requirement according to procedures established by the System. Students with disabilities are expected to meet the sector's minimum SAT or ACT score requirements but should request the appropriate testing accommodations from the agencies administering the SAT or ACT.
8. The mailing address for submission of all documents (except the electronic admissions application) is:Georgia Applicants will be provided with a username and PIN by the college to allow the student to check their application
Georgia Gwinnett College 2015-16 Catalog
status. A final decision on your acceptance into the College will be made after all application materials have been received.

Gwinnett College<br>Office of Admissions<br>1000 University Center Lane<br>Lawrenceville, GA 30043

## Admission Requirements for Programs Leading to the Baccalaureate Degree

## Freshman Requirements

Applicants who have never attended other colleges or who have earned fewer than 30 transferable semester hours from previous colleges are classified as freshman. The following requirements are in effect for freshman applicants:

## High School Diploma

Freshmen must have a High School Diploma from a high school accredited by a regional accrediting association (such as the Southern Association of Colleges and Schools), or by the Georgia Accrediting Commission, or from a public school regulated by a school system and state department of education. Certificates of Attendance or Special Education Diplomas are not acceptable. High school students with a general Diploma must have a minimum 2.00 grade point average based on the grades in the 17 units of Required High School Curriculum as defined by the Board of Regents.

As part of the admission process and in compliance with Board of Regents Policy, each student will be evaluated to determine satisfactory completion of the following 17 units of the University System of Georgia Required High School Curriculum (RHSC):

| Course Category | Instructional Emphases |
| :--- | :--- |
| ENGLISH (4 Carnegie Units Required) | Grammar and Usage; Literature (American, English, World) <br> and Advanced Composition Skills |
| MATHEMATICS (4 Carnegie Units Required) | Math I, II, III and a fourth unit of math from the BOR <br> approved list, or the equivalent courses. <br> Or <br> Algebra I and II, geometry and a fourth year of advanced <br> math, or equivalent courses. |
| SCIENCE (4 Carnegie Units Required) | One laboratory course from the life sciences and one <br> laboratory course from the physical sciences |
| SOCIAL SCIENCE (3 Carnegie Units Required) | At least one course focusing on United States studies and <br> one course focusing on world studies |
| FOREIGN LANGUAGE (2 Carnegie Units Required) | Units must be in the same language; emphasis on speaking, <br> listening, reading and writing in that language. Two (2) units <br> of American Sign Language may be used to satisfy this <br> requirement. |

## RHSC Deficiencies

Students who have not completed the required RHSC units must take additional courses as outlined below to make up for the RHSC deficiencies. All RHSC deficiencies must be made up before the student has earned 20 semester hours of college level credit. College courses taken to satisfy RHSC deficiencies are required for degree completion can be used to fulfill Core Curriculum or program requirements at Georgia Gwinnett College. The credits earned for these courses are calculated in the term grade point average as well as the cumulative Georgia Gwinnett College grade point average. Transfer students who satisfy RHSC requirements at another institution of the University System of Georgia will be acknowledged as having met those requirements.

| Area of RHSC Deficiency | Prescribed Remediation |
| :--- | :--- |
| ENGLISH | Pass COMPASS placement tests in Reading and English or complete <br> Student Success coursework in Reading and English. Courses used to <br> satisfy RHSC deficiency in English and reading: ENGL 0989 <br> Foundations for English Composition |
| MATHEMATICS | Pass COMPASS placement tests in Mathematics or complete <br> Student Success coursework in Mathematics. Courses used to <br> satisfy RHSC deficiency in mathematics: <br> MATH 0987 Foundations Quantitative Reasoning or MATH 0989 <br> Foundations for College Algebra |
| SCIENCE | Complete a laboratory science course from Area D of the General <br> Education curriculum; course must be successfully completed with a <br> grade of "C" or better. <br> Courses used to satisfy RHSC deficiency in science: <br> PSCI 1101K Physical Sciences I <br> BIOL 1101K Biological Sciences I |
| SOCIAL SCIENCE | Complete a course from Area E of the General Education <br> curriculum; course must be successfully completed with a grade of <br> "C" or better. <br> Courses used to satisfy RHSC deficiency in social science: |
| ANTH 1102 Anthropology |  |
| PSYC 1102 Introduction to Psychology |  |
| SOC 1101 Sociology |  |
| HIST 1111 Survey of World History I |  |
| HIST 1112 Survey of World History II HIST |  |
| $1121 ~ S u r v e y ~ o f ~ W e s t e r n ~ C i v i l i z a t i o n ~ I ~$ |  | intion II | HIST 1122 Survey of Western Civilization II |
| :--- |
| FOREIGN LANGUAGE |
| Complete an approved foreign language course from the General <br> Education curriculum; course must be successfully completed with a <br> grade of "C" or better. <br> Courses used to satisfy RHSC deficiency in foreign language: <br> SPAN 1001 Elementary Spanish I <br> FREN 1001 Elementary French I |

## Course Placement

Test scores will be required for all freshman applicants. Students must meet testing requirements before an admissions decision can be made. The testing requirement can be satisfied by meeting the minimum scores on 1 of 3 tests:

1. Minimum SAT Scores:

Critical Reading 480
Math 460
2. Minimum ACT Scores:

English 21
Math 19
3. Required Minimum COMPASS scores:

English $\quad 32$ or eWrite 6
Reading 62

Math 20
COMPASS scores will also be used for course placement. Applicants will be denied admission if they place into all three areas of Learning Support or if they score below the minimum on one of the sections of the COMPASS exam.

Beginning freshmen must also meet the minimum 2.00 high school GPA.
Students who attend a high school outside the United States must be evaluated by an approved evaluation service such as Joseph Silny \& Associates; World Education Services; or Educational Credential Evaluators, Inc. The student must submit transcripts to an evaluation service and request that an appropriate evaluation be submitted to the Georgia Gwinnett College Admissions Office.

## Non-Traditional Freshmen

The Director of Admissions will make the decision on Non-Traditional applications without going to Committee based on the following criteria:
H.S. GPA of 2.0 or greater - regular admissions
H.S. GPA between 2.0 and 1.50 - conditional admission up to 14 hours
H.S. GPA less than 1.50 - applications still reviewed by the committee.

Non-traditional freshmen are defined as individuals who meet all of the following criteria:

1. Have been out of high school at least five years and whose high school class graduated at least five years ago;
2. Hold a high school diploma from an accredited or approved high school or have satisfactorily completed the GED; and,
3. Have earned fewer than 30 transferable semester credit hours.

All non-traditional freshmen must be screened for placement in learning support courses using a placement test administered by a USG institution and must meet USG criteria for exemption or exit of learning support in reading, English and mathematics.

For students transferring from a Commission on Colleges (COC)-accredited TCSG college, comparable scores from the TCSG college may be used according to guidelines issued by the USG chief academic officer.

## Students with Fewer than 30 Transfer hours of College Credit

The college transcripts of students who have attended other colleges (but earned fewer than 30 semester hours of eligible transfer credit) will be considered as part of the admissions process. If a student meets the freshman requirements listed above and their combined GPA from previous college work is at or above a 2.00 , the candidate will be admitted without condition; those who fail to meet both these requirements will be denied admission.

A student who has fewer than 30 semester hours of college credit will be admitted on Academic Probation, if one of the following two conditions occur: a) the student meets the freshman admission requirements listed above but has a combined GPA from previous college work below a 2.00 or b) the student does not meet the freshman admission requirements listed above but has a combined GPA from previous college work above a 2.00 . Furthermore, students will be required to maintain Satisfactory Academic Progress as defined by their academic classification in order to be placed in good academic standing at Georgia Gwinnett College.

## Exceptions to Freshman Admission Requirements for Special Groups of Students

## Home School Applicants

Applicants from home school or graduates of non-accredited high schools may be considered for admission upon submission of a portfolio of the student's academic work and official SAT/ACT scores. Students who have completed each of the 16 -unit RHSC areas as documented in the portfolio (or as documented by the SAT II Subject Tests) and have achieved the minimum SAT scores described in "Course Placement." All applicants in this category must be reviewed by the Admissions Committee and an interview with the candidate may be required.

## Required High School Curriculum Requirements (RHSC) - Home School and Non-Accredited High School Applicants

All home school and non-accredited high school applicants must demonstrate equivalent RHSC competence as required by Board of Regents policy. Home School applicants who receive credit from accredited institutions and curriculum providers can demonstrate compliance by submitting official transcripts from these providers. These transcripts will evaluated for RHSC competence based on the general RHSC requirements detailed under freshmen requirements.

Home School applicants who have credits from non-accredited institutions and curriculum providers, as well as applicants from non-accredited High Schools, will submit a Home School/Non-Accredited High School College Preparatory Credit Evaluation Form (or a transcript in similar form) and one of the following:

- SAT II or CLEP scores in Biology, Chemistry or Physics, American History and World History and a foreign language. Applicants should contact the Admissions Office for the minimum score criteria
- A detailed description of course work completed in each subject area that includes the subject title, course description, texts or program used and primary teacher as well as writing samples, reading lists, major projects and assignments, exceptional learning experiences and additional standardized test scores such as the Iowa Basic Skills that can be used to evaluate RHSC compliance. Each subject should be representative of one Carnegie Unit (or academic year) of study. The Admissions Committee will review the portfolio for RHSC compliance and at its sole discretion can recommend that an applicant has met some, all or none of the RHSC requirements.
- Applicants who do not satisfy these requirements may still be admitted, but will be required to enroll in the appropriate courses (outlined above under the general "RHSC Requirements") to satisfy the RHSC deficiencies.


## Home School Portfolio Review Procedures

The committee will review the student portfolio with the primary goal of determining the applicant's potential for success at the college level. If the committee is not satisfied with the material submitted in the portfolio, it will seek additional information from the applicant as a condition for admission. If the committee's request is not satisfied, the applicant will be denied admission. Information regarding how applicants can satisfy the portfolio requirement and guidance in preparing their portfolio is contained on the GGC website at http://www.ggc.edu/admissions/forms-anddocuments by clicking on the Home School Evaluation Form.

## General Educational Development (GED)

Persons over 18 years of age (or whose class has already graduated from high school) whose secondary schooling was interrupted may be admitted by presenting General Educational Development (GED) equivalency. Official GED test score reports must be mailed directly from the Technical College System of Georgia Office of Adult Literacy/GED Testing Service to the Georgia Gwinnett College Admissions Office. GED applicants are strongly suggested (but not required) to take either the College Board Scholastic Assessment Test (SAT) or the American College Test (ACT), the results of which will be made part of the applicant's portfolio. All GED applications must be reviewed by the Admissions Committee, and an interview with the candidate may be required.

## GED cutoff scores are as follows:

## Traditional students - Minimum score of 260/2600/690-regular admission

## Non-Traditional students - Minimum score of 225/2250/600 - regular admission

## MOWR-Dual Enrollment

Georgia Gwinnett College 2015-16 Catalog

Move On When Ready (MOWR) program provides eligible high school students with the opportunity to take college courses to satisfy their high school graduation or home study completion requirements while earning college credit.

## Eligibility Requirements

- You must be a high school student entering the junior or senior year
- A minimum of 480 verbal and 460 math scores on the SAT-1 and a combined SAT score of 970 or a minimum of 21 English and 19 mathematics scores on the ACT and at least a composite score of 20 . COMPASS test scores cannot be used to satisfy this requirement
- A high school grade point average (GPA) of 3.0 or higher in courses taken from the required College Preparatory Curriculum unit
- Submit a MOWR Student Participation Agreement
- A plan to complete the University System of Georgia College Preparatory Curriculum requirement on schedule
- You must take courses from the approved courses list


## Transfer Student Requirements

Applicants who have attended other colleges and have earned more than 30 semester hours are classified as transfer students. Students admitted from other colleges are required to meet all general requirements regarding examinations and application deadlines. Students planning to transfer from other colleges must request that the Registrar's Office at each college previously attended forward an official transcript to the Admissions Office at Georgia Gwinnett College.
Official transcripts are required whether or not the applicant receives transfer credit. Documents must be mailed directly from the other college to the Georgia Gwinnett College Admissions Office.

## Admission Requirements

1. Transfer applicants must present a cumulative grade point average of 2.00 or above (based on a 4.00 scale) on all work attempted and must be in good academic standing at the last institution attended in order to be admitted to Georgia Gwinnett College in good academic standing.
2. Transfer students with a GPA of 1.99 or below will be denied with the option to appeal their decision.

## Transfer of Credit

Evaluations of transfer credit are available for student viewing on their account on Banner Web upon completion of the admissions process and attendance at a Georgia Gwinnett College Bear Essentials Orientation Session. Georgia Gwinnett College stands behind and assumes responsibility for all credits recorded on official student transcripts.

1. Credit earned in regionally accredited colleges may be transferred at full value to Georgia Gwinnett College provided the course content is comparable to that of a course offered by Georgia Gwinnett College or, for non-comparable courses, those that satisfy the guidelines of the University System of Georgia.
2. Transfer students are required to earn a grade of "C" or better in all Area A requirements (ENGL 1101 and 1102, MATH 1111, or equivalents) in order for those courses to transfer to Georgia Gwinnett College. In addition, a grade of " C " or better is required in all courses used in Area F and in the major.
3. Other courses earned at regionally accredited institutions may be permitted to transfer with grades of "D," to the extent that the grades on all credits accepted for transfer average to at least 2.00.
4. The transfer grade-point-average (GPA) will not be included in the student's institutional GPA at Georgia Gwinnett College but will be included in the total GPA used to determine academic honors and used by certain financial aid sources (i.e., HOPE scholarship).
5. The total number of combined hours through military experiences shall not exceed 15 semester hours. In order to determine military credit, the student must submit discharge paperwork (DD-214) or a Joint Service Transcript (JST).
6. Transfer credit from colleges and universities outside the United States must be evaluated by an approved evaluation service such as Joseph Silny \& Associates; World Education Services; or Educational Credential Evaluators, Inc. The student must submit transcripts to an evaluation service and request that an appropriate evaluation be submitted to the Georgia Gwinnett College Admissions Office.
7. Transfer students must complete the Georgia Gwinnett College Competency Test. Documentation of completion of the Regents Examinations or exemption of Regents at a previous University System of Georgia institution will transfer to Georgia Gwinnett College.
8. Transfer students must complete requirements in United States History and Constitution as well as Georgia History and Constitution prior to graduation. Completion of American History and American Government at a previous University System of Georgia institution will transfer to Georgia Gwinnett College. Completion of American History and American Government at a non-University System of Georgia institution (including out-of-state institutions) will satisfy the U.S. History and Constitution requirement upon transfer, but not the Georgia History and Constitution requirement. A proficiency examination in these legislative requirements is available for the student to complete prior to graduation. See the Testing Center for additional information.

## Transfer Admission Guarantee (TAG) with Georgia Perimeter College

Georgia Gwinnett College has entered into an agreement with Georgia Perimeter College to admit students who have completed an Associate's degree from Georgia Perimeter College. The goals of this agreement are:

1. To minimize barriers to transfer and assist prospective transfer students at Georgia Perimeter College to progress toward their baccalaureate degree;
2. To enable Georgia Perimeter College students to follow a course of study that allows them to begin upper division course work immediately upon transfer;
3. To assure Georgia Perimeter College students that if they follow the terms of their approve transfer agreement, they are admitted to Georgia Gwinnett College in the term agreed upon;
4. To facilitate cooperation between the counseling offices and the transfer centers at Georgia Gwinnett College and Georgia Perimeter College.

The agreement will guarantee general admission to Georgia Gwinnett College of Georgia Perimeter College students who fulfill the criteria listed below; it does not necessarily assure admission to a specific major. Georgia Gwinnett College and Georgia Perimeter College will form an oversight committee charged with evaluation and review of this agreement. This committee will meet on a biannual basis during March to review the agreement and reconfirm it for the next academic period. Either institution may terminate this agreement for any reason by providing written notice before August 1st of the academic year in which the transfer agreement shall terminate.

## Conditions of the Agreement

To qualify for the Transfer Admission Guarantee, a student must:

1. Complete the Intent to Transfer Form signed by both the student and a Georgia Perimeter College Transfer Admission Guarantee counselor.
2. Submit a Georgia Gwinnett College Undergraduate Application for Admission during the application filing period the student wishes to transfer.
3. Complete, with a grade of C grades or better, the English composition and mathematics courses required for admission at least two semesters preceding the term the student plans to transfer to Georgia Gwinnett College.
4. Earn an Associate's degree at Georgia Perimeter College by the end of the semester preceding transfer
5. Complete the last 30 of their 60 or more Georgia Gwinnett College transferable units at Georgia Perimeter College
6. Earn a cumulative GPA of at least 2.3 in all Georgia Gwinnett College transferable course work by the end of the current semester and maintain a 2.3 GPA or higher in all courses taken prior to transfer.
7. Meet conditions of Georgia Gwinnett College Code of Student Conduct.

## Terms of the Agreement

- Apply for admission to GGC during the application filing period for the semester in which you wish to transfer.
- Complete the required courses in English composition (English 1101 and English 1102) and one mathematics course (Math 1001 or Math 1111 or Math 1113 (Pre-calculus) or Math 2431 (Calculus I)) NB: Math-based majors and future Science and Technology majors are required to take Math 2431.
- Earn an Associate's degree by the end of the semester preceding transfer.
- Complete the last 30 of your 60 or more GGC transferable units at GPC; and

Georgia Gwinnett College 2015-16 Catalog

- Earn a cumulative GPA of at least 2.3 in all GGC transferable course work by the end of the current semester and maintain a 2.3 GPA or higher in all courses taken prior to transfer.
- Meet conditions of Georgia Gwinnett College Code of Student Conduct.
- You must earn a grade of C or better in each course of the core at GPC.


## Required Course Pattern

Completion of the core curriculum at GPC is required. Once you have successfully completed the core curriculum at GPC and have met all of the terms of the agreement outlined above, the credits that you have earned successfully at GPC will be accepted as credits in the core at GGC.

Attendance at a Bear Essentials (BE) registration session or an orientation session the semester you sign this Intent to Transfer form. Call GGC to make an appointment. You will be assigned a GGC mentor.

## Non-Traditional Transfers

Non-traditional transfer students are defined as individuals who meet all of the following criteria:

1. Have been out of high school at least five years or whose high school class graduated at least five (5) years ago; and,
2. Have earned thirty (30) or more transferable hours of college credit, as defined in Section 4.2.1.1 of this Policy Manual.

A non-traditional transfer student can be admitted, according to the institution's policy, if his/her transfer GPA is below the transfer standard for the institution's sector. These students do not count against the number of Limited Admissions allowed for transfer students at that institution. Institutions should require placement criteria as appropriate.

## Non-Traditional Students

In order to make the USG more accessible to citizens who are not of traditional college-going age and to encourage a higher proportion of Georgians to benefit from life-long learning, institutions may admit as many non-traditional students as is appropriate based on institutional mission, academic programs and success in retaining and graduating non-traditional students.
The number of non-traditional students an institution enrolls will not be counted against the percent of Limited Admissions allowed each institution.
For non-traditional freshman requirements, refer to Freshman Requirements, Non-Traditional Freshman. For nontraditional transfer requirements, refer to Transfer Student Requirements, Non-Traditional Transfers.

## Persons Aged 62 or Over

Pursuant to provisions of the Georgia Constitution, the University System of Georgia establishes the following rules with respect to enrollment of persons 62 years of age or older in programs of University System of Georgia schools. To be eligible for enrollment under this provision such persons:

1. Must be residents of Georgia, 62 years of age or older at the time of registration and shall present a birth certificate or other comparable written documentation of age to enable the institution to determine eligibility May enroll as a regular or auditing student in courses offered for resident credit on a "space available" basis without payment of fees, except for supplies, laboratory or shop fees
2. Shall meet all University System of Georgia and institution undergraduate requirements; however, institutions may exercise discretion in exceptional cases where circumstances indicate that certain requirements such as high school graduation and minimum test scores are inappropriate. In those instances involving discretionary admission institutions will provide diagnostic methods to determine whether or not participation in Learning Support will be required prior to enrollment in regular credit courses. Reasonable prerequisites may be required in certain courses.
3. Shall have all usual student and institutional records maintained; however, institutions will not report such students for budgetary purposes.
4. Must meet all University System of Georgia, institution and legislated degree requirements if they are degree- seeking students

## Course Credits for International Baccalaureate Diploma Completion

## System-wide Implementation Guidelines:

In recognition of the fact that a strong predictor of college success is a rigorous high school curriculum, USG institutions will award academic credit for appropriate courses in the USG core curriculum for corresponding subject areas in a completed International Baccalaureate ("IB") Diploma Program in which the student obtained designated end of course assessment scores.

Both Standard Level (college preparatory) and Higher Level (college comparable) courses will be considered for credit in a completed Diploma Program, as the program does not allow students to take all Higher Level courses. Higher Level end- of-course assessment scores of four or more and Standard Level scores of five or better suggests that the IB Program work is comparable to a college course.

The course credit schema in the table below will be used system-wide, with allowances made for variable credits in each category to account for labs and on occasion, for depth of material covered in the IB Program subject area that may be comparable to more than one college level course.

| Semester Credit Hours Granted |  |  |
| :---: | :---: | :---: |
| Score | Standard Level | Higher Level |
| 4 | 0 | $3-4$ |
| 5 | $0-4$ | $3-8$ |
| $6-7$ | $3-8$ | $3-12$ |

The particular courses for which students receive college credit may vary from institution to institution, depending on what courses the institution offers. Determinations of course comparability will be made by the respective departments. Institutions shall, however, attempt to have consistency across the USG on common numbered core courses.

The total college course credits awarded for IB assessments may not exceed 24 .
All institutions shall have a widely disseminated policy governing the award of course credits for IB assessments. The policy will apply to both resident and non-resident students.

Institutions will collect data on IB students, analyze the data and recommend revisions to the policy if warranted. A student may opt not to accept credits if he/she sees that acceptance of credits may disadvantage him/her. Further, if a student believes that the assessment of his/her work from the IB Diploma Program and subsequent awarding of credits for such is in error, he/she may file an appeal with the appropriate department chair and request a reassessment. As with other academic matters, if the issue is not satisfactorily resolved at the department level, the student may then appeal to the dean of the respective college, with a final appeal to the vice president for academic affairs, whose decision in the matter will be final.

Individual Institution Implementation Guidelines: Along with the system-wide policy, individual institutions may choose to offer additional benefits. After the appropriate core courses are credited, if the student (diploma completer) has additional acceptable IB assessment scores ( 4 or better for HL, 5 or better for SL) that have not been awarded course credits, individual institutions may award credit for other lower-division courses outside of the core for up to a maximum of 24 credits (total).

Institutions may choose to award other benefits to diploma completers as well (e.g. early registration, parking pass, etc.). If that is the case, details will be available on the institution's website.

Institutions may choose to award credit to students who did not complete the diploma program but were awarded a certificate for completion of a specific subject area for Higher Level courses with an assessment score of 4 or better.

## Notes about Admission

An applicant may be declared eligible for admission, registration, enrollment or re-enrollment at University System institution only after satisfying all requirements established by the University System of Georgia and the institution concerned. The institution shall have the right to examine and appraise the character, personality and qualifications of the applicant. In order that this examination and appraisal may be made, the applicant shall furnish to the institution such biographical and other information, including references, as may be required. Each unit of the University System reserves the right to refuse admission to a non-resident of Georgia, to an applicant whose admission would cause the institution to exceed its maximum capacity, to an applicant whose request for admission is only to a program that is already filled, to an applicant whose transcript(s) are from unaccredited institution or who is otherwise ineligible for admission. Applicants seeking additional information on referral of students to other institutions, right to limit admissions, limited admissions/Presidential exceptions, or the use of social security numbers, should refer to the Board of Regent's manual: www.usg.edu.

## Readmission

Students who must apply for readmission include transients and students who have not been enrolled for 12 consecutive months ( 3 terms) as well as students changing classification. If the student does not enroll, the process must be repeated. The application for readmission is online at
https://start.ggc.edu/Datatel.ERecruiting.Web.External/Pages/Welcome.aspx. The readmission application must be submitted along with the non-refundable processing fee and any required supporting credentials fees by the deadline for the term of the desired re-enrollment.

## Advanced Placement, College Level Entrance Program, International Baccalaureate and Military Experience

Georgia Gwinnett College accepts college credit by examination through the United States Military, the CollegeLevel Examination Program (CLEP), the Advanced Placement (AP) Program and the International Baccalaureate (IB). For information regarding testing, please refer to Testing Service's website. For additional information regarding experiential learning credit, please refer to the Registrar's website. The following rules govern the awarding of credit by examination:

1. The maximum credit that can be earned by any alternative credit is limited to 30 semester hours ( 15 military, 24 IB).
2. A student who is currently enrolled in the course or has earned a grade other than a W in the course may not earn CLEP credit for the course.
3. CLEP, IB and military credits carry no academic grade and are not computed into the grade point average (GPA).
4. Credits earned through CLEP may be transferred from other institutions in the University System of Georgia upon verification that CLEP scores are equal to or higher than those required by Georgia Gwinnett College. Students are responsible for verifying the score by having the College Board send an official score to Georgia Gwinnett College.
5. Students who failed to achieve the CLEP score necessary to receive credit must wait six months before being allowed to re-test.
6. Information about specific test scores may be found on the website, at the testing center, or in the Registrar's Office

The process for determining if credit should be awarded is:

1. Faculty members in the academic discipline shall review the topic areas covered in the test and compare those with corresponding GGC courses. Based on this comparison they shall identify an appropriate test scores for which credit will be awarded and then recommend those test scores to the Dean of the School.
2. The Dean will review the faculty recommendations and approve or disapprove the recommendation.
3. If the courses impacted are General Education courses the General Education Committee will also review the recommendation.
4. If approved by the Dean and the General Education Committee (if necessary), the recommended test scores will be forwarded to the Vice President of Academic and Student Affairs (VPASA) for review and final decision.
5. If approved by the VPASA the test scores will be forwarded to the Executive Director of Enrollment Management for inclusion in the policy for Alternative Credit Options and credit will be given.

The process of approving credit for military experience will include a review of the student's Joint Service Transcript (JST) or the DD 214.

## Admission Requirements for Undergraduate Programs Not Leading to the Baccalaureate Degree

Auditors
Students who submit evidence of graduation from a high school or a GED certificate may register to audit a course as space in the course permits. Under extraordinary circumstances, the president may waive the requirement of high school diploma or equivalent. Students registered as auditors shall be required to pay the regular tuition and fees for enrollment.

## Non-Degree Students

Students may enroll as non-degree students for a maximum of 12 semester credit hours (including institutional credit). Students may not enroll in any course for which there is a learning support prerequisite unless they have been screened for and have exempted the relevant learning support course.
Georgia Gwinnett College will not allow students to apply under this status, but will permit the Director of Admissions to allow students to be admitted under this category on an as needed basis.

## Post-Baccalaureate Students

Students who have earned the baccalaureate degree from a regionally accredited institution may enroll as nondegree students in courses with no limitation on the number of hours of undergraduate credit these students can earn.

## Transient Students

Transient Students from Other Institutions
A student enrolled in a degree program at another accredited college or university may apply to Georgia Gwinnett College for transient status. Such a student is one who expects to return to the college or university where previously enrolled and must have the permission of the home institution to attend Georgia Gwinnett College. The applicant who desires transient status must submit an application and a transient letter from the home institution. Transient students are admitted on a semester basis only. Georgia Gwinnett College does not guarantee that a transient student will be able to secure the courses desired, nor is Georgia Gwinnett College responsible for advising a transient student of courses that are applicable to their program of study at the home institution. Transcripts are not automatically forwarded to the home institution. Transient students must submit a written request to have a transcript sent back to the home institution.

## Admission Appeals

Any applicant denied admission to Georgia Gwinnett College may appeal the decision by submitting a written Request for Admissions Appeal to the Admissions Committee. The Committee will review an appeal to determine the student's potential for college-level academic work; an interview with the student may also be required. If an appeal is approved the student will be admitted conditionally with a probationary status and must complete any prescribed conditions as specified by the Committee. Any exceptions to this policy must be appealed to the Vice President for Academic and Student Affairs.

## Out-of-State Enrollment

See Board of Regents Policy Manual Section 4.3.1

## Classification of Students for Tuition Purposes

See Board of Regents Policy Manual Section 4.3.2

## Tuition Differential Waivers

See Board of Regents Policy Manual Section 4.3.3

## Verification of Lawful Presence

Each University System institution shall verify the lawful presence in the United States of every successfully admitted person applying for resident tuition status, as defined in Section 7.3 of this Policy Manual, and of every person admitted to an institution referenced in Section 4.1.6 of this Policy Manual.

See Board of Regents Policy Manual Section 4.3.4

## International Students

At GGC, an international student is an individual who meets one of the following criteria:

- Currently living outside the U.S. and will require an F-1 visa to study in the U.S.
- Not a U.S. Citizen or a Permanent Resident and is currently in the U.S. on an F-1 visa
- Currently in the U.S. on another non-immigrant visa classification which permits part-time or full-time study


## Degree Seeking International Students

Freshman Students:

Students whose secondary education was completed outside the United States system of education may be admitted with acceptable foreign credentials and English language proficiency as described below:

- Foreign Credentials

International students must demonstrate the required level of academic preparation as evidenced by a certificate, diploma, or other document deemed generally equivalent to a U.S. required high school curriculum by an independent evaluation service which is a member of the National Association of Credential Evaluation Services, Inc. (NACES). In special circumstances, other reputable credential evaluators will be considered. Students must submit transcripts to an evaluation service and request that an appropriate evaluation be submitted to the Georgia Gwinnett College Office of Internationalization.

- English Proficiency Requirement

Students whose first language is not English must also demonstrate English language proficiency. Generally, English proficiency is measured by the Test of English as a Foreign Language (TOEFL). The minimum TOEFL score acceptable for admission to GGC is 537 on the TOEFL paper test, 203 on the TOEFL computer test, or 74 on the TOEFL IBT. Non-native speakers of English who satisfy SAT Verbal or ACT English admission requirement do not need to take TOEFL for admission purposes. The recommended minimum score for the SAT Verbal is 480 and the recommended minimum score for the ACT English is 21 . Students may also choose to submit IELTS with a minimum score of 6 . [NOTE: The IELTS requirement of 6.0 has been GGC policy since we began admitting international students in 2012.]

Students who submit their application from within the United States must meet testing requirements for freshman applicants. Please see GGC Administrative Policy Manual 4.2.1.1.

## Transfer Students:

Students who are non-native speakers of English, who transfer from an institution of higher education outside the U.S. where English was not the language of instruction, must submit a TOEFL score as well as the official translation of their foreign credentials.

Students who are non-native speakers of English and who are transferring from an accredited institution of higher education inside the U.S. may be required to retake the TOEFL if their English proficiency cannot be fully demonstrated. Official transcripts of course work taken from previously attended colleges must also be submitted.

## Financial Requirements

International students must provide documentation showing sufficient resources to cover tuition, room and board, health insurance and other living expenses. In accordance with the payment policy of the College, students agree to pay all tuition and fees when due to Georgia Gwinnett College (including, but not limited to, tuition, mandatory student fees, and College Housing fees). Failure to pay a student account in full by the published deadline may result in a student being dropped from classes and will jeopardize a student's ability to maintain valid immigration status.

## International Non-Degree Seeking Students <br> J Visa Students:

The University System of Georgia Board of Regents is a designated J-1 visa sponsor. As such, GGC may host J-1 visa students. In addition, students who have J-1 sponsorship through an outside agency such as the Institute of International Education (IIE) or International Student Exchange Programs (ISEP) may enroll as non-degree-seeking students at GGC for the length of the program. Admission criteria and program length for these types of special programs will be established between the Office of Internationalization and the sponsoring agency.

## Visa Classifications Other Than F-1 or J-1

Individuals with certain visa classifications may enroll as full-time or part-time students. Individuals should contact the Office of Internationalization for verification of their eligibility to study in the United States.

## Presidential Exceptions

International students may also be admitted as Presidential Exceptions. See Board of Regents Policy Manual 4.2.1.2 and BoR Academic \& Student Affairs Handbook Section 3.2.6.

## Health Insurance

International students holding F or J visas are required to have student health insurance that meets the minimum standards set by the University System of Georgia. As a result, all students will initially be charged for coverage. Students who are already covered by an insurance policy (i.e., through parent plans, family plans or employer-sponsored plans) can easily opt out of the plan through a secure on-line process. Once the information has been verified, all charges will be waived. Students must apply for the waiver each academic year for which they are enrolled in classes, and this must be done during the waiver period. Students who do not apply for and receive the waivers during the enrollment period will be responsible for the insurance fees. Students who fail to submit creditable health insurance information by the waiver period will automatically be enrolled in the system-wide student health insurance plan.

Students should not purchase insurance from their home country until they have reviewed information on the insurance waiver policy and are sure they will qualify for a waiver. Students should verify that the insurance policy they are considering meets the waiver minimums before purchasing it. Additional information is available through this link: http://www.usg.edu/student affairs/students/student health insurance program SHIP.

## Housing for International Students

On-campus housing is not available year round. If students choose not to return home during semester breaks, they must arrange for alternative living arrangements off-campus. COLLEGE

## Financial Information

See the schedule below to determine your current tuition rate. All tuition rates are in addition to student fees.

## In-State Tuition

| New and Existing Students | Tuition per credit hour |
| :--- | :---: |
| Incoming freshmen and transfer students | $\$ 128.13$ |
| Flat rate tuition 15 credits and over | $\$ 1,922$ |

## Out-of-State Tuition

| New and Existing Students | Tuition per credit hour |
| :--- | :---: |
| Incoming freshmen and transfer students | $\$ 478.27$ |
| Flat rate tuition 15 credits and over | $\$ 7,174$ |

Mandatory Fees*

| Activity Fee | $\$ 5,6$ or more credit hours <br> $\$ 25,1-5$ Credit hours |
| :--- | :--- |
| Athletic Fee | $\$ 160,6$ or more credits |
| $\$ 80,1-5$ credits |  |, | Campus Infrastructure and Improvement Fee | $\$ 35$ |
| :--- | :--- |
| Health Fee | $\$ 25$ |
| Health and Wellness Fee | $\$ 70,6$ or more credits |
| $\$ 35,1-5$ credits |  |
| International Studies Fee | $\$ 7$ |
| Institutional Fee | $\$ 245,5$ or more credit hours |
| Parking Fee | $\$ 122.50,1-4$ credits |
| Student Center Fee | $\$ 100,6$ or more credit hours |
| Freshman Tutorial fee | $\$ 50,1-5$ credit hours |
| Technology Fee | $\$ 60,1-5$ credit hours |
|  | $\$ 40$ |

See the schedule below to determine your current tuition rate. All tuition rates are in addition to student fees.
In-State Tuition

| New and Existing Students | Tuition per credit hour |
| :--- | :---: |
| Incoming freshmen and transfer students | $\$ 128.13$ |
| Flat rate tuition 15 credits and over | $\$ 1,922$ |

## Out-of-State Tuition

| New and Existing Students | Tuition per credit hour |
| :--- | :---: |
| Incoming freshmen and transfer students | $\$ 478.27$ |
| Flat rate tuition 15 credits and over | $\$ 7,174$ |

## Mandatory Fees*

| Activity Fee | $\$ 55,6$ or more credit hours |
| :--- | :--- |
| $\$ 25,1-5$ Credit hours |  |, | $\$ 160,6$ or more credits |
| :--- |
| $\$ 80,1-5$ credits |, | Athletic Fee | $\$ 35$ |
| :--- | :--- |
| Campus Infrastructure and Improvement Fee | $\$ 25$ |
| Health Fee | $\$ 70,6$ or more credits |
| $\$ 35,1-5$ credits |  |


| New Student ID | $\$ 10$ |
| :--- | :--- |
| Orientation Fee | $\$ 90$, new students attending orientation |

*Mandatory fees must be paid by all students, including transfer and transient students. See the descriptions of fees below for more information.

Course Fees

| Art Fee | $\$ 10$ |
| :--- | :--- |
| Educational Field Experience | $\$ 20$ |
| Hybrid Course | $\$ 10$ |
| Math0099 Software | $\$ 80$ |
| Nursing Lab Fee | $\$ 250$ |
| PHED | $\$ 10$ |
| PHED1120 | $\$ 50$ |
| Science Lab Fee | $\$ 75$ |
| Student Liability Insurance (Internships) | $\$ 20$ |
| Weekend Cohort Fee | $\$ 200$ |

Miscellaneous Fees

| Accuplacer Placement Test | $\$ 50$ |
| :--- | :--- |
| ACT Exam | $\$ 50$ |
| Application Fee | $\$ 20$ |
| Background Check (Teaching/Residential Life) | $\$ 25$ |
| College Level Exam Program | $\$ 105$ |
| Compass Placement Test | $\$ 20$ GGC students <br> $\$ 50$, non-GGC students <br> $\$ 10$, retest all |
| Disconnect/Covered Smoke Detector | $\$ 100$ |
| Distance Learning Exam | $\$ 50$ |
| DSST Fee | $\$ 90$ |
| Early Arrival | $\$ 200$ |
| Entering/Exiting through window | $\$ 125$ |


| Failure to Evacuate | \$150 |
| :---: | :---: |
| Failure to Follow Emergency Procedures | \$150 |
| False Fire Alarm | \$250 |
| Georgia History Exam | \$15 |
| Georgia U.S. Constitution Exam | \$15 |
| Graduation Fee | \$50 |
| Honor Program Application | \$10 |
| Housing fine; miscellaneous damages | $\$ 50$ minimum; rate varies on damage |
| ID Replacement | \$15 |
| Improper Check-Out | \$25 |
| Improper Room Change | \$25 |
| Institutional TOEFL Testing | \$50 |
| ITEC 1001 Placement Exam | \$20 |
| Late Departure | \$125 |
| Late Graduation Fee | \$50 |
| Late Payment Fee | \$25 |
| Late Registration Fee | \$50 |
| Lock Change | \$180 |
| Lock Out | \$50 |
| Michigan Test of English Proficiency (MTELP) | \$50 |
| Miller Analogies Test | \$75 |
| Nursing Acceptance Fee | \$125 |
| Nursing Application Fee | \$20 |
| Parapro | \$35 |
| Parking Fines: Exceeding Speeding Limits | \$100 |
| Parking Fines: Illegal Parking | \$40 |
| Parking Fines: Parking Fine Restrictive/Reserved | \$35 |
| Parking Fines: Parking in Fire Lane | \$100 |


| Parking Fines: Parking in Handicap W/O Permit | $\$ 200$ |
| :--- | :--- |
| Parking Fines: Reckless Driving | $\$ 75$ |
| Parking Fines: Traffic Control Device Failure | $\$ 50$ |
| Removal of Furniture | $\$ 120$ |
| Removal of Window Screen or Window Stopper | $\$ 100$ |
| SAT Exam | $\$ 50$ |
| Smoking | $\$ 25$ |
| Student Teacher Education Fee | $\$ 100$ |
| TEAS - Nursing Exam | $\$ 76$ |
| Abandoned trash fee per bag | $\$ 30$ |
| Unauthorized Visitation | $\$ 150$ |
| World Language Placement French Exam | $\$ 20$ |
| World Language Placement Spanish Exam | $\$ 20$ |

Georgia Gwinnett College and the University System of Georgia reserves the right to change any of their policies, rules, regulations and fees without prior notice to the public.

## Description of Mandatory Fees

## Activity Fee

Student Activity fees are used by the Division of Student Affairs or registered student organizations to provide recreational, entertaining, educational, or culturally enriching programs or services which do not solely support academic programs. This includes student and professional staff members in the Office of Student Involvement. Programs, services, and staff positions must directly benefit or serve the GGC student body and events and services must be free and open to all GGC students. This does not include ordinary or operational expenses of denominational or sectarian religious activities, partisan political activities, social fraternities and sororities, nor charitable causes or contributions. Student activity fees cannot be used for the direct benefit of faculty, staff, or community members or for fundraisers, benefits, or registered student organization members-only field trips or events.

Athletic Fee
The Athletics fee supports the operation of intercollegiate athletics including facilities, operations, and the issuance of a bond package.

## Campus Infrastructure and Improvement Fee

The campus infrastructure and improvement fee will be utilized to help maintain and improve GGC's campus infrastructure.

Freshman Tutorial Fee
The freshman tutoring fee is applied in order to maintain and expand quality tutoring offerings across campus. Freshmen require special attention because they are just beginning college. We want to ensure that they receive the support and attention now and in the future.

Health Fee
The Health fee is used to offset costs associated with the physical and emotional health needs of students including basic first aid, health-related education, counseling, and disability services.

Health and Wellness Fee
The Wellness and Recreation Fee is used to support the bond repayment of the Wellness and Recreation Center. Additionally, the fee supports procurement, staffing, maintenance, programming, facilities, and equipment purchases related to Wellness and Recreation. The Wellness and Recreation Fee is used by the Division of Student Affairs to support student programming initiatives includes, but not limited to, Wellness, Recreation, and Outdoor Adventure (e.g. hiking, sailing, skiing, eco tours, and rafting trips open to all students.

International Studies Fee
The International fee is used to offset the costs of the Office of Internationalization, program development, international educational initiatives, student development programs related to international topics, and the increase of international study abroad opportunities in alignment with the mission of the institution and USG strategic goals.

Library access Fee
The Library Access fee is applied in order to maintain and expand quality library offerings. This fee will ensure college freshmen will have access to library resources and services to support their scholarship throughout their careers at GGC.

## Parking Fee

The Parking fee provides funding for the newly constructed parking deck, residential surface parking, future parking decks, and maintenance of all parking. Permits may be picked up at the Public Safety Office location in the A Building. Payment of this mandatory fee provides all students with a parking permit and allows access to the appropriately designated parking lots as well as the parking deck. These permits are valid in designated student spaces on a first come/first served basis.

Institutional Fee
The Institutional Fee is determined by the Board of Regents and goes towards offsetting the gap between the cost of instruction, what the state budgets and what tuition will not cover.

Student Center Fee
The Student Center fee is used by the Division of Student Affairs to fund the design and construction of the GGC Student Center as well as the continued bond repayment. The Student Center Fee will also be used for operational costs associated with the building that benefit and serve GGC students. These costs include necessary equipment and furniture, replacement of equipment and furniture, professional and student staff support, and other Student Center services.

Technology Fee
Technology fee revenues will be used primarily for the direct benefit of students to assist them in meeting their educational objectives. Access to technology is important to the collegiate academic experience including productivity tools, specific software packages, databases, specialized computers and printers, infrastructure, etc.

## Making Payments

Registration is not complete until payment of tuition and fees are made in full. Georgia Gwinnett College reserves the right at any time during the semester to drop any student from classes for failure to pay tuition and fees in full. Students who cease to attend by do not formally drop their classes will incur financial and academic consequences. Students are encouraged to take advantage of the online payment system using a credit card or ACH debit from a U.S based personal savings or checking account.

To view your account balance and make an online payment, login and click on the Student Account link on the main menu.

Payments may also be made in the Student Accounts office located in Building D, room 1147. For more information, contact Student Accounts at studentaccounts@ggc.edu or 678.407.5293.

Student Accounts sends bills directly to students via their GGC email accounts. Students who experience any difficulty accessing their email should seek immediate resolution by contacting the GGC Help Desk (678.407.5611), as payment will be expected on the "payment due date" published on the GGC website. Paper bills are only issued when the student is no longer enrolled in the College and a balance is due.

## Payment Deadline

All tuition and fees must be paid in full by the established deadlines each semester.
In exchange for the opportunity to enroll in courses at Georgia Gwinnett College, to receive educational services, and other goods of valuable consideration such as housing etc., students understand and agree that:
All charges become a financial obligation upon registration and once assessed agree to pay all tuition and fees when due to Georgia Gwinnett College (including, but not limited to, tuition, mandatory student fees, and College Housing fees). An account with a delinquent balance will be prohibited from registration until the account is paid in full. The College may require payment of a delinquent balance in the form of certified funds such as cash, money order or a cashier's check.
Balances due as a result of loss/reduction of financial aid, or other credits originally anticipated, due to ineligibility, attendance, incomplete paperwork, withdrawal, etc., is the student's responsibility and is required to be paid immediately.
Failure to pay any sums when due to Georgia Gwinnett College may result in late fees and referral to collections where allowable under the law, in which event the student agrees to pay all fees and costs of collection. Once placed with a collection agency, the account may be subject to up to $33 \%$ percent collection charge, or the allowable rate. The College has the right to litigate and the student will be responsible for all associated costs including attorney fees. In addition, a delinquency report will be filed with a credit bureau. The College is authorized to release financial information about an account to those concerned with collecting the balance owed.

Failure to pay any sums when due to Georgia Gwinnett College will result in the placement of a hold on the student account until the account and all costs of collections, including payment of reasonable attorney's fees, has been paid. The hold will prevent access to grades, registering for courses, receiving a diploma and obtaining transcripts.

## Financial Aid

Contact Information<br>Office of Financial Aid<br>Georgia Gwinnett College<br>1000 University Center Lane<br>Lawrenceville, GA 30043<br>Phone: 678-407-5701<br>Fax: 678-407-5925<br>ggcfinancialaid@ggc.edu<br>http://www.ggc.edu/admissions/financial-aid

## Eligibility for Financial Aid

Eligibility depends on many factors. To receive aid from the student aid programs offered at Georgia Gwinnett College, students must satisfy the following:

1. Be enrolled or accepted for enrollment as a regular student working toward a degree in an eligible program of study.
2. Have a high school diploma or a General Education Development (GED) Certificate.
3. Be a U.S. Citizen or an eligible non-citizen.
4. Have a valid Social Security Number.
5. Not be in default on a Federal Stafford Loan or own an over-payment on a Federal Student Grant.
6. Make Satisfactory Academic Progress (SAP).
7. Register with the Selective Service if required. If the student is a male age 18-25 and has not yet registered with the Selective Service, he can give the Selective Service permission to register him by checking a box on the Free Application for Federal Student Aid (FAFSA). He can also register through the Internet at www.sss.gov.
8. Sign a statement on the FAFSA certifying that the student (1) will use federal and/or state student financial aid only to pay for attending an institution of higher learning, (2) is not in default on a federal student loan or has made satisfactory arrangements to repay it, (3) does not owe money back on a federal student grant or has made satisfactory arrangements to repay it (4) will notify the school if he or she defaults on a federal student loan.

## Applying for Financial Aid

A student must complete a Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov in order to be considered for financial aid at Georgia Gwinnett College. When completing the FAFSA, use the Federal School Code of 041429 . The FAFSA serves as the initial application for all Federal Grants and Loans in addition to being one of the ways a student can apply for HOPE Scholarship or Zell Miller Scholarship. Once the GGC Office of Financial Aid receives a completed FAFSA, the student will be evaluated for financial aid based on the U.S. Department of Education's federal methodology of needs analysis.

The deadline to have the financial aid file complete is July 5 for Fall Semester, December 1 for Spring Semester and April 15 for Summer Semester. Files completed after these dates will still be processed in the order of receipt, however it may not be processed in time for the appropriate term's payment deadline. Students completing their financial aid files after the posted deadlines should be prepared to pay out-of-pocket and be reimbursed for any aid they are eligible for once the file has been processed.

## Cost of Attendance

For students not living with their parents the Cost of Attendance for 2015-2016 is:

|  | In-State Resident | Out-of-State Resident |
| :--- | :--- | :--- |
| Tuition/Fees* | $\$ 5,648$ | $\$ 16,152$ |
| Estimated Books/Supplies | $\$ 1,330$ | $\$ 1,330$ |
| Estimated Room/Board | $\$ 12,300$ | $\$ 12,300$ |
| Estimated Transportation | $\$ 2,090$ | $\$ 2,090$ |
| Estimated Miscellaneous Expenses | $\$ 2,120$ | $\$ 2,120$ |
| Total Cost of Attendance | $\$ 23,488$ | $\$ 33,992$ |

For students living with their parents the Cost of attendance for 2015-2016 is:

|  | In-State Resident | Out-of-State Resident |
| :--- | :--- | :--- |
| Tuition/Fees* | $\$ 5,648$ | $\$ 16,152$ |
| Estimated Books/Supplies | $\$ 1,330$ | $\$ 1,330$ |
| Estimated Room/Board | $\$ 5780$ | $\$ 5,780$ |
| Estimated Transportation | $\$ 2,090$ | $\$ 2,090$ |
| Estimated Miscellaneous Expenses | $\$ 2,120$ | $\$ 2,120$ |
| Total Cost of Attendance | $\$ 16,968$ | $\$ 27,472$ |

*The tuition rate may vary depending on what rate the student is being charged.

## Types of Financial Aid

HOPE Scholarship
Georgia's HOPE Scholarship is available to Georgia residents who have demonstrated academic achievement. The scholarship provides money to assist students with their educational costs of attending college in Georgia.

## Eligibility for HOPE Scholarship:

Students must be designated as a HOPE or Zell Scholar by GSFC (Georgia Student Finance Commission) out of high school, as defined by the HOPE program, or earn at least a 3.0 grade point average at the college level at specific credit-hour checkpoints.

1) Be enrolled as a degree-seeking student
2) Meet the residency requirements determined by the Georgia Student Finance Commission
3) Meet U.S. citizenship or eligible non-citizen requirements
4) Be in compliance with Selective Service registration requirements
5) Be in compliance with the Georgia Drug-Free Postsecondary Education Act of 1990
6) Not be in default or owe a refund on a student financial aid program
7) Maintain satisfactory academic progress
8) Must have a completed GSF Application or current year FAFSA on file.
9) Must meet academic rigor by high school graduation of at least two(2) full credits for 2015, at three (3) full credits for 2016 and at least four (4) full credits for 2017 from the academic rigor course category list provide by Georgia Student Finance Commission (GSFC).
10) Must be within 7 years of High School graduation if the student has never been invoiced for HOPE scholarship in the Spring 2011 semester or earlier. Students who were invoiced for a HOPE Scholarship during the Spring 2011 semester or earlier will have until 7 years after their high school graduation date or June 30, 2015.
The HOPE scholarship covers up to $\$ 106.00$ per credit hour of college level courses in the 2015-2016 school year. It does not pay for any learning support courses, institutional fees or books.

If you graduated from a Georgia high school after May 1, 2007 or later, you may view your initial HOPE eligibility status at www.gacollege411.org.

If you graduated from a Georgia high school before May 1, 2007, but never attended a college or university, you will need to submit an official high school transcript to the Georgia Student Finance Commission for a complete review.

## Checkpoint Requirements

Eligible students may continue to receive the HOPE Scholarship if they have a 3.00 or better HOPE GPA at the end of the semesters in which they attempt their 30/60/90th semester hours. In addition, there is an End-of-Spring Semester Checkpoint for all HOPE Scholarship recipients. You must have a cumulative 3.0 GPA at the end of each Spring term in order to continue eligibility, except for Freshman recipients who enrolled in fewer than 12 hours for each of their first three terms.

- Students not meeting the academic requirements following high school may be eligible to receive the HOPE Scholarship after attempting the equivalent of at least 30 semester hours of coursework, provided they meet the Georgia residency and U.S. citizenship requirements set forth above and have a HOPE GPA of 3.00 at the end of the term in which the 30 th semester credit hour is attempted. Students who have attempted more than 30 hours of coursework must have had at least a 3.00 HOPE GPA at the end of the semester in which the 30th/60th/90th hours were attempted in order to gain HOPE. Students may only lose HOPE Scholarship two times. After the second time HOPE has been lost, the student will never be eligible to receive HOPE Scholarship again.

Attempted means all college level course work including W's taken after high school graduation regardless of whether HOPE paid for the course or not. Developmental courses taken before Fall 2011 and after high school graduation are also included in attempted hours.

## HOPE Limits:

A college degree-seeking student is ineligible for the HOPE Scholarship if the student has

1) Received payment from any combination of HOPE Scholarship, Zell Miller Scholarship, HOPE Grant and Move On When Ready (MOWR) Program funds (through Spring term 2011) totaling 127 semester (190 quarter) hours of credit; or
2) Attempted 127 semester (190 quarter) hours of college degree credit, regardless of whether or not HOPE funds were received while attempting the hours; or
3) Earned a baccalaureate (four-year) college degree, regardless of whether or not HOPE funds were received while earning the degree, or
4) Reached the Seven Year Expiration of Eligibility date.

## HOPE for GED Recipients

Legal residents of Georgia who earned a General Education Development (high school equivalency) diploma awarded by the Georgia Department of Technical and Adult Education after June 30, 1993 may receive a one-
time $\$ 500$ HOPE award. This award can be used toward tuition, books and other educational costs at an eligible public technical institute or public or private college/university in a degree, diploma, or certificate program. Full-time enrollment is not required. Students must use their GED HOPE eligibility within 24 months of the date of the GED diploma. Military personnel have 52 months to exercise eligibility. Students receiving this award may also qualify for other HOPE programs.

## HOPE for Transient Students

Transient students who are eligible for HOPE Scholarship funds must have their home institution provide a HOPE Transient Certificate to Georgia Gwinnett College before receiving HOPE Scholarship funds. Transient students should plan to pay full amount by due date. Eligible transient students will be reimbursed to their HOPE eligibility.

For complete information on HOPE eligibility, please refer to the GAcollege411.org website.

## Zell Miller Scholarship

Georgia's Zell Miller Scholarship is available to Georgia residents who have demonstrated academic achievement. The scholarship provides money to assist students with their educational costs of attending college in Georgia.

## Eligibility for the Zell Miller Scholarship:

a. Meet one of the following academic requirements at the time of high school graduation:

- Graduate from a HOPE eligible high school as the Valedictorian or the Salutatorian.
- Graduate from an eligible high school with a minimum 3.7 grade point average combine with a minimum score of 1200 on the math and reading portions of the SAT test or a 26 composite score on the ACT test in a single test administration.
- Complete a HOPE eligible home study program with a 3.7 grade point average combined with a minimum score of 1200 on the math and ready portions of the SAT test or a 26 composite score on the ACT test in a single test administration.
- Graduate from an ineligible high school or complete an ineligible home study program with a minimum score of 1200 on the math and reading portions of the SAT test or a 26 composite score on the ACT test in a single test administration, and then earn a 3.3 grade point average or 30 semester hours or 45 quarter hours of college degree-level course work taken after high school graduation or home study completion. This option allows for payment of the first 30 semester hours or 45 quarter hours after they are taken.
b. Meet HOPE's academic rigor requirements as defined by GSFC based on the student's high school graduation date
c. Be enrolled as a degree-seeking student.
d. Meet HOPE's Georgia residency requirements.
e. Meet HOPE's U.S. citizenship or eligible non-citizen requirements.
f. Be in compliance with Selective Service registration requirements.
g. Be in compliance with the Georgia Drug-Free Postsecondary Education Act of 1990. A student may be ineligible for Zell Miller Scholarship payment if he or she has been convicted for committing certain felony offenses involving marijuana, controlled substances, or dangerous drugs
h. Not be in default or owe a refund on a student financial aid program.
i.Maintain satisfactory academic progress as defined by the college.
j. Must meet academic rigor by high school graduation of at least two(2) full credits for 2015, at three (3) full credits for 2016 and at least four (4) full credits for 2017 from the academic rigor course category list provide by Georgia Student Finance Commission (GSFC).

The Zell Miller Scholarship covers $100 \%$ of tuition for college level courses. It does not pay for learning support courses, institutional fees or books. A student cannot receive both the Zell Miller Scholarship and HOPE during the same term.

## Checkpoint Requirements

Eligible students may continue to receive the Zell Miller Scholarship if they have a 3.30 or better cumulative college GPA at the end of the semesters in which they attempt their 30/60/90th semester hours. In addition, there is an End-of-Spring Semester Checkpoint for all Zell Miller Scholarship recipients. You must have a cumulative 3.3 GPA at the end of each Spring term in order to continue eligibility.

Students who have lost the Zell Miller Scholarship may gain it back one time by having a 3.3 cumulative college GPA at 30/60/90 attempted hours. Students may only lose the Zell Miller Scholarship 2 times. After the second time the Zell Miller Scholarship has been lost, the student will never be eligible to receive the Zell Miller Scholarship again.

Attempted means all college level course work including W's taken after high school graduation regardless of whether Zell paid for the course or not. Developmental courses taken before Fall 2011 and after high school graduation are also included in attempted hours.

## Zell Miller Scholarship Limits:

A college degree-seeking student is ineligible for the Zell Miller Scholarship if the student has:

1) Received payment from any combination of HOPE Scholarship, Zell Miller Scholarship, HOPE Grant and MOWR Program funds (through Spring term 2011) totaling 127 semester (190 quarter) hours of credit; or
2) Attempted 127 semester (190 quarter) hours of college degree credits, regardless of whether or not Zell Miller funds were received while attempting the hours; or
3) Has earned a baccalaureate (four-year) college degree, regardless of whether or not Zell Miller funds were received while earning the degree.
4) Graduated from high school more than seven years ago and did not receive a HOPE Scholarship payment prior to Summer term 2011.

## Federal Pell Grant

The Federal Pell Grant is a federally funded program that provides need-based grants to undergraduate students who have not earned a bachelor's degree. The application is the FAFSA. Eligibility is based on the Expected Family contribution (EFC). Students receive their EFC on the Student Aid Report (SAR) after submitting the FAFSA. The EFC range for Federal Pell Grant eligibility is 0 to 5,157 . The awards range from a maximum of $\$ 5,730$ per year ( 0 EFC ) to a minimum of $\$ 602(5,157 \mathrm{EFC})$ per year for full-time enrollment. Part-time enrollment is prorated. Students receiving the Federal Pell Grant may also be eligible for other types of financial aid. Students receiving the Federal Pell grant may receive $600 \%$ of Pell Funds; 12 full time semesters. When $600 \%$ of lifetime Pell eligibility has been met, the student is no longer eligible of Federal Pell Grant.

## William D. Ford Federal Direct Stafford Subsidized Loan

The William D. Ford Federal Direct Stafford Subsidized Loan program allows students who are enrolled at least halftime to borrow money from the federal government at a low interest rate. Interest rates are fixed based on current Federal Stafford loan rates. No repayments are due and no interest accrues until six months after the student graduates, leaves the College, or ceases to be a half-time student. Origination and processing fees of approximately one-half percent are deducted from the loan amount borrowed.

Listed below is the maximum amount a student may borrow each academic year of college:

$$
\begin{array}{ll}
\text { Freshmen (up to } 29 \text { earned hours) } & \$ 3,500 \\
\text { Sophomores (30-59 earned hours) } & \$ 4,500 \\
\text { Juniors and Seniors (60 or more earned hours) } & \$ 5,500
\end{array}
$$

Eligible students are also able to borrow an addition $\$ 2,000$ per academic year in the Stafford Unsubsidized Loan program.

An independent student or a dependent student whose parents are unable to obtain a PLUS loan may borrow the following amounts from the unsubsidized loan in addition to the Stafford Loan limits:

Freshman/Sophomore up to $\$ 4,000$ a year
Junior/Senior

$$
\text { up to } \$ 5,000 \text { a year }
$$

William D. Ford Federal Direct Stafford Unsubsidized Loan
Any student that is enrolled at least half-time, regardless of need, may borrow from the William D. Ford Federal Direct Unsubsidized Stafford Loan Program. The procedures to receive a loan are the same as for the William D. Ford Federal Direct Subsidized Stafford Loan. The annual loan limits are the same and include any funds borrowed through the guaranteed program. Repayment of the loan is deferred as long as the student is enrolled at least half-time; however, interest on the loan starts accruing from the initial disbursement date and is recommended to be paid while the student is in school. The interest can also be deferred but would be compounded to the principal of the loan. Interest rates are fixed based on current Federal Stafford loan rates. Origination and processing fees of approximately one percent are deducted from the loan amount borrowed.

PLEASE NOTE: Students who are first-time borrowers and are in the first-year of their undergraduate study cannot receive the first installment of a Stafford Loan disbursement until 30 calendar days after the student's program of study begins.

To receive a Federal Direct Stafford Loan you must complete the following steps:

1. Accept your loans in your BANNER Account
2. Have a completed Master Promissory Note (MPN) on file at www.studentloans.gov
3. Have a completed Loan Entrance Counseling session on file at www.studentloans.gov

William D. Ford Federal Direct Parent Loan for Undergraduate Students (PLUS)
This program is available to parents of dependent students who are enrolled at least half-time. Parent borrowers may borrow from the federal government up to the cost of attendance at GGC minus other aid. The interest rate is fixed based on the current PLUS loan rates. Parents are allowed to select their loan amount. However, a credit check is required. The student will be allowed to borrow under the William D. Ford Federal Direct Unsubsidized Stafford Loan Program if the parents cannot borrow under the PLUS Loan Program.

GI Bill ${ }^{\circledR}$ Educational Benefits
The Office of Veterans Success provides support services and administers educational benefits programs to U.S. military service members, veterans, national guardsmen, reservists and their eligible dependents who are enrolled at GGC. Students utilizing GI Bill® Education Benefits under Chapters 1606, 1607 or 35 should be prepared to pay the costs of tuition and fees by the published payment deadline.

Students receiving Post 9/11 GI Bill benefits must have a Certificate of Eligibility on file with the Office of Veteran Success. Failure to provide the certificate will result in a delay of the certification of enrollment. Also, if the certificate is not on file, the student must pay full tuition by the payment deadline. Those who have a certificate on file, receive $100 \%$ of the benefit, and have an in-state tuition classification status will have their tuition deferred. Any student with an out-of-state tuition classification status or those receiving less than $100 \%$ of the Post $9 / 11$ benefit will be responsible for any money owed and must pay by payment deadlines. Post $9 / 11$ does not cover the cost of withdrawn courses.

GI Bill® Education Benefits do not cover the costs of tuition and fees for courses not associated with a student's declared degree program nor does the program cover the cost of on-campus housing and associated housing fees.

Students may apply for financial aid to help cover their tuition, fees and living expenses, if eligible. Student needing more information about applying for GI Bill® Education Benefits should visit either the Office of Veterans Success website at http://www.ggc.edu/about-ggc/departments/office-of-veteran-success.

## Satisfactory Academic Progress Standards

In order for a student to receive financial aid at Georgia Gwinnett College, the student must demonstrate Satisfactory Academic Progress (SAP). SAP includes two standards: GPA and Pace. Students must meet both standards to continue receiving financial aid.

GPA
In order to maintain eligibility for financial aid with the qualitative standard, a student must maintain the academic standing necessary to remain at GGC. The GPA policy is the same as the academic policies of GGC.

| Semester Hours Attempted Plus <br> Transfer Credit) | Minimum Cumulative GPA <br> (GGC Credit Only) |
| :--- | :--- |
| $0-15$ | 1.50 |
| $16-30$ | 1.60 |
| $31-45$ | 1.80 |
| More than 45 | 2.00 |

If a student fails to meet the GPA standard for academic progress, then he/she will be placed on financial aid warning for one semester.

The checkpoint for SAP is at the end of each semester.
Pace
Regulations allow a student to maintain eligibility for attempting credit hours that are $150 \%$ of the credit hours required to receive a degree. In order to meet this Pace standard, students must complete and pass (earn) $67 \%$ of courses attempted throughout his/her course of study. Courses earned include grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}$, or D. Courses attempted include any course in which grades of A, B, C, D, F, FN, W, WF, or I are given.

If a student fails to meet the Pace standard for academic progress, then he/she will be placed on financial aid warning for one semester.

The checkpoint for SAP is at the end of each semester.
Once a student reaches $150 \%$ of the number of credit hours required for his/her program, he/she will be ineligible to receive further financial aid. All attempted course hours must be included in this calculation, including those that are not included in the student's GPA for repeated course work and terms for which the student did not receive any financial aid. Students who are seeking a double major or double degree will have $150 \%$ of the total amount of hours it would take to complete both majors and/or degrees.

Once a student reaches $150 \%$ of the number of credit hours required for his/her program, he/she will be ineligible to receive further financial aid. All attempted course hours must be included in this calculation, including those that are not included in the student's GPA for repeated coursework and terms for which the student did not receive any financial aid. Students who are seeking a double major or double degree will have $150 \%$ of the total amount of hours it would take to complete both majors and degrees.

## Treatment of Student Success \& English for Academic Purposes Courses

Student Success Courses
Student Success courses are non-credit courses but they do count as institutional load credit in the semester in which they are taken. These courses do count for the student's enrollment status for that semester. However, they bear no quality points and no GPA hours. Therefore, they are not included in SAP considerations. However, the attempted hours on these courses taken prior to Fall 2011 do accumulate for HOPE scholarship eligibility checkpoints and will count toward the student's HOPE GPA calculation.

Per federal regulation, a student is limited to one academic year's ( 30 semester hours) of remedial coursework in order to retain eligibility for financial aid funds.

Remedial Coursework
Remedial coursework will not be considered in assessment of satisfactory academic progress standards. Only collegelevel coursework will be taken into consideration.

## Audit Courses

Students are not eligible to receive financial aid for audited courses. Audited courses are not included in the number of hours attempted or earned for SAP consideration.

## Repeated Courses

Students who receive a 'W', 'WF', 'F' or an 'FN' in a course, that student is allowed to repeat the course and receive financial aid (assuming he/she is meeting Satisfactory Academic Progress) until he/she receives a 'D' or better. Once the student has received a ' D ' grade or better, he/she can repeat the course a second time and still receive federal aid. The third time the student repeats a course in which he/she has earned a 'D' or better, this becomes an illegal repeat and the Office of Financial Aid cannot provide federal funding for that repeated course. If a student retakes a course that is not aid eligible, a recalculation of aid is completed to exclude the credits for the repeated course. This rule applies whether or not the student received aid for earlier enrollments in the course. This rule applies regardless of the minimum grade required by the program. A 'D' is considered passing for federal requirements.

All repeated courses affect financial aid Satisfactory Academic Progress calculations. A repeated course, along with the original attempt, must be counted as attempted credit hours. All students must successfully complete $67 \%$ of cumulative attempted hours by the end of each term.

## Grade Forgiveness

GGC allows for grade forgiveness for academic purposes. Financial Aid does not consider Grade Forgiveness as part of the Satisfactory Academic Progress Standards. Any courses taken at GGC or counted towards a student's degree will be considered in the Pace and Maximum Timeframe calculations.

Grade Changes
When the Financial Aid Office is notified of a grade change, the student(s) is checked for satisfactory academic progress (SAP) at that point; even if SAP has been previously checked. Should SAP status updates as a result of an official grade change result in SAP suspension, all aid will be removed from the student(s) account and any loans returned to the lender.

Financial Aid Warning and Financial Aid Probation
If a student does not meet both standards for academic progress, he/she will be placed on financial aid warning for one semester. If the standards are not met at the end of the warning period, the student will lose eligibility for financial aid for a period not less than one semester of enrollment in addition to any other consequences imposed by the College. The student must demonstrate compliance with all standards of academic progress to regain eligibility for financial aid.

In order for the student to meet the requirements of his/her warning period, the student must meet both the GPA and Pace standards for Satisfactory Academic Progress at the end of the one semester warning period. If the student fails to meet the requirements for his/her warning period, the student will be ineligible to receive federal and/or state aid until he/she meets the appropriate requirements for Satisfactory Academic Progress based on the GGC GPA and hours.

## Appeal Process

Students who fail to meet Satisfactory Academic Progress may appeal his/her status based on extenuating circumstances. Examples may include but are not limited to health reasons, family reasons, or other unusual reasons. The student should complete a SAP appeal form that is available from the student's BANNER account. Additionally, there must be an appeal statement from the student which should explain the extenuating circumstances. Documentation supporting the student's appeal must be submitted at the same time as the appeal. In addition, letters of support from an academic mentor/faculty member must be submitted. Only completed packets will be processed and evaluated. An incomplete packet will result in a denied appeal. If a student is granted an appeal for SAP then the student will be placed on probation for a period of one semester. No appeals will be accepted for the term after the mid-point (withdrawal date) of the same term.

The checkpoint for SAP is at the end of each semester.

Georgia Gwinnett College 2015-16 Catalog

Once a student reaches $150 \%$ of the number of credit hours required for his/her program, he/she will be ineligible to receive further financial aid. All attempted course hours must be included in this calculation, including those that are not included in the student's GPA for repeated coursework and terms for which the student did not receive any financial aid. Students who are seeking a double major or double degree will have $150 \%$ of the total amount of hours it would take to complete both majors and degrees.

You may not appeal for the following circumstances:

- Financial reasons or lack of knowledge that your aid was in jeopardy
- Not being prepared for or mature enough for college
- Unfair or incorrect grade for a course or improper advising
- Problems with professor or course content
- Living situation is not conducive for academic success
- Child care or day care issues
- Transportation issues
- Work-related issues
- Chronic illnesses that are not being properly managed

Students may only have two granted appeals during their time with Georgia Gwinnett College. Continued probation during one academic plan counts as one granted appeal for this purpose. The decision of all SAP appeals is final. There is no appeal for the appeals process. A meeting with the DFA may be necessary but is neither required nor guaranteed. The decision of the DFA is final.

Students who fail SAP standards for exceeding $150 \%$ of the number of credit hours required for his/her degree program and cannot complete the degree program in one semester, will be denied any appeal submitted. Additionally, students who cannot meet satisfactory academic progress standards in time for graduation will be denied appeal.

No Show Policy for Financial Aid
Faculty will notify the Registrar's Office in cases where a student never attends class. Students are coded as NS in Banner and dropped from the course. Financial Aid is then adjusted based on the correct number of attended hours.

If a student failed to attend class prior to financial aid census date, the student is not eligible to receive Pell funds for that course even if the course is reinstated. The student load credit will be evaluated as of the day census was performed and cannot be changed unless the student actually attended the course prior to the census date each term. The census date for the term is determined by the Calendar committee, but it is usually the day after the drop/add period for term ends.

## Unofficial Withdrawals and Financial Aid

Students who ceased attending class or failed to complete assignments due to not attending courses will receive a grade of FN. Students who receive all FN grades for a semester will be treated as an unofficial withdrawal for financial aid purposes and a Return to Title IV calculation will be performed at the end of the semester. A student who has a combination of F's and FN's would not be considered an unofficial withdrawal for financial aid purposed as a grade of F indicates that the student has attended the full semester.

COLLEGE

## Policies and Procedures

## Disability Services

The Office of Disability Services at Georgia Gwinnett College encourages all students to reach their full potential, both academically and personally, by providing equal access to classes and campus life. The Office of Disability Services works to

1. Provide reasonable accommodations that ensure an accessible educational, academic and social environment to students with documented disabilities.
2. Advocate for students and teach students to advocate for themselves.
3. Educate faculty, staff and students regarding disability related issues.
4. Continually evaluate physical accessibility at the College and look at changing conditions that may affect a person's accommodations.

Upon acceptance, any student with a documented disability or special need should notify The Office of Disability Services in Student Affairs at 678-407-5883 to receive assistance or accommodations.

## Academic Freedom

It is Georgia Gwinnett College's policy to publish academic freedom statement in all major policy documents that are used by the faculty, staff and students. GGC is committed to the protection of Academic Freedom by providing grievance procedures that can be used in causes of violation of Academic Freedom. Grievance procedures can be found in section $V$ of this document.

## Academic Freedom Statement

As a liberal arts college dedicated to the holistic development of students and to the production of graduates who can anticipate and respond effectively to the changing world, Georgia Gwinnett College affirms the vital role of diverse perspectives in helping students to develop their own knowledge and their ability to evaluate knowledge claims critically. The administration, faculty, staff and students share responsibility for fostering a climate that is favorable to the free exchange of ideas and to the examination of conflicting ideas and interpretations using generally accepted disciplinary standards of inquiry. Freedom of speech and expression extends to all members of the academic community, subject to commonly accepted constitutional limits on speech that is libelous or slanderous, incites violence, or discriminates against or harasses others.

Academic freedom is essential to the integrity of intellectual inquiry and scholarly criticism, to the dissemination of knowledge and to the search for truth and wisdom. It is the foundation upon which the all of the intellectual activity of the college rests. Faculty members are free to pursue scholarly interests without fear of censure, discipline, or reprisal.

This freedom extends to the display, publication and performance of creative work. Faculty may speak freely on all matters of college governance and may speak, work, or act as an individual in the public arena without fear of institutional discipline or restraint.

A fundamental goal of liberal arts education is the development of students' skills of analysis and critical inquiry. To this end, faculty are free to teach and discuss any aspect of a given topic pertinent to the course being taught as a means of teaching students to explore and evaluate competing perspectives and interpretations as they learn to assemble their own informed judgments. Faculty has a concomitant responsibility to teach students to evaluate knowledge claims using standards of evidence accepted in their respective disciplines and to promote respect for competing views offered by others. Students have the right to a safe classroom environment in which they can explore controversial ideas in an atmosphere characterized by openness, tolerance and civility and where they will be graded only on the intellectual merits of their work.

The College has established formal grievance procedures for addressing claims of unfair academic treatment by any member of the campus community.

Our view of academic freedom incorporates the principles of academic freedom stated by the American Association of University Professors (AAUP) as follows:

1. The teacher is entitled to full freedom in research and in the publication of the results, subject to the adequate performance of [his/her] other academic duties; but research for pecuniary return should be based upon an understanding with the authorities of the institution.
2. The teacher is entitled to freedom in the classroom in discussing [his/her] subject, but [he/she] should be careful not to introduce into his/her teaching controversial matter which has no relation to his/her subject. Limitations of academic freedom because of religious or other aims of the institution should be clearly stated in writing at the time of the appointment.
3. The college or university teacher is a citizen, a member of a learned profession and an officer of an educational institution. When [he/she] speaks or writes as a citizen, [he/she] should be free from institutional censorship or discipline, but [his/her] special position in the community imposes obligations. As a person of learning and an educational officer, [he/she] should remember that the public may judge [his/her] profession and [his/her] institution by [his/her] utterances. Hence, [he/she] should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others and should make every effort to indicate that [he/she] is not an institutional spokesperson.

The faculty also endorses the Statement on Academic Rights and Responsibilities published by the American Council on Education.

## Acceptable Use of Information Technology Resources

## General

Georgia Gwinnett College provides access to computing resources for students, faculty, staff and other authorized users. The computing resources of Georgia Gwinnett College, including facilities, hardware, software, networks and computer accounts, are the property of the State of Georgia. The use of these resources is a privilege granted by Georgia Gwinnett College to authorized users only. Georgia Gwinnett College requires its computing resources to be used responsibly by all authorized users and in compliance with all state and federal laws, contractual and license agreements and all policies of Georgia Gwinnett College and the Board of Regents of the University System of Georgia. Authorized users of the College's computing resources must act responsibly to maintain the integrity and security of these resources.

## Rights and Responsibilities

The Acceptable Use of Information Technology Resources policy is a complement to relevant laws and policies intended to define acceptable and unacceptable computer use practices at Georgia Gwinnett College (GGC), to promote an understanding of responsible usage of college computing resources and to protect and conserve those resources. This policy does not supersede any relevant State or Federal laws pertaining to the use Information Technology or policies of University System of Georgia. GGC does not provide a warranty, either expressly or implied, for the information technology services provided. The College reserves the right to limit a computer user's session or access if there are insufficient resources and to cancel, restart, or hold a job, process, or program to protect or improve system performance and security if necessary.

Authorized users include: current faculty, staff and students of Georgia Gwinnett College; any person connecting to a public information service housed on an information technology resource; and others whose access furthers the mission of the College and whose usage does not interfere with other users' access to information technology resources. Each user of an information technology resource must be specifically authorized to use that particular resource by the college unit responsible for maintaining and operating the resource.

Authorized users are responsible for all their activities using information technology services and will respect the intended use of such services. Individuals misusing the College's computing resources in violation of federal and state laws, Board of Regents and university policies, or this policy are subject to disciplinary actions by the College including suspension of their access and forfeiture of their computer privileges. In the event that use or misuse of Georgia Gwinnett College's information technology resources threatens to compromise the security or integrity of
data or services, the Chief Information Officer, or his designee, may restrict or terminate user access to GGC resources pending investigation.

Users of college information technology resources have no guarantee of the privacy of materials stored on those resources. The College reserves the right to access any of its computer resources when federal or state laws or university policies may have been violated or where college contractual obligations or college operations may be impeded or when deemed in the best interest of the College. Authorized users should not store confidential information within the College systems without protecting it appropriately. The College cannot and will not guarantee the privacy or confidentiality of computer files, electronic mail, or other information stored or transmitted by its computers. All computer usage on Georgia Gwinnett College information technology resources and network facilities is subject to the provisions of the Georgia Open Records Act, O.C.G.A. $\iint 50-18-70$ et seq.

System administrators will perform their duties fairly, in cooperation with the Georgia Gwinnett College community, their administrative supervisors, college policies and funding resources. System administrators will respect the privacy of others to the extent allowed by law and College policy. System administrators will refer all disciplinary matters to appropriate authorities.

## Examples of Misuse of Information Technology Resources

1. attempting to defeat or circumvent any security measures, controls, accounts, or record-keeping systems;
2. using systems for unauthorized access;
3. Misrepresenting a person's identity or relationship to the University when obtaining or using university computer or network privileges;
4. intentionally altering, misappropriating, dismantling, disfiguring, disabling, or destroying any computing resource, information technology, data or services;
5. using information technology services for workplace violence of any kind;
6. using information technology services for unlawful purposes including fraudulent, threatening, defamatory, harassing, or obscene communications;
7. invading the privacy rights of anyone;
8. disclosing student records in violation of FERPA;
9. violating copyright laws including the Digital Millennium Copyright Act. (Copying, installing, distributing, infringing, or otherwise using any software, data files, images, text, or other materials in violation of copyrights, trademarks, service marks patents, other intellectual property rights, contracts, or license agreements is prohibited. All usage of computing resources shall be in compliance with federal and state copyright laws and in full conformance with the Regents Guide to Understanding Copyright and Fair Use.)

## Disciplinaty Actions

Use of College information technology resources in violation of applicable laws or College policy may result in sanctions, including withdrawal of use privilege; disciplinary action, up to and including, expulsion from the College or discharge from a position; and legal prosecution under applicable federal and/or state law. Some violations may constitute criminal offenses; the College will carry out its responsibility to report such violations to the appropriate authorities.

## Security and Confidentiality of Records

Georgia Gwinnett College follows all policies governing the security and confidentiality of records as dictated by the Board of Regents. Directory information for any student will be distributed by Georgia Gwinnett College only as herein provided. Directory information may include the student's name, address, telephone number, date and place of birth, major field of study, participation in collegiate activities, dates of attendance, degrees conferred, awards and honors earned, the most recent previous educational agency or institution attended by the student and other similar information. Students have the right to refuse to permit the designation of any or all the categories as directory information. If students choose to exercise the right of refusal, they must do so in writing to the Registrar within 30 days of the beginning of each academic semester. It is understood that appropriate college officials will have access to such information and records as shall be necessary for them to perform their professional responsibilities. All official use of student files shall be in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA) and shall be duly recorded and shall be documented as required by its regulations.

Georgia Gwinnett College 2015-16 Catalog

The following information and records shall not be covered by this policy and access shall not be provided to students: information related to pending admissions decisions, financial records or information relating to students or parents/guardians; confidential statements of recommendation placed in the record obtained if a receipt of a statement from students waiving the right to open accessibility placement records is present; all information relative to the application for and receipt of financial assistance; records created or maintained by a physician, psychiatrist, psychologist, or other professional or paraprofessional acting or assisting in a similar capacity in treatment of a student; institutional employment or faculty files; alumni information; or a student serving on an official committee such as a disciplinary committee, or assisting another school official in performing his or her tasks; and sole-access educational records. Sole-access records are those records of instructional, supervisory and administration and educational personnel that are in the sole possession of the makers and are not accessible or revealed to any other individual except a temporary substitute.

## Procedure for Review and Correction

Pursuant to Family Educational Rights and Privacy Act of 1974, students have the right to inspect their educational records and correct such records if necessary. Students desiring to review their records should make this request to the appropriate official in writing. Such written request will be granted within a period of no more than 45 days from the date of request. In the event the record contains inaccurate, misleading or otherwise inappropriate information, every effort will be made to correct or delete such material and the student will be so informed of such action in writing. Institutions may release information to governmental agencies for review for purposes of financial aid audits, National Student Loan Clearinghouse, etc. In the event of a subpoena, the institution may disclose information if the institution makes a reasonable effort to notify the eligible student of the order or subpoena in advance of compliance, so that the student may seek protective action, unless the disclosure is in compliance with a Federal grand jury subpoena. Complete information on FERPA policy may be found at www.ed.gov.policy .

# Student Records Management and Security Policy 

## Policy

Because the ongoing security and confidentiality of student records is critical to the integrity of the institution, Georgia Gwinnett College protects the security, confidentiality, and integrity (including data protection and back up) of student records (regardless of storage media) from creation or receipt through processing, distribution, use retrieval, and maintenance to their ultimate disposition. GGC recognizes the importance of protecting confidentiality of records, preserving the integrity of its students' academic records, and overseeing the release of records in accordance with state and federal mandates and commonly accepted standards and practices among institutions of higher learning.

Student records include but are not limited to the following:

- Faculty: Class roles with grades, papers, exams, papers, assessments (paper, learning management system, laptops), advisee notes, confidential conversations in any form (e.g. email, text, print, verbal)
- Student affairs: Conduct, Medical (HIPPA, Fitness, Physician, mental health), disability, academic integrity violations, career services, e-mails with confidential information
- Enrollment Management: Admissions, financial aid, Registrar (transcripts, grades, applications, financial documentation about residency), medical (immunization and records submitted as documentation for hardship request, etc.), immigration status, e-mails with confidential information
- Intra-student e-mail communication within the GGC system

Policies related to confidentiality, security, integrity of records, and data protection and backup are reviewed yearly. They include:

- APM 10.8 Data Management and Classification
- APM 11.3 Information Security Policy
- APM 11.50.2 GGC Information Security
- APM 11.50.3 Continuity of Operations Plan Policy
- APM 11.90 GGC Library and Information Commons Computer Use Policy

Georgia Gwinnett College's policies address records management policies in the following subcategories.

## Protecting the Right to Privacy

Georgia Gwinnett College protects the rights of privacy of all student records including academic, medical and financial records, by following all local, state and federal law to include the Family Educational Rights and Privacy Act (FERPA) of 1974 (www.ed.gov/policy/gen/guid/fprco/ferpa/index.html), the Health Insurance Portability and Accountability Act (HIPPA) of 1996 (www.hhs.gov/ocr/privacysummary.pdf), and Gramm-Leach Bliley Act of 1999 (http:/ banking.senate.gov/conf/).

- See APM 10.8 Data Management and Classification for related information.


## Restricting Access to Records

Restricted physical and electronic access is the first line of defense for protecting records from physical damage, intrusion or theft. A proactive approach will be taken with respect to monitoring for physical and system invasion. In protecting records, the College will require that:

All student records will be kept in a locked, secure location and faculty and staff will observe the College's written standards of behavior when dealing with student records.

- Electronic access will be protected as described in APM 10.8 Data Management and Classification, APM 11.3 Information Security Policy and APM 11.50.2 GGC Information Security, following security and confidentiality protocols as defined by the USG Board of Regents (BOR Policy Manual Section 11.3)
- See APM 10.8 Data Management and Classification, APM 11.3 Information Security Policy and APM 11.50.2 GGC Information Security for related information.


## Releasing Information Only in Accordance with Strict Guidelines

- In accordance with the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA), the college maintains the right to require consent to disclosure of personally identifiable information contained in the student's educational records except to the extent that FERPA authorizes disclosure without consent.
- In accordance with FERPA, the college permits disclosure without consent if the disclosure of information is to school officials with a legitimate educational interest, such as a person employed by the college in an administrative, supervisory, academic, research, or support staff position (including law enforcement personnel); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Regents; or a student serving on an official committee such as a disciplinary committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility.
- Upon request, the college discloses education records without consent to officials of another school in which a student seeks or intends to enroll.


## Providing Students and their Parents with Information Concerning Students' Rights for the Protection of their Confidential Records

- GGC FERPA Disclosure Notice to Students will be explained to new students and their parents who attend the BEAR ESSENTIALS Orientation session as well as available to students on-line and in the Georgia Gwinnett College Catalog.
- Signed GGC FERPA Disclose Notice to Students will be maintained in the student file as well as recorded in Banner.
- GGC recognizes the right of the student to refuse to permit the release of information, including directory information as defined by FERPA.


## Student Electronic Records Storage and Recovery

- The College recognizes the need to provide reliable and efficient student services, therefore coordinates with the University System of Georgia to consolidate the technical environment for the Banner Student Information System for the purpose of providing secure, reliable, and cost effective database administration and system support functions.

Georgia Gwinnett College 2015-16 Catalog

- The Student Information System is managed via a memorandum of agreement with the University System of Georgia Information Technology Systems, which has a contract with Ellucian. A structured recovery plan is well documented and ready for execution in the event of system component failures is part of that arrangement.
- See APM 11.50.3 Continuity of Operations Plan Policy for information addressing disaster plans for records.


## Training of New Employees (Faculty, Staff and Student Workers) as well as Current Employees

- A regular training schedule for faculty and staff will be maintained to assure that the policy and procedures for storage, release, dissemination and disposition (whether physical, printed, or verbal) is consistently adhered to.
- See APM 10.8 Data Management and Classification for additional information on employee responsibilities.


## Annual Review of Procedures as well as Immediate Review of Procedures Any Time a Breach of Procedures is Identified

- A committee of members responsible for student data will complete an annual review of procedures for records security and privacy.
- In the event of a breach of procedures, the registrar will be notified of the violation. The appropriate dean, director and/or HR will address the situation and work with the Executive Director of Human Resources to address the issue with the person or the supervisor of the person who has committed the breach of procedures.


## Records Retention and Disposition

- Records will be kept according to the Georgia Board of Regents retention schedule (http://www.usg.edu/records_management/schedules)
- Review of the proper procedures for records disposal will happen annually for faculty and staff via the annual FERPA notification procedure.


## Release of Records

Georgia Gwinnett College follows all policies governing the security and confidentiality of records as dictated by the Board of Regents. Georgia Gwinnett College does not publish a student directory; however the student's name, major field of study, dates of attendance, and degrees conferred may be disclosed without consent of the student. For Georgia Gwinnett College, this is the only information which could be considered "Directory Information" for FERPA or other purposes, including but not limited to external record requests.
Students have the right to refuse to permit the disclosure of any information. If students choose to exercise the right of refusal, they must do so in writing to the Registrar within 30 days of the beginning of each academic semester. It is understood that appropriate college officials will have access to such information and records as shall be necessary for them to perform their professional responsibilities. All official use of student files shall be in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA) and shall be duly recorded and shall be documented as required by its regulations.

In accordance with FERPA, the college permits disclosure without consent if the disclosure of information is to school officials with a legitimate educational interest, such as a person employed by the college in an administrative, supervisory, academic, research, or support staff position (including law enforcement personnel); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Regents; or a student serving on an official committee such as a disciplinary committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility

The following information and records shall not be covered by this policy and access shall not be provided to students: information related to pending admissions decisions, financial records or information relating to students or parents/guardians; confidential statements of recommendation placed in the record obtained if a receipt of a statement from students waiving the right to open accessibility placement records is present; all information relative to the application for and receipt of financial assistance; records created or maintained by a physician, psychiatrist, psychologist, or other professional or a professional acting or assisting in a similar capacity in treatment of a student; institutional employment or faculty files; alumni information; and sole-access educational records. Sole access records are those records of instructional, supervisory and administration and educational personnel that are in the sole possession of the makers and are not accessible or revealed to any other individual except a temporary substitute.

## Correction of Records

Pursuant to Family Educational Rights and Privacy Act of 1974, students have the right to inspect their educational records and correct such records if necessary. Students desiring to review their records should make this request to the appropriate official in writing. Such written request will be granted within a period of no more than 45 days from the date of request. In the event the record contains inaccurate, misleading or otherwise inappropriate information, every effort will be made to correct or delete such material, and the student will be so informed of such action in writing. Institutions may release information to governmental agencies for review for purposes of financial aid audits, National Student Loan Clearinghouse, etc. In the event of a subpoena, the institution may disclose information if the institution makes a reasonable effort to notify the eligible student of the order or subpoena in advance of compliance, so that the student may seek protective action, unless the disclosure is in compliance with a Federal grand jury subpoena. Complete information on FERPA policy may be found at www.ed.gov/policy.

## Student Records Procedures

This section details the procedures connected to the Student Records Policies outlines in APM 10.9.2, Records Management Policies.

## Procedures Related to Privacy

As outlined in policy, GGC protects the privacy of students. Procedures that relate to privacy include restricting access to records, releasing information only in accordance with guidelines, and providing information to parents and students about student rights for the protection of confidential data.

## Procedures Related to Restricting Access to Records

All student records will be kept in a locked, secure location with restricted access. Restricted access to records is given based on job level and a verifiable need to view the record. Faculty and staff who have been given restricted access to view records will:

- Make sure that all records are kept in a secure, locked location.
- Lock computer desktops and/or offices when leaving a work station.
- Refrain from storing student records on the computer desktop. All student data should be stored on a secure network drive.
- Ensure that College laptops are kept in a secure location whether on or off campus. Laptops must be locked and password protected when not in use.
- Properly shred printed material that contains information not necessary for storage.
- Maintain confidentiality of student information by being aware of their surroundings when holding discussions with the student or with others who have a verifiable need to know the information.
- Attend regularly offered training to faculty and staff to ensure that up-to-date security standards are understood and being adhered to. This training will include an annual review of FERPA, HIPAA, and Gramm-Leach Bliley regulations.

Access to confidential student data is available only to properly authorized personnel. GGC requires that:

- All users have individual accounts
- User permissions are controlled by user classes that control access to data
- Security log tables are monitored
- Documentation of site security procedures and end-user responsibilities are maintained.

These procedures apply both to information in the Student Information System and to Student Affairs student records including conduct, medical and other records covered under HIPPA such as Fitness, Physician and mental health, disability, academic integrity violations, career services, and e-mails with confidential information.

All student data stored electronically must comply with policies found in the APM in section 11.

- 11.50.1.1 Acceptable Use of Information Technology Resources
- 11.50.1.2 Internet Acceptable Use Policy
- 11.50.2.1 Data Usage 11.50.2.2 Password Policy
- 11.50.2.3 Electronic Mail Privacy Statement

Georgia Gwinnett College 2015-16 Catalog

- 11.50.2.4 Firewall Policy
- 11.50.3 Continuity of Operations Plan Policy
- 11.90 GGC Library Computer Use Policy


## Procedures Related to Releasing Information

Faculty and Staff with access to student records are expected to use that access appropriately, mindful that they are required to have a legitimate educational interest in the data they access.

Individuals employed by the college who require data beyond their normal levels of access will submit a data request for the specific data needed. These requests will be reviewed for compliance with FERPA regulations before the data are provided.

## Procedures Related to Informing Students and Parents of Students' Rights for the Protection of Their Confidential Records

- GGC FERPA Disclosure Notice to Students will be explained to new students and their parents who attend the BEAR ESSENTIALS Orientation session as well as available to students on-line and in the Georgia Gwinnett College Catalog.
- Signed GGC FERPA Disclose Notice to Students will be maintained in the student file as well as recorded in Banner.
- GGC recognizes the right of the student to refuse to permit the release of information, including directory information as defined by FERPA.


## Procedures Related to Electronic Records Storage and Recovery

- The Student Information System is managed via a memorandum of agreement with the University System of Georgia Information Technology Systems, which has a contract with Ellucian. A structured recovery plan is well documented and ready for execution in the event of system component failures is part of that arrangement.
- See APM 11.50.3 Continuity of Operations Plan Policy for information addressing disaster plans for records. The College recognizes the need to provide reliable and efficient student services, therefore coordinates with the University System of Georgia to consolidate the technical environment for the Banner Student Information System for the purpose of providing secure, reliable, and cost effective database administration and system support functions.


## Procedures Related to Training

Faculty and Staff who have been given restricted access to view records will attend regularly offered training to faculty and staff to ensure that up-to-date security standards are understood and being adhered to. This training will include an annual review of FERPA, HIPAA, and Gramm-Leach Bliley regulations.

## Procedures Related to Review of Procedures

- A committee of members responsible for student data will complete an annual review of procedures for records security and privacy.
- In the event of a breach of procedures, the registrar will be notified of the violation. The appropriate dean, director and/or HR will address the situation and work with the Executive Director of Human Resources to address the issue with the person or the supervisor of the person who has committed the breach of procedures.


## Procedures Related to Records Retention and Disposition

Retention of Student Records: Documentation of the records retention program will be maintained to show systematic development and implementation in the normal course of business. Georgia Gwinnett College follows the approved retention schedule for college records which can be found at the Georgia Board of Regents website (http://www.usg.edu/records_management/schedules).
When it is determined that records can be disposed, student records will be shredded locally for daily processing and via records management service for large-scale disposals.

## Procedures Related to Release of Records

Georgia Gwinnett College follows all policies governing the security and confidentiality of records as dictated by the Board of Regents. Georgia Gwinnett College does not publish a student directory; however the student's name, major

Georgia Gwinnett College 2015-16 Catalog
field of study, dates of attendance, and degrees conferred may be disclosed without consent of the student. For Georgia Gwinnett College, this is the only information which could be considered "Directory Information" for FERPA or other purposes, including but not limited to external record requests.

Students have the right to refuse to permit the disclosure of any information. If students choose to exercise the right of refusal, they must do so in writing to the Registrar within 30 days of the beginning of each academic semester. It is understood that appropriate college officials will have access to such information and records as shall be necessary for them to perform their professional responsibilities. All official use of student files shall be in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA) and shall be duly recorded and shall be documented as required by its regulations.

In accordance with FERPA, the college permits disclosure without consent if the disclosure of information is to school officials with a legitimate educational interest, such as a person employed by the college in an administrative, supervisory, academic, research, or support staff position (including law enforcement personnel); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Regents; or a student serving on an official committee such as a disciplinary committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility

The following information and records shall not be covered by this policy and access shall not be provided to students: information related to pending admissions decisions, financial records or information relating to students or parents/guardians; confidential statements of recommendation placed in the record obtained if a receipt of a statement from students waiving the right to open accessibility placement records is present; all information relative to the application for and receipt of financial assistance; records created or maintained by a physician, psychiatrist, psychologist, or other professional or a professional acting or assisting in a similar capacity in treatment of a student; institutional employment or faculty files; alumni information; and sole-access educational records. Sole access records are those records of instructional, supervisory and administration and educational personnel that are in the sole possession of the makers and are not accessible or revealed to any other individual except a temporary substitute.

## Procedures Related to Correction of Records

Pursuant to Family Educational Rights and Privacy Act of 1974, students have the right to inspect their educational records and correct such records if necessary. Students desiring to review their records should make this request to the appropriate official in writing. Such written request will be granted within a period of no more than 45 days from the date of request. In the event the record contains inaccurate, misleading or otherwise inappropriate information, every effort will be made to correct or delete such material, and the student will be so informed of such action in writing. Institutions may release information to governmental agencies for review for purposes of financial aid audits, National Student Loan Clearinghouse, etc. In the event of a subpoena, the institution may disclose information if the institution makes a reasonable effort to notify the eligible student of the order or subpoena in advance of compliance, so that the student may seek protective action, unless the disclosure is in compliance with a Federal grand jury subpoena. Complete information on FERPA policy may be found at http://www.ed.gov/policy.

## Research

## Policy

See Board of Regents Policy Manual Section 6.1.

## Ethics in Reseatch

If research is to continue to make a positive contribution to society, scholars must ensure they maintain the highest levels of integrity and ethical behavior. At Georgia Gwinnett College (GGC), research (i.e., scholarship and creative activities) not only complies with the highest legal and ethical standards, but strives to serve as a model in terms of how research should be conducted. The research activities performed by GGC faculty, students, and staff follow universal best practices. Each member of the GGC community has a personal responsibility and is held accountable for ensuring that the activities engaged in embody the intent of this policy. The institution is responsible for creating a culture and structure where ethical behavior in research is established, enforced, and rewarded.

Georgia Gwinnett College 2015-16 Catalog

Scholars engaged in research involving humans comply with the guidelines and procedures outlined by the Institutional Research Board (IRB). Further, those engaged in research that involves animals follow the practices specified by the Institutional Animal Care and Use Committee (IACUC). These guidelines provide the norms by which scholars are to operate when conducting scholarship and creative activities, in an effort to achieve the objectives of the research (e.g., knowledge, truth), while maintaining the trust and support of the public.

In sum, GGC adheres to strict principles of ethics in research and does not do anything that goes against the law. If questionable activities should occur, GGC will fully investigate such claims and/or fully cooperate with the appropriate authorities to ensure the issues are resolved and the necessary parties are informed.

## Intellectual Properties

See Board of Regents Policy Manual Section 6.3.

## Preamble

Georgia Gwinnett College (GGC) is dedicated to teaching, scholarship, and the extension of knowledge to the public. The personnel at the College recognize as two (2) of their major objectives, the production of new knowledge and the dissemination of both old and new knowledge. Inherent in these objectives is the need to encourage the development of new and useful devices and processes, the publication and presentation of scholarly works, and the development of computer software. Such activities (1) contribute to the professional development of the faculty, staff or students involved; (2) enhance the reputation of the institution; (3) provide additional educational opportunities for participating students; and (4) promote the general welfare of the public at large.

Patentable inventions and materials often come about because of activities of GGC faculty, staff, or students who have been aided wholly or in part through the use of resources of GGC. It becomes significant, therefore, to ensure the utilization of such inventions for the public good and to expedite their development and marketing. The rights and privileges, as well as the incentive, of the inventor or creator must be preserved so that his/her abilities may be further encouraged and stimulated.

Georgia Gwinnett College recognizes and encourages the publication of scholarly works as an integral part of the processes of teaching, research, and service. GGC acknowledges that faculty, staff, or students regularly prepare for publication, usually through individual effort and initiative, articles, pamphlets, books, presentations, and other scholarly works which may be subject to copyright and which may generate royalty income for the author. Publication may also result from work supported either partially or completely by the institution. With the advent of innovative techniques and procedures, the variety and number of materials which might be created in a university community have increased significantly, causing the ownership of such copyrightable materials to become increasingly complex.

GGC recognizes the need for enhanced development and dissemination of software technology as a means of expressing both old and new knowledge. Inasmuch as the College is aware of the dynamic nature of software and that the value of intellectual property comes from the ability of its owner to control its use and that such value is directly related to the degree of protection it enjoys under the law, GGC will protect such expressions of knowledge by the utilization of appropriate intellectual property laws and the creation of comprehensive software technology transfer policies and procedures.

The foregoing considered, Georgia Gwinnett College, does hereby establish the following policy with respect to the development, protection, and transfer of rights to Intellectual Property resulting from the work of its faculty, staff, or students.

See Board of Regents Policy Manual Section 6.3.1.

## Policy Applicability to Faculty, Staff, and Students

This policy shall be applicable to all full or part-time faculty, staff and students of Georgia Gwinnett College.

## Definitions

See Board of Regents Policy Manual Section 6.3.2.

## Intellectual Properties

Intellectual Property shall be deemed to refer to patentable materials, copyrighted materials, trademarks, software, and trade secrets, whether or not formal protection is sought.

## Patentable Materials

Patentable Materials shall be deemed to refer to items other than software that reasonably appear to qualify for protection under the patent laws of the United States or other protective statutes, including Novel Plant Varieties and Patentable Plants, whether or not patentable thereunder.

## Copyrighted Materials

Copyrighted Materials shall include the following:

1. Books, journal articles, texts, glossaries, bibliographies, study guides, laboratory manuals, syllabi, tests, and proposals;
2. Lectures, musical or dramatic compositions, and unpublished scripts;
3. Films, filmstrips, charts, transparencies, and other visual aids;
4. Video and audio tapes or cassettes;
5. Live video and audio broadcasts;
6. Instructional materials;
7. Mask works; and,
8. Other materials or works other than software that qualify for protection under the copyright laws of the United States (See 17 U.S.C. § 102 et seq.) or other protective statutes whether or not registered thereunder.

## Software

Software shall include one or more computer programs existing in any form, or any associated operational procedures, manuals or other documentation, whether or not protectable or protected by patent or copyright. The term "computer program" shall mean a set of instructions, statements, or related data that, in actual or modified form, is capable of causing a computer or computer systems or parts therein to perform specified functions.

## Trademarks

Trademarks shall include all trademarks, service marks, trade names, seals, symbols, designs, slogans, or logotypes developed by or associated with the USG or any of its institutions. (See 15 U.S.C. § 1127.)

## Trade Secrets

Trade Secrets means information including, but not limited to, technical or nontechnical data, a formula, a pattern, a compilation, a program, a device, a method, a technique, a drawing, a process, financial data, financial plans, product plans, or a list of actual or potential customers or suppliers that:

1. Derives economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and 2. Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy (See O.C.G.A. § 10-1-761).

## Patentable Plant

Patentable Plant means an asexually reproduced distinct and new variety of plant (See 35 U.S.C. $\int 161$ ).

## Mask Work

Mask Work means a series of related images, however fixed or encoded:

1. Having or representing the predetermined, three dimensional pattern of metallic, insulating, or semiconductor material present or removed from the layers of a semiconductor chip product; and, 2. In which series the relation of the images to one another is that each image has the pattern of the surface of one form of the semiconductor chip product (See 17 U.S.C. $\S 901$ ).

## Novel Plant Variety

Novel Plant Variety means a novel variety of sexually reproduced plant (See 7 U.S.C. $\S 2321$ et seq).

## Creator and Originator

Creator and Originator, which are used interchangeably in this Intellectual Property Policy, shall mean the creator, author, inventor, or similar person and that person's executor, heirs, successors, and assigns.

## Faculty Members, Staff Member and Student

Faculty Member, Staff Member, and Student are individuals who have signed an appropriate agreement (such as an application for admission or a contract of employment) with the College that obligates them to abide by the policies of the College and the Board of Regents. A staff member is any person other than a faculty member who is employed on a full-time or part-time basis by the College.

## Determination of Rights and Equities in Intellectual Properties

See Board of Regents Policy Manual Section 6.3.3.

## Sponsor-Supported Efforts

Sponsored project agreements with the College or one of its foundations often contain specific provisions with respect to ownership of Intellectual Property developed during the course of such work, in which case the terms of the sponsored project agreement shall establish ownership. When the sponsored project agreement is silent on the matter, all rights in intellectual property shall vest in the College. Income, if any, from such Intellectual Property shall be shared with the Originator, subject to the sponsor's requirements, in accordance with Section 6.3.4.10.

## College-Assigned Efforts

Ownership of Intellectual Property developed as a result of College-assigned efforts shall reside with the College. Copyrightable works created by an employee in the course of his/her employment are considered to be works made for hire under copyright law, with ownership vested in the employer. However, any income from such Intellectual Property shall be shared with the Originator, in accordance with Section 6.3.4.10. The above notwithstanding, a faculty member's or student's general obligation to produce scholarly and creative works does not constitute a work for hire or a specific College assignment.

## College-Assisted Individual Effort

Ownership of Intellectual Property developed by faculty, staff, and students who make more than purely incidental use of College resources shall be shared by the Originator and the College. For purposes of this Intellectual Property Policy, the use of the following College resources generally shall not result in shared ownership: all resources available to the public without charge; College owned/leased office, lab, or studio space or general use equipment; general use computer equipment; library resources, including electronic resources; and Internet access.

Use of the following College resources in the production of Intellectual Property generally shall constitute more than purely incidental use, shall be defined as College-Assisted Individual Effort, and shall result in shared ownership of the Intellectual Property under this Section: resources provided by College-funded and/or College Foundation-funded grants, and stipends; College employees (other than faculty) within the employment period; long distance telecommunication services and other cost-added supplies and services; and College facilities other than offices, labs, studios, or library. Income, if any, from such Intellectual Property shall be shared as described in Section 6.3.4.10.

## Individual Effort

Ownership of Intellectual Property developed by faculty, staff, and students of the College shall reside with the Originator of such Intellectual Property provided that: the Intellectual Property was not developed in accordance with the terms of a sponsored project agreement (see Section 6.3.3.1); the Intellectual Property was not developed by faculty, staff, or students as a specific College assignment (see Section6.3.3.2); and there was no significant use of College resources in the creation of such Intellectual Property (see Section 6.3.3.3). The Originator of the Intellectual Property shall have the opportunity to demonstrate that this classification applies. 230

## Other Efforts

Ownership of Intellectual Property developed by faculty, staff, and students of the College under other efforts is determined according to the criteria specified in Sections 6.3.3.1 through 6.3.3.4 above. Such efforts include, but are not limited to, consulting for outside organizations, collaborating with non-College personnel, or serving on non-College boards, committees, task forces, etc. Any agreement should include a statement that the faculty member has intellectual property obligations to the College and this Intellectual Property Policy should be attached to the agreement. In the event that there is any conflict between the College personnel's obligations to this Intellectual Property Policy and their obligations to the entity or collaborative arrangement for which they provide these efforts, the obligations to this Intellectual Property Policy shall control.

## Institutional Procedures

See Board of Regents Policy Manual Section 6.3.4.

## Intellectual Property Committee

The President shall appoint an institutional Intellectual Property committee, consisting of no fewer than four (4) or more than nine (9) members, one (1) of whom shall be designated by the President to serve as chair. The committee shall include a representative of the Office of Resources, the faculty, the staff, and the student body. The committee shall meet as necessary, and shall act in an advisory capacity to the President or his/her designee. Faculty, staff, and students shall promptly report to the committee in writing, through the appropriate channels, all Intellectual Property invented or created by them, which is reasonably likely to have commercial value. The duties of the IP Committee include:

- Review Disclosure of Intellectual Property forms submitted by faculty, staff, and students.
- Act in an advisory capacity regarding Intellectual Property to the President, Vice President or his/her designee.
- Evaluate Intellectual Property developed through Sponsor-Supported Efforts and College-Assigned Efforts, and to determine whether to administer such Intellectual Property by undertaking those efforts it determines to be appropriate to protect and license or otherwise commercialize such Intellectual Property.
- In all cases in which questions arise as to equities, rights, division of royalties, or any other Intellectual Property-related matter the Intellectual Property Committee will perform any necessary consideration of circumstances, interpretation of policy, and initial decision making.
- For Sponsor-Supported Efforts, College-Assigned Efforts, and College-Assisted Efforts, the College Intellectual Property Committee is the body to recommend a lower percentage of the net revenue than specified in Section 6.3.4.10 if warranted where availability and use of College resources warrants smaller payment provisions. Any revenue sharing recommendations from the Intellectual Property Committee require written review and approval by the appropriate Vice President.


## Disclosure of Intellectual Property

For circumstances meeting the criteria for Section 6.3.3.1 through 6.3.3.3, College personnel and students shall promptly provide the Intellectual Property Committee with a disclosure describing their creative and scholarly works and new material, devices, processes, or other inventions which may have commercial potential by using forms provided by the Intellectual Property Committee. College personnel and students shall also cooperate with the College and sign all papers deemed necessary to protect and commercialize Intellectual Property covered by this Intellectual Property Policy.

Disclosures are not required for circumstances meeting the criteria delineated in Section 6.3.3.4 or for works of authorship where there is no intent to commercially exploit the intellectual property (examples include, but are not limited to, articles for publication in scholarly or professional journals and instructional or research material for internal use), even though the ownership of the copyright may reside in the College as determined by Sections 6.3.3.1 and 231
6.3.3.2, or Georgia Gwinnett College Intellectual Property Policy. In cases where disclosure is not required, the College shall assign the copyright to the author for publication purposes.

## Obligations of Principal Investigator/Project Directors

Principal Investigators/Project Directors shall be responsible for informing coworkers, co-investigators, and direct reports of their rights and obligations under contracts, grants, and the like before the initiation of research or other sponsored projects.

## Confidentiality

Certain contractual obligations and governmental regulations require that information be maintained in confidence. Some works, such as certain computer software, may best be protected and licensed as trade secrets. Additionally, inventions must be maintained in confidence for limited periods to avoid the loss of patent rights. Accordingly, the timing of publications is important, and College personnel and students shall use their best efforts to keep the following items confidential (to the extent allowed by law): all information or material designated confidential in a contract, grant, or the like; all information or material designated or required to be maintained as confidential under any applicable governmental statutes or regulations; and all information relating to Intellectual Property developed by College personnel and students which may be protected under this Policy until application has been made for protection.

## Collaboration

Collaboration between College personnel and persons not employed or associated with the College, including researchers at other universities or companies can result in the development of Intellectual Property jointly owned by the College and other persons or their employers. Protection and commercialization of such joint Intellectual Property can be difficult without extensive cooperation and agreement among the owners. Accordingly, it is important for College personnel involved in collaborative activities that may
result in, the development of Intellectual Property to advise their immediate supervisors and the Office of Research and Grants of such activities.

## Administration of "Sponsor-Supported Efforts" and "College-Assigned Efforts"

The Intellectual Property Committee has the responsibility to evaluate Intellectual Property developed through Sponsor-Supported Efforts and College-Assigned Efforts, and to determine whether to administer such Intellectual Property by undertaking those efforts it determines to be appropriate to protect and license or otherwise commercialize such Intellectual Property.

## Administration of "College-Assisted Individual Effort"

Any Intellectual Property which is the result of College-Assisted Individual Effort under the Georgia Gwinnett College Intellectual Property Policy shall be administered by the Originator, unless the Originator and the Committee agree to have it administered by the College. Such Intellectual Property which is administered by the College shall be treated as "College-Assigned Effort." In this situation, the Originator shall assign to the College his/her share of the ownership rights in such Intellectual Property, and the determination of revenue sharing as described in Section 6.3.4.10 of this Policy will be in accordance with the "College-Assigned Effort" classification.

## Administration of "Individual Effort"

Intellectual Property designated as "Individual Effort" shall be assigned to the Originator under a simple agreement which provides for periodic reports describing the Originator's administrative activities, generation of payments or royalties, and if appropriate payment to the College of a portion of net revenue from the exploitation of the Intellectual Property. The Originator shall have responsibility for administration of the Intellectual Property. "Individual Effort" Intellectual Property may be assigned to the College to be treated and administered as College-Assigned Effort Section 6.3.3.2 Intellectual Property if both the Committee and the Originator agree to do so (see the discussion in Section 6.3.4.7).

## Declined Intellectual Property

Whenever the College chooses not to administer Intellectual Property or chooses to cease administering Intellectual Property, such Intellectual Property, subject to any obligations to a sponsor, may be released to the Originator to dispose of as the Originator sees fit.

## Revenue Shating

All Recommended Revenue Sharing Distribution Agreements must be approved by the appropriate Vice President.
Recommendations shall be made in writing by the Intellectual Property Committee.
A. Net Revenue from License Activity

The proposed division of net revenue is presented below. Net revenue is defined as gross receipts received by the College from license activity minus contract amounts due sponsors, if any, and the out-of-pocket costs incurred by the College in protecting and licensing the Intellectual Property. Where the College owns some portion of the Intellectual Property in question, revenue generated from use of the Intellectual property by the College is not receipts by the College from license activity.

## Recommended Revenue Distribution

| REVENUE <br> DISTRIBUTION | Originator | Originator's <br> School | Originator's <br> Discipline** | Georgia Gwinnett <br> College <br> Foundation* | Office of the <br> Originator's Vice <br> President |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SPONSOR <br> SUPPORTED | $70 \%$ | $5 \%$ | $5 \%$ | $10 \%$ | $10 \%$ |
| COLLEGE ASSIGNED | $50 \%$ | $15 \%$ | $5 \%$ | $10 \%$ | $10 \%$ |
| COLLEGE ASSISTED | $70 \%$ | - | $5 \%$ | $10 \%$ | $15 \%$ |
| INDIVIDUAL <br> EFFORT | $100 \%$ | - | - | $10 \%$ |  |
| OTHER EFFORTS | To be determined on case-by-case basis. | - |  |  |  |

* A different entity who administers the Intellectual Property on behalf of the College may replace the stated foundation.
** Funds designated for the Originator's Discipline will be provided to the Originator's school with instruction that this portion of the funds be devoted to fostering further scholarship and research in the Originator's Discipline.


## Notes on Originator Portion:

1. The Originator's share of net revenue shall be divided (equally) among joint Originators of jointly developed Intellectual Property, unless a written statement signed by all joint Originators which provides for a different distribution is filed with the College prior to the first distribution of shared net revenue.
2. In the event the Intellectual Property is licensed to the Originator, or an external entity in which the Originator has a significant financial interest, the Originator shall waive the right under the College Intellectual Property Policy to receive the Originator's share of royalties identified above (except when the development of the Intellectual Property meets the criteria established for the Individual-Effort category, in which case this clause does not apply). In the event the Originator does not receive the Originator's share, that share shall be distributed to the other parties in the proportions detailed above. 3. In the event the terms of the license of the Intellectual Property provide the College with equity, or an option to acquire equity, in the entity which licenses the Intellectual Property, the share of such equity due to Originators as identified above will be distributed to the originators when such equity is transferable or convertible to cash.

For Sponsor-Supported Efforts, College-Assigned Efforts, and College-Assisted Efforts, the College Intellectual Property Committee may recommend that a lower percentage of the net revenue be distributed to the Georgia Gwinnett College Foundation and the Faculty Research Committee if it seems evident that use of College resources warrants smaller payment provisions.

## B. Net Revenue from College Use of College-Owned Intellectual Property

Where the College owns some portion of the Intellectual Property in question, net revenue generated from use of the Intellectual property by the College shall be divided in accordance with the following table. Net revenue is defined as gross receipts received by the College from its usage of the Intellectual Property activity minus contract amounts due sponsors, if any, and the out-of-pocket costs incurred by the College in protecting the Intellectual Property.

## Recommended Revenue Distribution

| REVENUE <br> DISTRIBUTION | Originator | Originator's <br> School | Originator's <br> Discipline** | Georgia Gwinnett <br> College <br> Foundation* | Office of the <br> Originator's Vice <br> President |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SPONSOR <br> SUPPORTED | $17 \%$ | $17 \%$ | $33 \%$ | $33 \%$ | $17 \%$ |
| COLLEGE ASSIGNED | $30 \%$ | $20 \%$ | $20 \%$ | $30 \%$ | $30 \%$ |
| COLLEGE ASSISTED | $17 \%$ | $17 \%$ | $33 \%$ | $33 \%$ | $17 \%$ |
| OTHER EFFORTS | To be determined on a case-by-case basis. |  |  |  |  |

* B different entity who administers the Intellectual Property on behalf of the College may replace the stated foundation.


## Interpretation, Decision, and Appeal

Cases where the Originator and the College agree to the classification and proposed mechanism of commercialization, the intellectual property will be processed by the College in accordance with this policy. All cases in which questions arise as to equities, rights, division of royalties, or any other Intellectual Property-related matter shall be referred to the Intellectual Property Committee for consideration, interpretation of policy, and decision. Appeal of an Intellectual Property Committee decision shall be to the appropriate Vice President. Appeals within the College must be made, in writing, within twenty (20) days of written notice of a decision. A final institutional decision may be issued by the President or his designee. If further appeal is necessary after issuance of a final institutional decision, the party may appeal to the Board of Regents. Appeals to the Board of Regents shall be made in accordance with Article IX of the Bylaws of the Board, which currently requires that appeals be filed within twenty (20) days of the final institutional decision. Twenty days refers to calendar days.

## Heirs and Assigns

The provisions of this Policy shall fix the interests of and be binding upon the heirs and assigns of (1) all University personnel; and (2) all others who agree to be bound by it.

## Trademarks

All trademarks arising out of research by institutions of the University System of Georgia constitute property of the Board of Regents of the University System of Georgia, and applications for registration, use of and licensing of such trademarks shall be governed by the policies of the Board. Trademarks arising out of research done by an institution of the University System of Georgia pursuant to an agreement with a cooperative organization shall be the property of such cooperative organization and such organization may file all appropriate applications and other documents necessary to protect such trademarks and may exercise all other rights consistent with ownership of the trademarks.

## Filling of Institutional Policies

A true copy of the Georgia Gwinnett College Intellectual Property Policy shall be filed with the Office of Legal Affairs in the University System Office, as required by the Board of Regents Policy Manual Section 6.3.6.

See Board of Regents Policy Manual Section 6.3.6.
Georgia Gwinnett College 2015-16 Catalog

COLLEGE

## Academic Policies and Procedures

## Student Success Courses

See University System of Georgia Academic \& Student Affairs Handbook Section 2.9 and Board of Regents Policy Manual Section 3.3.2.

In keeping with the admission policy of the University System of Georgia and Georgia Gwinnett College, students who lack the fundamental skills needed for success in college level courses may be admitted to the college, provided they enroll in Student Success courses specifically designed to meet their unique needs. Student Success courses are a sequence of studies to assist students with developing their academic skills, their personal goals and appropriate curriculum plans. Special one-on-one consultation and academic advisement are provided to help students progress towards enrollment in college level credit courses.

## Student Success Courses in English (Reading/Writing) and Math

The School of Transitional Studies offers Student Success (i.e., Learning Support) courses designed to prepare students for collegelevel work.
a. These courses include, but are not limited to, ENGL 0989: Foundations for English Composition, ENGL 0099 or ENGL 0999: Support for English Composition, MATH 0987: Foundations for Quantitative Reasoning, MATH 0997: Support for Quantitative Reasoning, MATH 0989: Foundations for College Algebra, and MATH 0999: Support for College Algebra.
b. No degree credit will be earned in Student Success courses, but institutional credit will be awarded.
c. The following grades are approved for Student Success courses in English (reading/writing), and mathematics:

- Passing course grades: A, B, C, S
- Failing course grades: F, U, WF
- Progress insufficient for completion of the course: IP
- Academic progress satisfactory, but coursework incomplete: I
- Withdrawal without penalty: W
- Student auditing Student Success course that is not required but taken voluntarily: V

Georgia Gwinnett College may use any of these grades or symbols that it deems appropriate for its Student Success program. "D" is not allowed as a grade in Student Success courses.

## Student Placement Test Scores Relative to Course Placement

New students with fewer than 30 semester hours are required to demonstrate proficiency in English (reading/writing), and mathematics to register for college-level courses. Those entering without transferable English credit (e.g., ENGL 1101) or mathematics credit (e.g., MATH 1001, MATH 1111) and scores below acceptable SAT/ACT minimums will be required to take a placement exam to determine the appropriate level of coursework. Students may take the placement exam twice.

Placement exams are administered by Testing Services. The University System of Georgia may mandate or recommend the use of specific placement exams (e.g., COMPASS) and scores for placement into college-level courses. Georgia Gwinnett College may require students to take additional placement exams to refine placement of new students within the guidelines of the University System. Those students with scores that do not meet specific requirements are required to complete appropriate Student Success courses to assist them in gaining the required skills. Specific information about the placement exams and placement scores are available on the Georgia Gwinnett College website. The majority of students with Student Success requirements will be placed into corequisite courses.

## Policies for Students with Student Success Requirements

## Advising

Students enrolled in Student Success courses are provided help to develop their personal goals and appropriate curriculum plans. Students may be assigned a Student Success advisor in the Georgia Gwinnett College Advising Center to make sure they remain on track to exit their Student Success courses and succeed at Georgia Gwinnett College.

## Student Success Courses Take Priority

It is the policy of the University System of Georgia that during each semester of enrollment, a student must first register for all required Student Success courses before being allowed to register for other courses. This policy also applies to part-time students. Two exceptions are possible:
a. When two Student Success areas are required and the student is enrolled in at least one Student Success course, a
freshman orientation course (e.g., GGC 1000) or physical education course or other activity or performance course may, if available, be taken that semester instead of another required Student Success course.
b. In the event that a required Student Success course is not available, a student may enroll in a course for degree credit if the student has met the course requirements, subject to the written approval of the President or designee.

## Prerequisites for College-Level Classes

a. Required Student Success classes can restrict the range of collegiate level courses students may take. Students who are required to enroll in Student Success courses are not permitted to enroll in credit courses that require the content or the skills of the prerequisite courses.
b. The following core curriculum areas require students to complete or exempt certain Student Success requirements:

- Completion or exemption from Foundations-level Student Success English is a prerequisite for Social, Natural, and Physical Science courses.
- Completion or exemption from Foundations-level Student Success English or placement into corequisite English is required for placement into college-level English courses (ENGL 1101).
- Completion or exemption from Foundations-level Student Success mathematics or placement into corequisite mathematics is required for placement into college level mathematics courses.
- Completion or exemption from Foundations-level Student Success mathematics is a prerequisite for physics and chemistry courses.
- GGC may set higher prerequisite standards, such as completion of Student Success requirements at the corequisite level.
- Any courses with prerequisite of any other college-level course requires exit or exemption from related Student Success requirements. Exceptions to this policy are allowed for co-requisite programs that link Student Success courses and college-level courses.
- Courses such as music, art, and film are open to students with Student Success requirements.


## 30-Hour Rule

Students who have accumulated a maximum of 30 semester hours of college-level credit and have not successfully completed required Student Success courses may enroll only in Student Success courses until requirements are successfully completed. Students with transfer credit or credit earned in a certificate or prior degree program who are required to take Student Success courses for their current degree objectives may earn up to 30 additional hours of college-level credit. After earning the additional hours, such students may enroll in Student Success courses only.

## Withdrawal from Student Success Courses

Students with Student Success requirements who are enrolled in both Student Success courses and college-level credit courses and who withdraw from required Student Success courses are not required to withdraw from unrelated collegiate courses.

## Maximum Number of Attempts and Suspension

a. An attempt is defined as an institutional credit course in which a student receives any grade or symbol except "W" or "WM".
b. If students do not complete requirements for Foundations-level English or mathematics in two attempts, they will be suspended for a calendar year. Suspended students may be considered for readmission before the end of one year if they can provide evidence that they have taken measures to improve their skills.
c. Students who have been suspended from the institution without completing Student Success requirements may complete their Student Success requirements and additional collegiate-level work at SACSCOC-accredited TCSG institutions during the year of suspension.
d. There are no limits on attempts in corequisite Student Success courses.

## Transfer Students and Student Success Courses

Time spent in Student Success course work in a disciplinary area is cumulative within the University System of Georgia. A transfer Student Success student with fewer than two attempts in Foundations-level English (reading/writing) and/or mathematics may be granted an additional semester in Foundations-level Student Success course(s) at Georgia Gwinnett College. Students who have been suspended from Georgia Gwinnett College may not be exempted from their required Student Success courses through transfer of course credit unless they are eligible for transfer admission under GGC's regular transfer admission policies. Students who complete course work and exit an area of Student Success/Learning Support at any institution in the USG shall not be required to re-enter that area of Student Success upon transfer to GGC. For students transferring from SACSCOC-accredited TCSG colleges, exit will be considered according to guidelines issued by the Executive Vice Chancellor and Chief Academic Officer of the USG.

## Resuming College Work and Student Success Requirements

a. Students who leave a USG school for any reason may be re-admitted without Student Success/Learning Support requirements if they meet one of the following conditions:

- Students have completed all Student Success/Learning Support requirements at a SACSCOC TCSG institution and completion of Student Success/Learning Support requirements is documented on their TCSG transcript.
- Students have earned transferable credit at a regionally-accredited non-USG institution for ENGL 1101 or 1102 (for completion of the Student Success/Learning Support English requirement) or an Area A mathematics course (for completion of the Student Success/Learning Support Mathematics requirement). Georgia Gwinnett College will decide whether to grant Area A credit for courses taken elsewhere.
- Students have completed Student Success/Learning Support requirements at another USG institution and completion of Student Success/Learning Support requirements is documented on their transfer transcript.
b. Students who leave Georgia Gwinnett College and return without having satisfied their Student Success requirements in the interim may be readmitted to the college under the following conditions:
- Students who have been suspended for a calendar year for failure to complete a Foundations-level Student Success course within two attempts have two options on their return: See 3.3.2.1.6.
- Students with Student Success requirements who voluntarily leave Georgia Gwinnett College for periods of less than one calendar year will return to the level of Student Success (Foundations-level or corequisite) they were in immediately prior to their absence:
- Time spent in Student Success/Learning Support course work in a disciplinary area is cumulative within the USG. Students who return to Georgia Gwinnett College less than
- one calendar year after one attempt in Foundations-level Student Success will return on their second attempt in the Foundations-level Student Success course.
- Students who had completed requirements for Foundations-level Student Success and had been recommended for corequisite Student Success may reenter at the corequisite support level.
- Students in Student Success who voluntarily leave Georgia Gwinnett College for periods of one calendar year or more must be retested with the COMPASS in any previously unsatisfied Student Success area:
- Such students may be readmitted without a Student Success requirement if they meet the institutional criteria for exemption.
- Students who do not score high enough on the COMPASS test to exempt Student Success may be placed in either Foundations-level or corequisite courses.
- Students placed in Foundations-level Student Success may be readmitted and allowed up to two additional attempts in Foundations-level Student Success in both English and mathematics, as applicable, if individual evaluation indicates that the student has a reasonable chance of success on readmission.
c. Students readmitted under this provision are subject to the 30 -hour limit on college-level coursework and may not take credit work if they had earned 30 or more credit hours during their previous period(s) of enrollment and have not completed Student Success requirements in the interim (See 3.3.2.1.2.4).
d. Completion of transferable Area A courses in English or mathematics from any institution will eliminate further Student Success requirements in that area upon transfer back to Georgia Gwinnett College.


## Exit Policies for Student Success Courses

Students will exit Student Success (corequisite English or Mathematics) by successfully passing the corresponding Area A collegiatelevel course with a grade of C or better. Because registration for the next semester occurs before final grades are calculated, students may register for college-level courses but not exit required Student Success courses that are prerequisites for the college-level courses. It is the responsibility of the student to amend his or her class schedule by removing the college-level courses for which the student has not satisfied the prerequisites and register for any required Student Success courses from which the student did not exit. There are no limits on attempts in corequisite Student Success courses.

## Voluntarily Enrolling in Student Success Courses

Students who are not required to take Student Success courses in a disciplinary area may elect to enroll in Student Success courses in the non-required area for institutional credit or on an audit basis. Such students are limited to a maximum of two attempts if they elect to enroll in Foundations-level English (reading/writing) or mathematics but are not subject to the requirements specified in 3.3.2.1.5. There is no limit on attempts for students who elect to enroll in corequisite Student Success courses. An attempt is defined as an institutional credit course in which a student receives any grade or symbol except "W."

## Student Success Suspension in English and Mathematics

Students placed into Student Success courses must complete requirements for Foundations courses for English (reading/writing) or mathematics in two semesters or the student will be suspended for one year. During this time, students are expected to take measures to improve their skills before being readmitted to Georgia Gwinnett College. Suspended students may be considered for readmission before the end of one year if they can provide evidence that they have taken measures to improve their skills. Students who have been

Georgia Gwinnett College 2015-16 Catalog
suspended from the institution without completing Student Success requirements may complete their Student Success/Learning Support requirements and additional collegiate-level work at SACSCOC accredited TCSG institutions during the year of suspension. There are no limits on attempts in corequisite Student Success courses.

## Readmission from Student Success Suspension

Students suspended for not completing Student Success requirements may apply for readmission. Students who have been suspended for a calendar year for failure to complete a Foundations-level Student Success course within two attempts have two options on their return:

- Students may return to placement in the Foundations-level Student Success course and have two more attempts.
- Students may take the COMPASS test and accept the resulting Student Success placement. If placed in Foundationslevel Student Success, they will have two more attempts to complete this level.

Students suspended from the institution without completing Student Success requirements may not be exempted from the Student Success course requirements through transfer of course credit unless they are eligible for transfer admission under GGC's regular transfer admission policies.

# Student Success Courses in English for Academic Purposes/English as a Second Language 

Students whose native language is not English must show proficiency in English before being admitted to the college. Students who graduated from a high school outside the United States must present a satisfactory TOEFL score. Students with scores that admit them to Georgia Gwinnett College will be placed in either English for Academic Purposes/English as a Second Language (EAP/ESL) or collegiate-level English courses depending on their placement test results (See 3.3.2.2.1).

## Criteria for Determining EAP/ESL Placement

Entering students who are non-native speakers of English and who score below 480 on the verbal section of the SAT or below 21 on the English ACT are required to take the EAP placement test administered by Testing Services. The EAP placement test may be taken twice. Students with transfer credit for ENGL 1101 and no RHSC deficiency in English are not required to take the EAP placement test.

## English for Academic Purposes/English as a Second Language (EAP/ESL) Program

The English for Academic Purposes/English as a Second Language Program (EAP/ESL) provides instruction in academic English, including reading, writing, speaking, and listening, for non-native speakers of English. The program is designed to prepare students in the language skills necessary for successful academic work at Georgia Gwinnett College.

## Prerequisites for College-Level Classes

Students who are enrolled in EAP courses may be restricted as to which other courses they may take while taking EAP courses. Students should consult the Georgia Gwinnett College Catalog to determine course prerequisites.

## EAP/ESL Registration Takes Priority

During each semester of enrollment, EAP/ESL students must first register for all required EAP courses before registering for other courses. This policy applies to full-time and part-time students.

## EAP/ESL Withdrawal Policy

EAP/ESL students may withdraw from one or more EAP courses. They will not be withdrawn from unrelated collegiate courses as long as they remain enrolled in a minimum of one EAP course. Students who withdraw from all EAP courses will also be withdrawn from all unrelated collegiate courses.

## EAP/ESL Exit Policy

In order to exit the EAP program, students must achieve passing grades in the upper level EAP course(s) and/or any required final exit exams. Final exams in EAP courses may be given after registration for the following semester, and students may have registered for courses that have their current EAP courses as prerequisites. Because of this, if students do not pass their final exams in the EAP courses, they may not exit and be unable to take some collegiate-level courses the next semester. It is the responsibility of students in Student Success classes like EAP to amend their schedule to reflect their exit results.

## GGC Honors Program

The GGC Honors Program provides a distinguished, integrated educational experience that challenges students of distinction to demonstrate excellence in Scholarship, Service, Leadership, and Creativity. The Honors Program challenges students to discover the deepest meanings of these core values and apply them to their studies, potential careers, and daily lives. Qualified students admitted to the GGC Honors Program explore the core values via a rich and varied set of curricular and co-curricular experiences that challenge students academically; develop their creativity; foster within them an abiding commitment to civic engagement; and enhance their leadership skills.

Members of GGC's Honors Program are offered a variety of benefits. They are eligible for enrollment in: Honors versions of several core curriculum classes, designated as such on student transcripts; Honors 1000, a one-credit, passfail Honors seminar designed for first-year students; and for Honors Program students who meet pre-requisites, interdisciplinary Honors 3000 Special Topics seminars developed by faculty from disciplines across the college. Honors courses are limited in size and emphasize in depth discussions and active, student-centered learning in an engaging and supportive atmosphere. Members also have access to our Honors Learning Lounge and a range of co- and extracurricular programming, events, and opportunities to enrich the college experience with particular focus on the College's four core values.

In addition, Honors Program members may be able to graduate from the College "with honors" and their Honors Program membership noted on their transcripts and diplomas if they:

In addition, Honors Program members may be able to graduate from the College "with honors" and their Honors Program member ship noted on their transcripts and diplomas if they:

- Maintain a minimum GPA of 3.5 in college-level courses;
- Demonstrate a commitment to leadership, creativity, scholarship and service;
- Demonstrate mastery of the Honors Program Student Learning Outcomes; and
- Remain enrolled at GGC and in the Honors Program for at least four semesters.


## Honors Program Student Learning Outcomes

Members of GGC's Honors Program are expected to demonstrate progress related to and eventual mastery of the following outcomes:

- Effective multi-modal communication;
- Creative thinking;
- Critical thinking; and
- Civic engagement.


## GGC Honors Program Admission Policy

Admission to the Honors Program requires that all applications are reviewed holistically, and those students who desire admission into the GGC Honors Program must:

- Have attained a GPA of 3.5 or higher;
- Write an essay illustrating the student's personal commitment to GGC's core values of scholarship, service, leadership and creativity;
- Obtain a letter of recommendation from a GGC faculty and/or staff member. Or, in the case of first-year or transfer students, a letter of recommendation from a faculty and/or staff member from the student's previous institution;
- Successfully complete an interview conducted by the Honors Programs Selection Committee; and
- Complete the GGC Honors Admission Application form, which requires students to give information about their co-curricular and extra-curricular activities.


## Honors Program Expectations and Requirements

- Students accepted to the program are expected to:
- Participate in and document at least one activity per semester related to each of the four core values;
- Attend one of two monthly meetings;
- Play an active role in at least one service project each semester
- Document their activities related to the four core value and the Honors Program outcomes for inclusion in a portfolio;
- Represent the college appropriately at school functions and in the community; and
- Abide by all schools policies and codes of conduct.

Students in the program are required to:

- Enroll in and successfully complete the Honors 1000 1-credit seminar (open to all members but required of only first-year students);
- Enroll in and successfully complete a minimum of two (2) Honors 3000 classes over the course of their time in the program;
- Maintain a GPA of 3.5 or higher, barring extraordinary mitigating circumstances;
- Remain active in the program for four or more semesters (in order to graduate with the Honors Program distinction); and
- Maintain a portfolio demonstrating their commitment to the four core values and appropriate progress towards mastery of the program learning outcomes.


## Student Study Abroad Policy and Procedures

The following Student Study Abroad Policies are intended to guide Georgia Gwinnett College (GGC) students who wish to study abroad.

## Eligibility and Requirements

GGC students who study abroad must have a minimum cumulative GPA of 2.5. Students who do not meet this minimum GPA will not be permitted to study abroad as a student at Georgia Gwinnett College (GGC). Students may not be on any form of academic probation, suspension, dismissal, warnings, or continued probation.

Certain study abroad programs may require higher GPAs or other prerequisites. Students must have achieved the required GGC GPA by the application deadline of the study abroad program.

GGC students are eligible to study abroad after completion of a minimum of 24 collegiate credit hours.
Transfer students must complete a minimum of one full-time semester at GGC before they may study abroad.

International students wishing to study abroad should consult the Office of Internationalization to verify that their student visa will allow them to study in the proposed host country.

## Study Abroad Advising

In keeping with the objectives of the Georgia Gwinnett College Student Mentoring Program, study abroad advisement at GGC is committed to "facilitating student success, development, and retention by supporting the design and implementation of educational and career plans and enhancing student engagement in the academic community." In addition, study abroad advisement is aligned with the University System of Georgia's assertion that academic advising "...represents...an opportunity for the...institution to express a special interest in both the personal and academic welfare of the students." In keeping with this view, study abroad advisement at GGC is structured to support participating study abroad students' achievement of the Integrated Educational Experience (IEE) outcomes of the college.

## Study Abroad Intake Process

The first step for GGC students interested in studying abroad is to visit the Office of Internationalization (OI) in order to complete the study abroad intake process, students should make an appointment.

The goals of the initial intake process are as follows:

- Set appropriate student expectations regarding program options and requirements,
- Explain in detail the various study abroad program options available to GGC students,
- Verify that applicants are GGC students who have completed the minimum 24 collegiate credit hours,
- Verify that applicants have a minimum 2.5 cumulative grade-point average. Students will also understand that certain study abroad programs may require a higher GPA or have other prerequisites, and
- Discuss the basics of studying abroad, from the available destinations, types of programs, financial aid, scholarships, credit transfer, passport/visa issues, health and safety abroad, among other topics.


## Individual Advising Process

After the student has completed the intake process, the second important step is to begin their individual advisement. The individual advising process further engages students, by helping them narrow down the many choices by considering the following questions:

- For how long would you like to study abroad?
- In what country would you like to study?
- What subjects would you like to study?
- What is your budget?
- What kind of support services would you like to be offered by your program?

As the responses to these questions are developed, the Office of Internationalization, in most cases, will direct the student to his/her school's designated Point of Contact (POC) for study abroad to complete a course/degree audit.

This step is critical to the selection of an appropriate study abroad program.
Upon completion of the course/degree audit, the Office of Internationalization continues to work individually with the student to select a program that meets his/her course requirements, personal budget and destination interest. The Office of Internationalization will provide the student with several program options to consider, as well as advise the student on how to obtain sample course descriptions/syllabi to discuss with the POC. One of the primary goals of study abroad at GGC is to help students select a study abroad program consistent with their degree requirements.

## Study Abroad Program Selection and Approval

After a study abroad program has been recommended by the Office of Internationalization, the student will work with his/her designated POC for study abroad to make sure courses will count towards his/her academic program. If a nonGGC study abroad program is selected, the student must obtain approval from his/her POC or Faculty Mentor as well as the appropriate Dean. After this, depending on the type of program, the student will do one of the following:

- GGC Faculty-led Study Abroad Programs

1. Meet with the faculty leading the study abroad program for initial approval to attend the study abroad program.
2. Obtain a GGC Institutional Study Abroad Application from the Office of Internationalization-to be signed by the faculty program director.
3. Return to the Office of Internationalization a copy of the application.

- Non-GGC Study Abroad Programs:

1. Complete the Non-GGC Study Abroad application.
2. Complete a Study Abroad Course Approval Form in order to receive credit approval.
3. A GGC Request for Transient Permission or a Consortium Agreement Form may need to be completed.

The GGC Request for Transient Permission is not required for GGC faculty-led study abroad programs.
The GGC Institutional Study Abroad Application can be obtained in the Office of Internationalization and requires the student to obtain the following signatures of approval as part of their study abroad application and Individual advisement process:

1. School Point of Contact (POC) for study abroad
2. School Dean
3. Financial Aid
4. Student Affairs
5. Residence Life
6. Wellness Center
7. Assistant Director for Education Abroad

Students are required to submit their study abroad applications on or before the published deadlines. In addition, students are required to attend all mandatory pre-departure orientations.

## Types of GGC Study Abroad Programs

Georgia Gwinnett College considers study abroad one of the most important experiences that the institution can offer its students. GGC sponsors a variety of study abroad programs, including spring break, maymester, summer programs, semester, and academic-year programs. These programs fall under the following categories:

- GGC Faculty-Led Study Abroad Programs: The Office of Internationalization works with GGC’s academic schools to develop faculty-led study abroad programs. These programs are primarily spring break, summer and maymester programs led and taught by Georgia Gwinnett College faculty members. The programs tend to focus on a particular topic or theme and generally attract between 10 and 20 students, though some programs may be larger. These programs grant GGC resident credit, and no course substitution or transient permission is necessary.
- Students participate in lectures, site visits, excursions, and tours as part of the program. These programs can last between ten days and six weeks. Students find the programs a great way to get to know their professors and other GGC students while earning GGC credits and grades. Financial aid and scholarships are available.
- GGC Exchange Programs: Currently, GGC does not have any formal exchange agreements with foreign universities. GGC exchanges will offer semester or academic-year studies at a foreign university, and classes may be taught in the host language, English, or both. Exchange programs are among the most affordable study abroad options, as the costs are comparable to spending the semester at GGC. Students who are very independent tend to do well on exchange programs. These programs offer a high level of cultural immersion as GGC students take their courses at the overseas partner institution with local students. Financial aid and scholarships are available. Courses taken through GGC exchanges or with GGC exchange partner universities count as transfer credit.
- GGC International Internships and Independent Study: Students interested in pursuing credit-bearing international internships or independent study under the supervision of a GGC professor should contact the Office of Internationalization. There are some additional requirements related to insurance and documentation, since the student is not on an organized study abroad program. No course substitution or transient permission is necessary. If a student pursues a non-GGC-supervised international internship, course approval and transient permission is required.
- USG Affiliate Programs: In cases where one of the above-referenced GGC programs does not suit the student's academic needs or interests, the student may choose from many other programs within the University System of Georgia such as the USG European Council programs or the China Summer Program.


## Transfer Credit for Study Abroad

Affiliate Programs and Non-GGC Programs: GGC has agreements with several affiliate program providers, and students are encouraged to consider using one of these providers. For non-GGC and affiliate study abroad programs, courses will be reflected on another institution's transcript and will count as transfer credit at GGC. Please note the following important policies:
A. Completed Request for Transient Permission and Course Substitution and Study Abroad Course Approval forms are required prior to registering for the program (Refer to section 3.53.3). These forms allow students to plan how courses will transfer in. They also enable students to maintain student status at GGC for financial aid and other purposes.
B. Courses may transfer as major, minor, core, or elective credit. The appropriate GGC school(s) will determine how the course(s) will transfer and how course(s) will be applied towards degree requirements.
C. GGC students should contact the Office of Internationalization as early in the planning process as possible to review the steps required for completing the transfer credit or transient permission approval process.
D. Transfer credit will be given only for courses that are from accredited U.S. universities/colleges and/or operated by approved GGC study abroad affiliates or consortia.
E. Whether or not transfer credit will be awarded will be determined on a case-by-case basis. The Office of Internationalization will make this determination in consultation with the Registrar's Office and the relevant school dean.
F. Other USG Programs: These programs include all public colleges and universities within the state. GGC students may be eligible to participate in study abroad opportunities through these institutions. Students should consider the following regarding USG programs:

- USG programs tend to be around the same cost and are often led by a faculty member from the host USG institution.
- To participate in a program through another USG institution, students will need to apply as "transient" students to that school as well as apply to their particular study abroad program.
- Each institution is different, so students should pay special attention to the instructions given to them by the contact person for that specific USG study abroad program.
G. Foreign Language Programs/Schools: In order for credit to transfer into Georgia Gwinnett College, it must originate from an accredited institution of higher learning in the US or abroad, and be evaluated by one of the approved credential/evaluation services.


## Financial Aid and Scholarships for Study Abroad

## Financial Aid

GGC students can use their federal and state aid, including the HOPE Scholarship, for study abroad. Financial aid can be used on any study abroad program for which the student will receive academic credit.

To receive academic credit for non-GGC study abroad programs, students need to complete a Request for Transient Permission Form and a Study Abroad Course Approval Form (See Section 3.53.5). Students who do not complete and submit these forms to the Office of Internationalization will not receive financial aid for their study abroad program.

Once a student has submitted these forms, his/her financial aid will be released prior to the start of the study abroad program to the address the student marked for financial aid in Banner. If a financial aid check is scheduled to arrive while the student is abroad, the student should consult with his/her bank about granting Power of Attorney to a close friend or relative so that he/she can deposit the financial aid check.

Important Note: While most students are able to use financial aid to assist with the cost of studying abroad, it is very likely that the student will need to cover these expenses up-front and then be reimbursed at a later date by financial aid or other scholarships. Due to federal regulations, these funds very rarely come through in time to use them to cover study abroad expenses in advance. Students should be aware of this and make arrangements to have their expenses covered in the meantime.

## Steps to Securing Financial Aid for Study Abroad

Students should complete their FAFSA application well in advance of their term abroad. They should verify how their financial aid package will apply to their study abroad program. This is easily accomplished by meeting with a Financial Aid counselor

## International Education Fee Grants

The Georgia Gwinnett College International Education Fee (IEF) Study Abroad Grant Program, initiated fall 2010, is funded by the mandatory international education student surcharge fee. The deadlines for grant applications are as follows:

| Term Abroad | IEF Deadlines |
| :--- | :--- |
| Spring Semester | 5:00 p.m., October 25 |
| Maymester, Summer and Fall | 5:00 p.m., March 25 |

Students studying abroad for an academic year are eligible to apply for both the fall and spring grant competitions. Interested students should pick up an application form in the Office of Internationalization.

## IEF Stipend Eligibility Requirements

- All IEF stipend applicants must be enrolled full time and working toward completion of a degree at Georgia Gwinnett College.
- A minimum institutional GPA of 2.5 is required for GGC students.
- At the time of application, applicants must be in the process of enrolling in a study abroad program for which they will receive academic credit for the term for which they are applying for the IEF grant.
- Recipients must agree to complete a minimum of five hours of service in support of international education upon their return to GGC. Service will be approved and coordinated by the Office of Internationalization. IEF funds may not be used towards study in countries that are currently under a U.S. Department of State Travel Warning.

Note: Meeting eligibility requirements and submitting an application do not guarantee an award.

## IEF Award Amounts

If recommended for an IEF stipend, students may receive the following amounts:

- Less than 4 weeks (Study Abroad): maximum of $\$ 500$
- 4-8 weeks: maximum of $\$ 800$
- 8 weeks or more: minimum of $\$ 1,200$


## Service Requirements

All IEF grant recipients are required to complete five hours of assistance to the Office of Internationalization for each term for which they receive a grant. This requirement can be fulfilled in several ways, such as these:

- Assisting with campus study abroad outreach efforts
- Completing administrative and programmatic projects of the Office of Internationalization
- Speaking to classes about education abroad experiences

The service requirement must be completed within two semesters of returning from the study abroad program. If a student is unable to perform this requirement, the grant must be repaid.

## Other Study Abroad Scholarships \& Funding Sources

Students should contact the Office of Internationalization to inquire about other types of external scholarships and funding sources.

## International Risk Management Policy

Georgia Gwinnett College (GGC) recognizes the importance of risk management and crisis prevention for study abroad. The issues involved are complex and often fluid. Therefore, the policies set forth below are intended to provide the foundation for a strong protocol for the College regarding GGC students studying abroad on non-GGC programs. Policies related to GGC Programs and faculty-led programs are detailed in Section 3.53 .8 of this policy.

## Phone Script

The emergency phone script is to be used by staff in the Office of Internationalization (OI) and Office of Public Safety when answering emergency phone calls related to GGC students studying abroad. The script helps track important information to provide the most effective and efficient assistance possible. The OI staff is trained to answer emergency phone calls.

## Emergency Notification System

In the event of an emergency or crisis abroad, students on non-GGC programs will be instructed to contact the Office of Internationalization if the incident is during office hours. If it is not during office hours, the call should be directed to the Office of Public Safety at 678-407-5333. This number is answered 24 hours a day, 7 days a week.
All known information about the emergency should be given, including contact information for the on-site program coordinator. Public Safety will then contact the Director of Internationalization (International Crisis Coordinator), Chief of Police and the Senior Associate Provost for Student Affairs, who will then contact the remaining persons identified on the contact list set forth below. The International Crisis Coordinator or Alternate Crisis Coordinator (whoever receives the call) will determine if circumstances merit contacting the President and the Vice President for Academic \& Student Affairs.

## GLOBAL STUDIES CERTIFICATION

## GLOBAL STUDIES CERTIFICATION ADMISSION REQUIREMENTS

To be accepted into the Global Studies Certification Program, a student must:

1. Possess a 2.7 Cumulative GPA
2. Have completed 24 hours of academic credit (with at least 12 hours completed at GGC)
3. Complete/sign the Certification Agreement available in the Office of Internationalization. (This process involves the student, faculty mentor and Certification Coordinator.)

## GLOBAL STUDIES CERTIFICATION PROGRAM COMPLETION POLICIES

To complete the Global Studies Certification program, a student must:

1. Complete at least two (2) i-courses at the 3000 or 4000 level at GGC with a grade of "C" or better. NOTE: Students who took a course in 2012-13 through 2015-16 that is subsequently identified as an i-course may submit a request for the course to fulfill this requirement. The Certification Coordinator will verify whether the course qualifies as an i-course and respond to the student's request.
2. Complete the Global Studies Certification Capstone Course with at a grade of "C" or better. NOTE: Capstone Course Registration: Pre-registration for the Certification Capstone Course signals the completion of all other certification requirements.
3. Complete a credit-bearing study abroad program, or a course offered in an international location, earning a grade of "C" or better and a minimum of 3-credit hours for the experience.
4. Satisfy the foreign language requirement by demonstrating proficiency in at least one language other than the student's native language. The foreign language requirement for the Global Studies Certification can be satisfied in any one of the following manners:

- Two Courses at GGC: Completes two GGC courses at any level (in the same language) in Chinese, French or Spanish with a grade of "C" or better.
- Transfer Courses in Foreign Languages: Transfers into GGC with two courses at any level (in the same foreign language) in any USG recognized modern foreign language with a grade of "C" or better.
- AP or IB Credit: Completes Advanced Placement (AP) or IB examinations and scores at the recommended score/level, he/she will receive academic credit in those circumstances and subsequently satisfy the Certification's proficiency requirement.
- CLEP Testing: Completes CLEP testing for a foreign language and scores at the recommended score/level to receive academic credit.
- Language Testing International Oral Proficiency Interview (OPI) or Writing Proficiency Test (WPT): Completes LTI testing and scores at the recommended level to test out of the GGC language requirement without credit.


## GLOBAL STUDIES CERTIFICATION LANGUAGE PROFICIENCY

The following is a reference chart, which provides additional descriptive factors regarding the range of proficiency standards to satisfy the foreign language requirement of the Global Studies Certification:

| Language Category Based on Difficulty | Class A: Western European Languages (Spanish, French, German, Italian, Portuguese, Dutch, etc.) | Class B: Other World Languages (Asian languages, Middle Eastern Languages, Creole, indigenous languages of Africa and the Americas, Eastern European Languages, etc. |
| :---: | :---: | :---: |
| ACTFL Standard Goals (http://actflproficiencyguidelines2012.org/) | Intermediate Low (Reading, Writing, or Speaking) | Novice Mid (Reading, Writing, or Speaking) |
| Satisfaction of Requirement With College Foreign Language Credit |  |  |
| College Coursework | 2 semesters in the same language, completed with a " C " or better1 | 2 semesters in the same language, completed with a "C" or better1 |
| CLEP Score | 50 (Spanish, French, and German)2 | N/A |
| AP Scores | 3, 4, or 5 (Spanish, French, Italian, and German)3 | 3, 4, or 5 (Chinese and Japanese)3 |
| IB Scores | HL 4/SL 5 (Spanish, French, and German) | HL 4/SL 5 (Arabic and |
| Satisfaction of Requirement Without College Foreign Language Credit |  |  |
| Language Testing International Oral Proficiency Interview (OPI) or Writing Proficiency Test (WPT) <br> (http://www.languagetesting.com/actfl-tests-for-higher-education) | Intermediate Low | Novice Mid |

[1] Any level, need not be consecutive
[2] Credit in German is currently not awarded through the CLEP, although students are allowed to transfer in credit in German.
[3] At present, students must make a 4 or 5 on the German, Italian, or Japanese AP exam, in order to receive credit, although they can receive credit for Chinese, French, or Spanish 1002 with a score of 3.

## I-Courses

I-courses are those courses offered by GGC that have been intentionally designed to promote student learning and development in relation to the College's 2013-2018 Quality Enhancement Plan. These courses are intended to provide students with opportunities to build intercultural competence and skill. As such, i-courses contain both a high level of international content and the requirements and activities needed to promote student success in achieving the desired learning outcomes at an appropriate level for a given course. The QEP Student Learning Outcomes (SLOs) address three broad areas of competence: intercultural awareness (SLOs 1 and 2), communication and collaboration (SLOs 3 and $4)$, and application (SLO 5).

## Student Attendance Policy

The classroom experience is a vital component of the college learning experience. Interaction with instructors and with other students is a necessary component of the learning process. Students are expected to attend regularly and promptly all class meetings and academic appointments. Students who are absent from classes bear the responsibility of notifying their instructors and keeping up with class assignments in conjunction with instructor provisions in the
course syllabus. Individual instructors bear the decision as to whether a student's absence is excused or unexcused and whether work will be permitted to be made up; the decision of the instructor in this case is final. Students who are absent because of participation in college-approved activities (such as field trips and extracurricular events) will be permitted to make up the work missed during their college-approved absences, provided that the student discussed with and obtained approval from the instructor to make up the work missed prior to the student's going on the field trip.

Individual instructors may establish additional attendance requirements appropriate to their course's context, e.g., lab attendance. A student whose class schedule would otherwise prevent him or her from voting will be permitted an excused absence for the interval reasonably required for voting.

## Student Field Trip and Off Campus Event Policy

Participation in field trips/off-campus events provides students the opportunity to engage in meaningful learning outside the classroom and as such, these trips are a valuable part of the college experience. Such outings permit students to integrate theoretical aspects of learning with practical applications and observations in environments other than the classroom. These experiences thus afford students an alternative means of applying knowledge.

Certain guidelines need to be followed to ensure that students gain the most from participation in field trips.

1. Attendance on field trips/off campus events is optional and students will not be penalized if they do not attend.
2. Alternate assignments may be given in lieu of a student's participation in field trips/off campus events where said participation would have derived extra credit or other course points.
3. Students who choose to go on field trips must contact the professors of the other classes which will be affected by their participation on the field trip prior to going on the field trip. However, participation on field trips does not exempt students from completing the work which is assigned in the classes that will be missed, nor does it provide a reason for students to miss tests, exams, or other graded work which is performed in the classes that will be missed.
4. Students who are absent because of participation in college-approved activities (such as field trips and extracurricular events) will be permitted to make up the work missed during their college-approved absences, provided that the student discussed with and obtained approval from the instructor to make up the work missed prior to the student's going on the field trip.
5. The field trip originator will ensure that the students who attend field trips complete the appropriate waivers and forms.
6. The faculty member/field trip originator should deliver copies of the waiver forms to the Dean's/Director's office for appropriate filing prior to or within five business days after returning from the field trip or off campus event/project.

## Mandatory Participation in Alert Notification System

Georgia Gwinnett College is committed to the safety of our students, staff and faculty. Communication is an important component of campus safety and part of our communication plan includes an alert notification system. Email participation is mandatory for all GGC students, staff and faculty. We also require that each participant provide either a cell phone number for SMS based text messages or a phone number for a voice message alert at a minimum.

## Academic Standards of Progress

## Course Load

Twelve (12) semester hours constitutes a full-time course load for each semester of enrollment. Any enrollment of fewer than 12 semester hours constitutes a part-time course load for the semester of enrollment. Students may enroll
for up to 17 hours per semester without additional approval. Students who desire to enroll in more than 17 hours must obtain approval from their major school. Approval must be given in writing each semester.

## Grading

Student progress in a course is measured at the end of each semester in the form of a grade assigned by the course instructor based on the student's completion of course requirements as stated in the course syllabus. The grade for a course is officially recorded on the student's academic transcript in the Registrar's Office. The student is notified of his/her final grades as well as the student's academic standing for the semester via the college's web-based academic records system. Final grades and academic standing can be accessed by semester and reflect a semester grade -point average as well as a cumulative grade-point average of all work completed at Georgia Gwinnett College as well as all accepted transfer credit. The deadlines for grade submission may be found in the academic calendar.

## Grades Approved in Determining the Grade Point Average

Georgia Gwinnett College shall use the Board of Regent's Uniform Grading System with the additional grades of WA and FN .

The following grades are approved by the Board of Regents for use in institutions in the determination of the Grade Point Average. Georgia Gwinnett College has added the grade of WA and FN:

| Grade | Grade Point Average |
| :---: | :--- |
| A | Excellent (40.0) |
| B | Good (3.00) |
| C | Satisfactory (2.00) |
| D | Passing (1.00) |
| F | Failure (0.00) |
| WF | Withdrew Failing (0.00) |
| WA | Administrative <br> Withdrawal (0.00) |
| FN | Failure due to Non <br> Attendance (0.00) |

The minimum passing grade for most courses is the "D" grade. ENGL 1101, ENGL 1102, MATH 1111 (or equivalent courses) and all Student Success courses must be passed with a minimum grade of "C." Courses in Area F of the Common Core as well as all courses in the student's major must be passed with a minimum grade of "C." In addition, courses that are pre-requisites to other courses require a "C" or better to meet the pre-requisite requirement.

The following grade symbols will be used in the cases indicated but will not be included in computing the student's grade point average:
$\mathbf{I}=$ indicates an incomplete grade for the course due to non-academic reasons which prohibited the student from completing the requirements for a course. The assignment of the "I" grade is at the discretion of the course instructor and Dean but should only be assigned if the student has completed satisfactory work up to the last two weeks of the semester then faced extreme personal hardships in completing the semester. Prior to the last two weeks of the semester, the grade assigned should be "W" or "WF."
Assignment of an "I" grade indicates that the instructor and the student have worked out a plan for completing the remaining course requirements unless otherwise stated in the incomplete contract. The deadline for removing an "I" grade is the last day of the following semester. If the "I" grade is not removed within the defined time period, the " I " converts to a grade of " F " and is then factored into the student's grade- point average. Requests for the approval of extensions must be made to the office of the dean.
IP = indicates a student has made progress in a Student Success course, but not sufficient progress to meet the requirements for the next course in the Learning Support sequence. The "IP" grade is not included in the calculation of the student's grade-point average.
$\mathbf{K}=$ indicates credit given by external examination (CLEP, AP, etc.). The "K" grade is not included in the calculation of the student's grade-point average.
$\mathbf{S}=$ indicates successful completion of the Regents' Writing Skills course and/or the Regents' Reading Skills course and successful completion of the corresponding Regents' Test. The " S " grade is not included in the calculation of the student's grade-point average.
$\mathbf{U}=$ indicates unsuccessful completion of the Regents' Writing Skills course and/or the Regents' Reading Skills course and unsuccessful completion of the corresponding Regents' Test. The "U" grade is not included in the calculation of the student's grade-point average.
$\mathbf{V}=$ indicates that a student was given permission to audit this course. Students may not transfer from audit to credit status or vice versa. Students may register, however, on a credit basis for a course that has previously been audited.
$\mathbf{W}=$ indicates that a student was permitted to withdraw without penalty. Withdrawals without penalty will not be permitted after mid-semester except in cases of hardship as determined by the Registrar.
$\mathbf{W M}=$ indicates a student was permitted to withdraw under the Board of Regents policy for military service refunds. The use of this symbol indicates that this student was permitted to withdraw without penalty at any time during the term.

## Grade Point Average

The cumulative grade point average will be calculated by dividing the number of hours scheduled in all courses attempted in which a grade of A, B, C, D, F, FN, WF or WA has been received into the number of grade points earned on those hours scheduled. The cumulative grade point average will be recorded on the student's permanent record. Institutional credit shall in no way affect the cumulative grade point average. The grade point average is computed by multiplying the quality points earned by the credit hours of each course and dividing the total quality points earned by the total credit hours attempted. Below is an example of the GPA computation for a 12 credit hour semester load where the grades earned were an "A", two "B's" and a "C":

| Hours | Quality Points |
| :--- | :--- |
| 3 sem hrs of $\mathrm{B}=3 \times 3=$ | 9 quality points |
| 3 sem hrs of $\mathrm{A}=3 \times 4=$ | 12 quality points |
| 3 sem hrs of $\mathrm{B}=3 \times 3=$ | 9 quality points |
| 3 sem hrs of $\mathrm{C}=3 \times 2=$ | 6 quality points |
| 12 hours | 36 total quality points |

36 quality points $\div 12$ bours attempted $=3.0 \mathrm{GP} A$

## Grade Appeals

Students wishing to appeal a final grade in a course must first discuss the grade appeal with the course instructor within 30 calendar days of the assignment of the final grade. If the student still wishes to appeal beyond the discussion with the course instructor, the student may then file a grade appeal with the appropriate dean or director. The student must submit a written request along with all supporting documentation to the dean or director within 15 calendar days of the instructor's decision. An interview with the student and/or the course instructor may be a part of the dean's or director's decision. If the student wishes to appeal the dean's or director's decision, he/she may then appeal to the Vice President for Academic and Student Affairs submitting the same documentation as was submitted to the dean or director within 15 calendar days of the decision. The decision made by the Vice President for Academic and Student Affairs is binding.

## Grade Changes

Errors in grades must be reported to the Office of the Registrar immediately. In general, no grade changes will be made after the end of the next semester after the grade was assigned, except with the approval of the Dean or Director. No requests for grade changes will be considered beyond the end of the following semester in which the grade was assigned. A petition for a grade change will not be accepted after the date of graduation.

## Mid-Term Grades

Instructors will post mid-term grades to the student's web-based academic record, but the mid-term grades do not calculate into the student's grade point average for that semester or into the student's cumulative grade point average. The mid-term grade on a course is not an official grade report and therefore is not permanently recorded on the
student's academic transcript; it is a periodic evaluation of the student's progress in a course in the middle of the semester.

## Grade Point Average upon Academic Renewal

Academic Renewal (AR) allows Georgia Gwinnett College degree-seeking students who earlier experienced academic difficulty the opportunity to make a fresh start and have one final opportunity to earn an associate or bachelor's degree.

Application for Academic Renewal (AR):

- Students must be admitted to GGC and have had a previous absence of three (3) years from GGC or a regionally accredited institution of higher education to apply for AR.
- Students with transfer credit taken during the period of absence will receive transfer credit for all coursework eligible to be awarded; however only credit taken over three years ago is eligible for AR.
- Students are encouraged to apply for AR as soon as possible after admission to GGC. Students may not apply for AR if they were admitted one full year or longer prior to their application for AR.
- Students must have a GGC transfer grade point average (GPA) of less than 2.0 at the time of admission in order to be considered for AR.
- Students who are approved for AR will be eligible to graduate with honors based on GGC's policy regarding academic honors at graduation.
- All previously attempted coursework continues to be recorded on the student's official transcript.
- GGC's registrar will review the application and determine eligibility.
- Students who are denied AR can appeal. Appeals will go to the AR appeal committee for a decision.

Procedures for Academic Renewal (AR):
a. The Academic Renewal GPA will be used for determining academic standing and eligibility for graduation.
b. To earn a degree, a student must meet the institution's residency requirements after acquiring academic renewal status.
c. At least $50 \%$ of work toward a degree must be completed after the granting of Academic Renewal status for a student to be eligible for honors at graduation.
d. Academic credit for previously completed coursework -- including transfer coursework taken more than three (3) years ago -- will be retained only for courses in which an A, B or C grade has been earned.
e. Retained grades are not calculated in a Renewal GPA. Such credit is considered in the same context as transfer credit, credit by examination and courses with grades of "S."
f. Courses with D or F grades must be repeated at the Academic Renewal institution if they are required in the student's degree program. Further, all remaining courses for the current degree objective must be completed at the Academic Renewal institution, i.e., no transient credit will be accepted.
g. Applicability of retained credit to degree requirements will be determined by the degree requirements currently in effect at the time Academic Renewal status is conferred on the student. Specific institutional program regulations must also be met.
h. If a student does not request Academic Renewal status at the time of re-enrollment after a three (3) year or greater period of absence, the student may do so within one full calendar year.
i. The Renewal GPA begins with the semester following re-enrollment.
j. Reentry into any program is not automatic.
k. If a student is denied Academic Renewal and subsequently does not re-enroll, he/she may resubmit an Academic Renewal application after no fewer than three semesters have passed since the initial petition.

1. The granting of Academic Renewal does not supersede financial aid policies regarding Satisfactory Academic Progress.
m . The granting of Academic Renewal does not supersede the admissions requirements of certain programs (e.g., teacher education, nursing) which require a specific minimum grade point average based upon all coursework.
n. The Academic Renewal GPA will include all coursework taken since re-enrollment.

## Registration

Registration periods are published on the website at www.ggc.edu and additional notification is sent to students via the approved Georgia Gwinnett College student email address. Students are required to meet with their mentor prior to choosing and registering for classes each semester.

Currently enrolled students are encouraged to register early after consulting with their mentor.

## Immunizations Policy

Georgia Gwinnett College requires proof of immunizations for all new students (first-year, transfers and others) as directed by policy consistent with recommendations provided by the Advisory Committee on Immunization Practices, developed collaboratively by the Board of Regents of the University System of Georgia and the Division of Public Health of the Georgia Department of Human Resources. Such policies shall be on file in each institution's office of student affairs.

Information is available to every new student regarding required and recommended immunizations using information developed by the Division of Public Health in concert with the Office of Student Services of the Board of Regents of the University System of Georgia.

Specific colleges or departments, with concurrence of the president and the Chancellor, may require some immunizations not required for all new students by this policy. Institutions are also authorized to impose additional immunization requirements for students when, in the opinion of the president of the institution and with concurrence of the Chancellor and appropriate public health authorities, there is a substantial risk of exposure to other communicable diseases preventable by vaccination.

Pursuant to legislation, all students residing in campus housing are required to sign a document stating that they have received a vaccination against meningococcal disease or reviewed the information provided by the institution.

## Drop/Add

Dropping and Adding Courses - Students may drop or add courses without penalty during the designated drop/add period for each semester or term within a semester. See the academic calendar for specific dates for drop/add. A course that is dropped during the drop/add period will not generate an official record of enrollment in the class. When adding a course, the student should complete this process online unless the student has a registration issue that requires additional approval. For special requests that require an approval from a faculty, dean or other area of the college, students should see the appropriate school office to obtain the approval and override. Overrides may be completed by the academic office or may require completion of a drop/add form.

## Withdrawal from College

Students may find that there is a need to withdraw from a class after the drop/add period for the semester. The student's academic advisor should be consulted prior to withdrawal. Once it is determined that a withdrawal is necessary, the student should complete the Course Withdrawal On-Line eForm to withdraw from a course. Course withdrawals submitted prior to midterm will result in a grade of "W". Course withdrawals will not generate a refund of tuition. Any course withdrawals that occur after mid-term will be awarded a "WF" unless special circumstances exist where a non-academic hardship has been established. Potential non-academic hardships include medical, psychological, or personal emergencies. The student must petition for a hardship withdrawal by submitting a personal statement and supporting documentation to the Registrar's Office. A small committee consisting of representatives from the Registrar's Office and the Division of Student Affairs will convene to review the withdrawal. The Registrar's Office will then notify the student of the decision regarding the hardship withdrawal.

Occasionally students may need to withdraw from college for the semester. To withdraw from class prior to the end of term, a student should complete the College Withdrawal Form which can be found on the Registrar's website. The date the student begins the school's withdrawal process is based on when the student notifies the college of the withdrawal. In addition, refunds for complete withdrawal will be calculated based on the date when the student notifies the college of the withdrawal.. Note: Students receiving financial aid should contact the Financial Aid office. Grade assignments for withdrawal from Georgia Gwinnett will be the same as the above for course withdrawals. If the student wished to
appeal, he/she should follow the procedure for Student Complaints found in the Georgia Gwinnett College Student Handbook.

## Academic Advising and Mentoring

In keeping with its commitment to create a culture devoted to the holistic development of students, Georgia Gwinnett College (GGC) embeds traditional academic advising (course selection and academic program planning) within a broader context of career planning, goal clarification and personal growth. Georgia Gwinnett College has chosen the term "mentoring" for its academic advisement program to emphasize this focus on the whole student, rather than simply on academic matters.

## Mission

The mission of the GGC Student Mentoring Program is facilitating student success, development and retention by supporting the design and implementation of educational and career plans and enhancing student engagement in the academic community.

## Academic Advising Model

In its broad definition of academic advising, the University System of Georgia asserts that academic advising "...represents...an opportunity for the faculty and the institution to express a special interest in both the personal and academic welfare of the students." In keeping with this view, the overall goal of mentoring at GGC is to assure that all students achieve the Integrated Educational Experience (IEE) outcomes of the college:

1. Clearly communicate ideas in written and oral form.
2. Demonstrate creativity and critical thinking in inter- and multidisciplinary contexts.
3. Demonstrate effective use of information technology.
4. Demonstrate an ability to collaborate in diverse and global contexts.
5. Demonstrate an understanding of human and institutional decision making from multiple perspectives.
6. Demonstrate an understanding of moral and ethical principles.
7. Demonstrate and apply leadership principles.

In support of these goals, mentoring at GGC encompasses the three broad areas of academic advising, career advising and personal growth. Within these three broad areas, the outcomes of mentoring are:

## Academic Advising

1. Development of academic program plans appropriate for students' anticipated majors and career goals.
2. Progression toward completion of academic requirements and graduation at a reasonable rate.
3. Awareness of policies and procedures pertinent to completion of students' planned academic programs.
4. Awareness of special academic opportunities such as study abroad, internships, etc.

## Career Advising

1. Identification of educational and career objectives commensurate with students' interests and abilities.
2. Exploration of academic and other requirements for students' chosen careers.
3. Exploration of post-graduate educational or employment opportunities for students' chosen careers.

## Personal Growth

1. Awareness of on-campus support available to students.
2. Engagement in the co-curricular program of the college.
3. Demonstrate leadership in the classroom, college and/or community.
4. Make appropriate life decisions and accept personal responsibility for the consequences of decisions.

Ultimately, Georgia Gwinnett College graduates will be informed, engaged citizens of the community who are inspired to a lifetime of service.

## Role of Faculty

All faculty and selected staff are engaged in mentoring students. Effective mentoring is a critical element in the annual evaluation process for faculty. All GGC students are assigned a faculty mentor at the point of matriculation and continue to be mentored by a faculty member throughout their educational careers.

## Advising for New Students Who Place Below the University System Placement Standards

All entering students without transferable English credit (English 1101) or college level Math credit (Math 1101 or higher) and scores below University system placement standards will be required to take Student Success English, Reading and/or Student Success Math. All entering students without transferable credit are required to take the English, Reading and Math portion of the Computer Adaptive Assessment and Support System (COMPASS). Students whose English score falls between the range of 60 and 79 on the COMPASS are required to write a sample essay. Students should call the Testing Center to sign up for the tests.

These placement tests will determine at which level students begin their classes. Students are allowed to retake the placement tests one (1) time before classes begin. The placement test consists of a computerized English and Reading exams and a math exam.

## Student Success Orientation

After a student is admitted, takes the placement test and is determined to need academic assistance, he/she will receive an invitation to GGC Bear Essentials. At Bear Essentials the student will learn more about the College, will speak either with an advisor to determine what classes are needed and will register.

## Advising for Continuing Student Success Students

Advising for continuing Student Success students is an integrated process between Student Success Faculty and a dedicated advisor in the Office of Student Success. Advising will take place during the semester. Once students exit Student Success Courses they will be assigned a faculty advisor in the student's chosen major.

## EAP Policy

Students whose native language in not English and do not have transferable English credit, or score below college level English on the placement test will be required to take an EAP sequence of courses. These courses are designed to prepare them for ENGL and other regular college level courses.

## New EAP Students

All entering non-native speakers of English without transferable English credit (English 1101) and scores below SAT I 480 or ACT 21 will be required to take the COMPASS EAP Placement Test and a writing sample. All entering students without transferable math credit (Math 1101 or higher) are required to take the math portion of the Computer Adaptive Assessment and Support System (COMPASS). Students should call the Testing Center to sign up for the tests.

These placement tests determine at which level students begin their classes. Students are allowed to retake the placement tests one (1) time before classes begin. The EAP placement test consists of a computerized listening comprehension, reading comprehension and grammar exam. In addition, there is a required writing sample. Students must complete all four (4) parts of the exam to register for classes. Because the writing sample is not machine scored, it usually takes approximately one (1) week to get the results back. Students must take the EAP placement test before the semester begins.

## EAP Orientation

After a student is admitted and takes the placement test, he/she will receive an invitation to GGC's Bear Essentials Orientation. At Bear Essentials the student will learn more about the College, will speak with an advisor to determine what classes are needed and will register.

## Advising for Continuing EAP Students

Advising for continuing students will take place during the second half of the semester. EAP faculty will be responsible for advising EAP students. Once students exit EAP, they will be assigned a faculty advisor in the students' chosen major.

## Minority Advising Program

## See Board of Regents Academic \& Student Affairs Handbook Section 2.7.1

## Georgia Gwinnett College Students Enrolling at Other Institutions as Transient Status

A Georgia Gwinnett College student who wishes to take a course at another institution must complete an application for admission to the transient institution. Transient enrollment requires approval by both institutions and it is the student's responsibility to comply with that college's standards and application deadlines. Georgia Gwinnett College students seeking transient approval should coordinate the process with his/her academic advisor and the Office of the Registrar.

Students who seek transient status must obtain approval from the appropriate dean.

Those students who are enrolled at Georgia Gwinnett may request to be a transient student at other institutions provided that the courses that they seek to take at another institution fall into one of the following categories:

1. The course(s) which the student is requesting to take is/are not offered at Georgia Gwinnett College during the semester in which the student desires to take the course(s)
2. The course(s) which the student is requesting to take is/are closed due to full enrollment during the semester in which the student desires to take the course(s).

Students will complete the Request for Transient Permission. This form is valid for one term of enrollment only. In order to receive transient permission, it is the student's responsibility to:

1. Be currently enrolled at Georgia Gwinnett College as a degree-seeking student;
2. Be in good academic standing;
3. Have completed all Learning Support and/or English for Academic Purposes requirements;
4. Have completed all Required High School Curriculum (RHSC) requirements.

In order to receive transfer credit at Georgia Gwinnett College for the specified courses, it is the responsibility of the student to:

1. Be currently enrolled at Georgia Gwinnett College as a degree-seeking student;
2. Be in good academic standing;
3. Have completed all Learning Support and/or English for Academic Purposes requirements;
4. Have completed all Required High School Curriculum (RHSC) requirements.

Georgia Gwinnett College<br>Enrollment Management Office<br>1000 University Center Lane<br>Lawrenceville, GA 30043

Students receiving HOPE scholarship or Veteran's Affairs Benefits must coordinate payment details with the financial aid offices at both Georgia Gwinnett College and the transient institution.

## ARCHE - Cross Registration

Georgia Gwinnett College is one of twenty partnering schools that participate in the Atlanta Regional Council for Higher Education (ARCHE) cross registration program. The cross registration program allows students at member institutions to broaden their academic experience by registering for courses at other member colleges and universities. To be eligible to participate in ARCHE, a student must be in good academic standing and be currently enrolled in at least one credit course.

## ARCHE Students Attending Georgia Gwinnett College

Applications for cross registration will be reviewed if received by the Arche Cross Registration Application Deadlines listed below. Students must meet the prerequisites (if any) of the requested course as defined. Students will be registered based on space availability after all Georgia Gwinnett College students have had an opportunity to register for courses. Official transcripts will be sent to the student's home institution following Georgia Gwinnett College's end of semester.

## Georgia Gwinnett College Students Attending other ARCHE Institutions

First-semester freshman are not eligible for cross registration (unless cross registering for marching band). Students must meet the prerequisites (if any) of the requested course as defined by the host institution. Students will not be approved for cross registration if the course is available at Georgia Gwinnett College. Students will pay all tuition and fees to Georgia Gwinnett College; however special fees or security deposits may be required at the host institution. Grades are determined according to the standards and practices of the host institution. The host institution will send the grade to Georgia Gwinnett College and the grade will be included on the official Georgia Gwinnett College transcript.

Students must submit an application for cross registration to the Registrar's Office in time for the Registrar to send the application to the host institution by the ARCHE cross registration application deadline listed below. Students will be required to have the approval of their mentor in order to submit the application form. Students who have holds on their record will be required to have all holds resolved in order for the application for cross registration to be processed.

Arche Cross Registration Application Deadlines:
Fall: July 15, Spring: November 15, Summer (if applicable): April 15

## Auditing Courses

The auditing of courses will be permitted for regularly enrolled students who have obtained the approval of their adviser. Proper paperwork obtained in the Office of the Registrar must be filed before the end of late registration, drop/add. Such courses count at full value in computing the student's course and fees load and the student's name should appear on the official class rolls of the courses audited. The courses being audited should also appear on the student's approved schedule of courses. No credit is granted for courses scheduled on an auditing basis and students are not permitted to change to or from an auditing status except through the regular procedures for schedule changes. The grade for auditing is V (visitor) and this grade should at no time be changed to a W on the basis of the auditor's attendance in the course. The grade of V will have no effect upon the student's grade-point average and students will not be permitted to have the audit grade changed at any future date.

## Repeated Courses

In the case of courses that are repeated, the higher grade will substitute for the lower grade on the student's academic degree evaluation. The higher grade will replace the lower grade in the computation of the student's GGC-GPA. However, the repeated course will be counted as an attempt for the maximum timeframe component of $150 \%$ of the required number of hours for the degree program.

NOTE: All grades may be factored into the cumulative GPA in compliance with financial aid programs and credentialing programs external to the College. Each student will limited to two repeats of a course (a maximum of three attempts). Students who wish to repeat a course after three attempts must meet with the Dean. It is at the Dean's discretion if the student remains in good standing.

## Academic Standing

## Classification of Students

Class designation is generally based on the number of hours the student has earned in courses offered at Georgia Gwinnett College or transferred from other educational institutions. Following is a general explanation of class designation.

Freshman: A student who has earned fewer than 30 hours of credit. Sophomore: A student who has earned 30 to 59 hours of credit. Junior: A student who has earned 60 to 89 hours of credit.
Senior: A student who has earned 90 or more hours of credit.
Class designation does not necessarily reflect the students' readiness to graduate or progress in their chosen program of study.

## Good Standing

Students are considered to be in Good Standing with the College if they are eligible to enroll in classes and are not on Academic or Conduct Probation. Students in Good Standing with the College may hold office in any college club or organization, and participate in athletics. Students not in Good Standing with the College, who wish to appeal holding office in any college club, organization, or participation in athletics, must submit their appeal through the Student Complaint Process.

## Good Academic Standing

Georgia Gwinnett College seeks to provide ample opportunities for all students to fully realize their academic potential and goals. In turn, all students attending Georgia Gwinnett College are expected to maintain certain academic standards that are outlined in the table below. A student is in good academic standing if their cumulative Georgia Gwinnett College grade point average is at or above the Minimum Cumulative Georgia Gwinnett College Grade Point Average for the number of semester hours attempted plus transfer hours. These standards stress the importance of successful performance by students to maintain an academic status of good academic standing.

| Semester Hours Attempted <br> (Including Transfer Hours) | Minimum Cumulative <br> GGC GPA |
| :---: | :---: |
| $0-15$ | 1.50 |
| $16-30$ | 1.60 |
| $31-45$ | 1.80 |
| More than 45 | 2.00 |

## Academic Warning

If a student in Good Academic Standing fails to maintain the appropriate Minimum Cumulative Georgia Gwinnett College GPA, they will be placed on Academic Warning. The student will receive a written notice alerting them that a continued deterioration in academic performance will result in Academic Probation. The student will also be required to meet with their advisor to implement a plan for improvement before registering for the subsequent semester as a way to promote academic progress and student success. Students will have one semester to raise their GPA to the appropriate Minimum Cumulative Georgia Gwinnett College GPA and return to Good Academic Standing.

## Academic Probation

Students will be placed on academic probation if they fail to achieve the appropriate minimum cumulative Georgia Gwinnett College GPA for two consecutive semesters. A student on academic probation will be restricted to a maximum of 14 semester hours of course work in the subsequent semester of enrollment and may not represent the college in any official capacity (student organizations, athletics, etc.). Students on Academic Probation may also be subject to a loss of certain financial aid funds and should check with the Financial Aid Office regarding Satisfactory Academic Progress regulations for Financial Aid. Students will remove themselves from probation by raising their GPA to the appropriate minimum cumulative Georgia Gwinnett College GPA.

## Continued Probation

Students who earn a 2.00 GPA during any semester in which they are on Academic Probation, but do not raise their Georgia Gwinnett College cumulative GPA sufficiently to be removed from probation, will continue on Academic Probation and thereby avoid Academic Suspension.

## Academic Suspension

A student who fails to a) remove themselves from Academic Probation or b) meet the requirements of Continued Probation will be placed on Academic Suspension. A student on Academic Suspension will be prohibited from taking courses or participating in college level activities for the duration of the exclusion. Students excluded at the end of Fall semester must sit out the following Spring semester and are eligible to apply to return the following Summer semester. Students excluded Spring Semester must sit out the following Fall semester are eligible to apply to return the following Spring semester. Students excluded Summer semester must sit out the following Fall semester and are eligible to apply to return the following Spring semester.
After this absence, the student may apply for readmission to the college through the Admissions Committee. Students readmitted following an Academic Suspension are placed on Academic Probation and are subject to the cumulative GPA requirements listed above. Any exceptions to this policy must be appealed to the Vice President for Academic and Student Affairs.

## Academic Dismissal

Students who are placed on Academic Probation returning to the college after Academic Suspension during their tenure at the college and who fail either to remove themselves from this status or to meet the requirements of Continued Probation will face Academic Dismissal. A student on Academic Dismissal will be prohibited from taking courses or participating in college-related activities for one calendar year from the end of the semester in which the dismissal occurred, after which the student may apply for readmission to the college using the procedures followed by any new student. Students readmitted following an Academic Dismissal are placed on Academic Probation and are subject to the cumulative grade point average requirement listed above. Students who receive a second Academic Dismissal will not be eligible for readmission to Georgia Gwinnett College. Any exceptions to this policy must be appealed to the Vice President for Academic and Student Affairs.

## Dismissals from Other Institutions

A student serving a dismissal or similar penalty from another institution must serve that time and not be allowed to attend Georgia Gwinnett College until their penalty has expired. If a student has been permanently suspended from another institution, the Admissions Committee will process the student like any other transfer student who appeals the denial of admission to Georgia Gwinnett College. Any exceptions to this policy must be appealed to the Vice President for Academic and Student Affairs.

## Recognition of Scholarship

President's List -- The President's List may include undergraduate students who achieve a 4.0 semester GPA in 12 or more hours. All work must be taken on a letter-graded basis and students must be in good academic standing. This distinction is noted on the academic transcript. Students will not be eligible for the President's List by virtue of repeated courses. A student who has been found responsible for a violation of the Academic Integrity Policy is not eligible for the President's List.

Dean's List -- The Dean's List may include students who complete 12 semester hours or more and achieve a minimum term grade-point average of 3.60 or higher. All work must be letter-graded with no grade below a C and students must be in good academic standing. Part-time students achieve Dean's List status if they complete at least 8 hours to 11 credit-bearing hours on a letter-graded basis, earn no grade below a $C$ and attain a grade point average

Georgia Gwinnett College 2015-16 Catalog
of 3.6. Students are not eligible for the Dean's List by virtue of repeated courses. A student who has been found responsible for a violation of the Academic Integrity Policy is not eligible for the Dean's List.

## Transcript Requests

Georgia Gwinnett College has partnered with Scrip-Safe to provide our students, former students and alumni with access to "Transcripts on Demand," an online transcript ordering system which provided 24/7 access to transcript ordering. Transcripts may be delivered either through Scrip-Safe's Global Electronic Transcript Delivery Network or by traditional U.S. mail. Students can order a transcript by accessing Transcripts on Demand at https://iwantmytranscript.com/ggc. Student will need to create an e-Script-Safe personal account to submit a request for an academic transcript. Students may request an electronic transcript or a transcript to be mailed. Transcripts cost a minimum of $\$ 3$ per transcript. Transcripts are issued only if a student's account is paid in full and no other holds restrict the student's account or registration. Copies of transcripts will not be faxed to the student or specified institutions. Such copies are not considered official transcripts and Georgia Gwinnett College cannot assume responsibility for the confidentiality of such records. Unofficial transcripts may be printed by the student from the Banner Web account.

## Academic Integrity

Georgia Gwinnett College students are expected to adhere to the highest standards of academic integrity and are expected to encourage others to do the same. Further, students are expected to take responsible action when there is reason to suspect dishonesty on the part of others. While it is not possible to list all acts of academic dishonesty, examples include:

## Cheating

This act of dishonesty includes giving information to or taking information from other students during examinations. Cheating is also committed when students copy from unauthorized sources and/or represent some other person's work as their own. Collaboration on out-of-class assignments or examinations is considered to be cheating if prohibited by the professor.

## Plagiarism

This category includes copying material from unpublished or published sources, including electronic resources and submitting that material as the student's own work. Students are responsible for identifying the proper source and for giving credit to that source anytime that they present ideas which are not their own.

## Collusion

This act of dishonesty includes buying or selling material which will be misrepresented as a student's own work. In addition, students who fail to report known acts of academic dishonesty on the part of others are guilty of collusion.

## Previously submitted material

Students must not submit work which has been or is being concurrently submitted, in whole or in part, in another class without first having received the permission of all the professors involved.

## Misrepresentation or falsification of material

This act includes misrepresenting, fabricating, or altering academic material, such as transcripts, diplomas, grades or records, professors' or administrators' signatures or initials. In addition, students must not take an examination or test in the name of another student or present another student's work as their own.

## Misrepresentation of circumstances

Students must not misrepresent personal circumstances (e.g., illness, conflicting responsibilities, etc.) to avoid meeting academic responsibilities.

Academic dishonesty carries severe penalties ranging from a grade of " 0 " on the affected assignment to dismissal from Georgia Gwinnett College. Each faculty member at Georgia Gwinnett College bears the responsibility for assigning penalties for cases of academic dishonesty. Students may appeal a penalty for academic dishonesty to the Academic Dean or Director of the School in which the course is taught or to the Vice President for Academic and Student Affairs.
The decision of the Vice President for Academic and Student Affairs is considered to be final. In cases of dismissal from college, the student may appeal to the President utilizing procedures outlined in the Student Code of Conduct for "Further Review for Cases Resulting in Suspension, Expulsion, Charter Suspension/Revocation and Revocation of College Registration."

## Program Completion

Upon completion of the student's degree requirements and any other requirements listed below and upon recommendation and approval by the College faculty, Georgia Gwinnett College students will receive a diploma reflecting their graduation with a Bachelor's degree in their chosen major.

## Undergraduate Degree Requirements

Georgia Gwinnett College offers baccalaureate degrees in Arts, Education, Science and Business Administration. Bachelor of Arts (B.A.) majors include English, History and Political Science. Bachelor of Science (B.S.) majors include Information Technology, Math, Psychology, Biology and Criminal Justice. The Bachelor of Business Administration (BBA) major is Business Administration. The Bachelor of Science in Education includes majors in Early Childhood and Special Education.

Commencement ceremonies are held three times a year following the fall, spring and summer semesters.
Although students may complete requirements for graduation during any semester, degrees and diplomas will not be officially conferred until the graduation ceremonies. The official date when the student has completed requirements for the degree will be specified on the student's permanent record. All students are required to participate in graduation exercises. Students who cannot attend for some reason known in advance of the ceremony must request to be excused from this requirement by obtaining and completing the appropriate form available in the registrar's office. All necessary signatures must be obtained by the student who should then return the In Absentia Form to the registrar's office.

Students must submit their application for graduation by the graduation application deadline. Please refer to the Academic Calendar for deadline dates. The graduation fee covers the cost of the diploma, cap and gown, as well as other administrative costs associated with graduation.

In order for Georgia Gwinnett College to confer a baccalaureate degree, the following general requirements must be met:

1. The student must submit the graduation application to the Office of the Registrar by the application deadline.
2. Students must pay $\$ 50$ graduation fee.
3. The student must satisfactorily complete a minimum of 123 semester hours of college work.
4. A student must be in good academic standing at the time of graduation.
5. Students must have a minimum cumulative grade point average of 2.0 at the time of graduation. Some majors require a higher minimum grade point average. Consult the appropriate department section for specific requirements.
6. Students must have a minimum cumulative grade point average of 2.0 at the time of graduation in all course work required for their major. Some majors require a higher minimum major grade point average. Consult the appropriate department section for specific requirements

## Residence Requirement for Degree

Georgia Gwinnett College requires all students to complete at least $25 \%$ of their overall semester hours of credit in residence prior to graduation. A student is defined to be "in residence" when taking Georgia Gwinnett College courses. Transient courses taken at another institution and courses transferred from other colleges are not considered to qualify a student as "in residence."

Typically, the last thirty-one (31) semester hours of a student's academic program satisfies the requirement to be "in residence." Alternative arrangements to using the last thirty-one (31) semester hours of the student's academic program must be approved by the appropriate School Dean with notification of the approval sent to the Registrar's Office.

Under no circumstances will a student be permitted to graduate from Georgia Gwinnett College without satisfying the "in residence" requirement.

## Graduation with Honors

Students graduating from Georgia Gwinnett College may qualify for one of three honors designations. Eligibility for one of these honors designations will be based on the cumulative Georgia Gwinnett College GPA (all coursework taken at GGC's as well as all credit awarded transfer credit) at the point of completion of all course work. The appropriate honors designation will be noted on the student's diploma as well as on the student's academic transcript from Georgia Gwinnett College.

> Cum Laude: Cumulative Georgia Gwinnett College -GPA $=3.50$ to 3.74
> Magna Cum Laude: Cumulative Georgia Gwinnett College -GPA $=3.75$ to 3.874
> Summa Cum Laude: Cumulative Georgia Gwinnett College -GPA $=3.875$ to 4.00

## General Education

The General Education program at Georgia Gwinnett College is an outcomes-based curriculum that is consistent with Georgia Gwinnett College's mission and vision. Georgia Gwinnett College has determined the outcomes expected of a student completing the program. Thus, Georgia Gwinnett College expects its general education program will produce engaged and informed citizens who:

1. Clearly communicate ideas in written and oral form;
2. Demonstrate creativity and critical thinking in inter- and multi-disciplinary contexts;
3. Demonstrate effective use of information technology;
4. Demonstrate an ability to collaborate in diverse and global contexts;
5. Demonstrate an understanding of human and institutional decision making from multiple perspectives
6. Demonstrate an understanding of moral and ethical principles;
7. Demonstrate and apply leadership principles;
8. Demonstrate an ability to reason quantitatively;

These core competencies represent the intellectual skills and knowledge required of an educated person in a diverse, global and technologically-oriented society. In addition, these core competencies represent a multidisciplinary foundation on which the major programs of study build an interdisciplinary component to a student's chosen specialization. Thus, the general education program becomes the key to a fulfilling life of selfknowledge, self-reflection, critical awareness and lifelong learning

Incoming freshmen students should use the table below to assure they meet all the course requirements of the General Education program.

## Core Curriculum

For specific requirements for Georgia Gwinnett College refer to Program Completion in the Georgia Gwinnett College Catalog. In addition to the 60 hour core curriculum all students are required to complete three credit hours of physical education that includes one credit hour of wellness (such as PHED 1101) and two additional credit hours of physical education. Veterans with 12 months or more active military service may request a waiver of the required physical education credits.

Students transferring to Georgia Gwinnett College should be aware of the following University System of Georgia policy:

1. "Students successfully completing a course in one institution's Areas A-E will receive full credit in Areas A-E for the course upon transfer to another System institution as long as (a) the course is within the Area hours limitations of either the sending institution OR the receiving institution and (b) the student does not change from a non-science major to a science major."
2. All transfer students are required to complete ITEC 1001 (or higher IT course) unless completed at a prior institution. This is not an additional graduation requirement but will count toward completion of Area B, Area D, or the program of study. mnj

Students transferring into or out of Georgia Gwinnett College may use the table below to assure completion of all General Education requirements.

| Area of Focus \& Number of Hours | Courses |
| :--- | :--- |
| Area A - Essential Skills (9 to 10 hours) <br> (Depending on major) | ENGL 1101 and ENGL 1102 (English Comp I \& II) and MATH 1001 (Quantitative <br> Reasoning) or MATH 1111 (College Algebra) or MATH 1113 (Pre-Calculus) or <br> MATH 2200 (Calculus I) or higher math (must receive a grade of "C" or better) |
| Area B - Institutional Option (4 hours) | ITEC 1001 (Introduction to Computing) or higher information technology |
| Information Technology (4 hours) |  |
| Area C - Humanities/Arts (6 hours) | MUSC 1100 (Music Appreciation) or ARTS 1100 (Art Appreciation) FILM 1005 <br> (Intro to Film) or ENGL 2110 (World Literature) or ENGL 2100 (Trans-Atlantic <br> English Literature) |
| Arts/Literature (3 hours) | RELN 1100 (World Religions) or GEOG 1101 (Human Geography) or one semester <br> of intermediate level foreign language (2001 or higher in Spanish, French, or <br> Chinese) |
| Global Culture (3 hours) | Choose one sequence: PSCI 1101K and PSCI 1102K (Physical Sciences I \& II) BIOL <br> 1101K and BIOL 1102 (Biological Sciences I \& II) CHEM 1211K and CHEM <br> 1212K (Principles of Chemistry I \& II) <br> CHEM 1151K and CHEM 1152K (Survey of Chemistry I \&II) |
| Area D - Science, Mathematics, and <br> Technology (11 hours) | ITEC 2110 (Digital Media) or ITEC 2120 (Introduction to Programming) |
| Science (7 hours) | Choose one US History course: HIST 2111 (U.S. History I) or HIST 2112 (U.S. History II) <br> and one other course from the following: HIST 1111 (W orld History I), HIST 1112 (W orld <br> History II), HIST 1121 (Western Civilization I), or HIST 1122 (Western Civilization II), , <br> HIST 2111 (U.S. History I) (if not used above), HIST 2112 (U.S. History II) (if not used <br> above) |
| Information Technology (4 hours) | POLS 1101 (American Government) Choose one of the following (Ifproficiency in American <br> Politics and Georgia history and constitution is demonstrated choose two of the following) PSYC <br> 1102 (Introduction to Psychology) or SOCI 1101 (Introduction to Sociology) or <br> ANTH 1102 (Introduction to Anthropology) or ECON 2100 (Introduction to <br> Economics) |
| Area E - Social Sciences (12 hours) |  |
| History (6 hours) | Requirements to be determined by the academic program. Must receive a grade of <br> "C" or better. |
| Human and Institutional Behavior (6 <br> hours) |  |
| Area F - Pre-Requisites for Major (18 <br> hours) |  |

See Board of Regents Policy Manual Section 3.3.1.
3. By completing the General Education requirements, students will satisfy the overlay requirements in the areas of Critical Thinking, Global Learning, and United States Perspectives. The courses which students may take at GGC are listed below.

Critical Thinking<br>MATH 1001 (Quantitative Reasoning)<br>MATH 1111 (College Algebra)<br>MATH 1113 (Pre-Calculus)<br>MATH 2200 (Calculus I)<br>CHEM 1151K (Survey of Chemistry I with Lab)<br>CHEM 1152K (Survey of Chemistry II with Lab)<br>CHEM 1211K (Principles of Chemistry I with Laboratory)<br>CHEM 1212K (Principles of Chemistry II with Laboratory)<br>BIOL 1101K (Biological Sciences I and Laboratory)<br>BIOL 1102 (Biological Sciences II)<br>PSCI 1101K (Physical Science with Laboratory)<br>PSCI 1102 (Physical Sciences)<br>ENGL 2110 (World Literature)<br>ENGL 2100 (Transatlantic English Literature)<br>ANTH 1102 (Introduction to Anthropology)<br>ART 1100 (Art Appreciation)<br>ECON 2100 (Introduction to Economics)<br>FILM 1005 (Introduction to Film)<br>MUSC 1100 (Music Appreciation)<br>PSYC 1102 (Introduction to Psychology)

SOCI 1101 (Introduction to Sociology)
Global Perspective
ENGL 2110 (World Literature)
ENGL 2100 (Transatlantic English Literature)
HIST 1111 (Survey of World History/Civilization I)
HIST 1112 (Survey of World History/Civilization II)
HIST 1121 (Survey of Western Civilization I)
HIST 1122 (Survey of Western Civilization II)
HIST 2111 (Survey of United States History I)
HIST 2112 (Survey of United States History II)
ART 1100 (Art Appreciation)
FILM 1005 (Introduction to Film)
FREN 2001 (Intermediate French I)
GEOG 1101 (Introduction to Human Geography)
MUSC 1100 (Music Appreciation)
RELN 1100 (World Religions)
SPAN 2001 (Intermediate Spanish I)
United States Perspective
HIST 2111 (Survey of United States History I)
HIST 2112 (Survey of United States History II)
POLS 1101 (American Government)

## Upper Division Major Requirements

Each graduate must complete all curriculum and related requirements for one specific major as listed in the appropriate section of the catalog. In addition to courses, graduation requirements may include GPA minimums, experiential learning, residency regulations, assessments, examinations, remedial work, or other requirements as explained in the Georgia Gwinnett catalog or official program handbooks. Unless otherwise stated, all upper division courses in baccalaureate degree programs require a minimum grade of C. At least 39 semester hours must be taken at the 3000 level or above.

## Demonstration of English/Reading Competency and Regents Writing Competency

Georgia Gwinnett College has established standards and criteria for demonstrating competency in writing and in reading. Students with transfer credit for English 1101 and/or English 1102 will meet the criteria for demonstrating competency. Students' records will be updated to show satisfaction of English/Reading Competency and Regent Writing Competency upon receiving transfer credit for English 1101 or 1102 (with a grade of C or better) or completion of English 1101 or 1102 at Georgia Gwinnett College (with a grade of $C$ or better).

## United States and Georgia History and Constitution

All colleges and universities sustained or in any manner supported by public funds shall give instruction in the history of the United States, in the history of Georgia and in the essentials of the United States Constitution and the Constitution of Georgia and no undergraduate student in any college or university shall receive a certificate of graduation or a degree without successfully completing course work or previously passing a satisfactory examination on the history of the United States and the history of Georgia and upon the provisions and principles of the United States Constitution and the Constitution of Georgia.

## United States and Georgia History Exams

## Eligibility to Take History Tests

The tests are designed to allow students to meet the legislative requirement of demonstrating knowledge of US and Georgia history, only if they failed to fulfill it in the normal course of completing their general education requirements. Students will be required to take the US History test or to take an additional specific history course if they completed the Area E history requirement without taking a US history course.

Students will be required either to take the Georgia History test or to take an additional specific history course if they fall into one of the following categories:

1. Students who received US History AP credit which exempted their taking the General Education Area E required history courses.
2. Students who completed a US History course in fulfilling the Area E history requirement at a non-USG system school.

Students may take either test only twice in their academic career and not more than once per semester. If they fail a test twice, they MUST take an additional course that meets the legislative requirement.

## Overview of US History Test

This computer-based test contains multiple choice questions that replicate a rigorous final exam in a course that meets the US History legislative requirements. Thus the test format includes 33 US history multiple choice questions worth 3 points and one question worth 1 point for a total of 100 points. The thirty-four questions are generated from a test bank of over 900 questions.

Overview of Georgia History Test
This computer-based test consists of 40 multiple choice questions that focus on the political and social history of the state from prehistory to contemporary experience.

## Alternatives to Taking Test

Students may take history courses at Georgia Gwinnett College that meet the legislative requirement. These courses currently include the US History surveys (HIST 2111 and HIST 2112) and HIST 3265 (Georgia History).

## Multiple Majors

## Double Major

Students may enroll in a program leading to a double major. A student may complete a double major by completing one type of baccalaureate degree (e.g., a Bachelor of Science) and electing to concurrently pursue two majors of that type of degree. A student must complete a double major simultaneously. In order to complete a double major students must satisfy all requirements for both majors, including general education requirements across schools if applicable. Courses common to both majors may be counted toward the requirements of each major. Courses that are required or are electives in one major may be used to fulfill electives in the other major, however, the double major must contain coursework of a minimum of 150 credit hours. Student completing a double major will receive one diploma with both major fields of study noted on the transcript. To declare a double major, students must be advised by faculty in both academic disciplines and complete the Application for Double Major form.

## Double Degree

Students may enroll in a program leading to a double degree. A student may complete a double degree by completing two types of baccalaureate degrees (e.g., a Bachelor of Science and a Bachelor of Business Administration). A student must complete a double degree simultaneously. In order to complete a double degree students must satisfy all requirements for both majors, including general education requirements across schools if applicable. Courses common to both majors may be counted toward the requirements of each major. Courses that are required or are electives in one major may be used to fulfill electives in the other major, however, the double degree must contain coursework of a

Georgia Gwinnett College 2015-16 Catalog
minimum of 150 credit hours. Students completing double degrees will receive two diplomas. Both degrees will be noted on the transcript. To declare a double degree, students must be advised by faculty in both academic disciplines and complete the Application for Double Degree form.

## Multiple Concentrations

Students may choose to complete multiple concentrations within the same academic degree program. In order to complete multiple concentrations, students must satisfy all required courses for each concentration, including specified general education requirements across schools, if applicable. In addition to the completion of these required courses, students must earn the total number of credits required in the first concentration and they also must take a minimum of 15 additional hours for each concentration, or the stipulated amount of hours for the concentration in that discipline, as is applicable. Multiple concentrations will be noted on the transcript.

To declare multiple concentrations, students must complete the "Application for Multiple Concentrations" form. After declaring multiple concentrations, students must be advised by the appropriate faculty in each of the academic specialty areas, if applicable. If a student would like to take 15-18 hours in a discipline or major outside of his/her academic degree program, the student should pursue the appropriate academic minor.

## Academic Minors Policy

An academic minor allows students to expand and broaden their educational experience by exploring a particular subject or subjects in sufficient depth to gain competency. By completing a minor, a student can become familiar with an additional area of study which will supplement the expertise gained in the major. In the case of an interdisciplinary minor, the student will have had the opportunity to learn about a particular theme or focused area of inquiry or study.
Each minor has a particular set of curricular goals and student learning outcomes which are determined by the school or unit which offers the minor. By following the prescribed courses of study in the minor, a student must master these curricular outcomes.

## GGC Guidelines

1. The minor will be comprised of a minimum of 15 and a maximum of 18 credit hours.
2. At least 9 hours of upper level courses must be included in the coursework for the minor, subject to all other guideline restrictions.
3. Courses taken to satisfy core Areas A through E may not be counted as coursework in the minor.
4. No more than one half of the credit hours in the minor can be duplicative. (See example below.)
5. Courses from Area F may be counted as duplicative courses for the minor.

## Other Guidelines

A. The School offering the minor will be responsible for the following areas:

1. Appropriate Curricular Approvals. A School seeking to offer a minor will request approval for the minor through the appropriate institutional channels and receive approval before offering the minor. The minor must be approved through the college's curriculum review process; subsequent approval must be obtained from the Vice President for Academic and Student Affairs. The USG must be notified of the addition of a minor in a discipline with an approved major. The addition of a minor in a discipline that does not have an approved major must be approved by the USG.
2. Requirements determining requirements for the minor shall be the responsibility of the school.
3. Grade Point Average. Grade point average requirements for the minor, if any will be determined by the School.
4. Graduation eligibility. Verifying clearance for graduating with a minor shall be the responsibility of the School.
5. Interdisciplinary Minor. An interdisciplinary minor will be handled by the School designated to offer the minor in consultation with appropriate faculty from the other areas. This School also must obtain the appropriate curricular approvals, including the curriculum committees and subsequent approval from the Deans of the other schools and the Vice President for Academic and Student Affairs.
B. Mentoring/Advising
6. Selection of a Minor. A student may select a minor in consultation with his/her assigned faculty mentor. The student may consult with a faculty member in the minor field, but the faculty mentor remains the primary contact for program plan advising.
7. Advising. The Schools that sponsor minors will prepare program plan sheets to be used by faculty mentors and students.
C. Responsibilities of the Registrar
8. Banner. The Registrar will build minors into CAPP.
9. Graduation Application. The Registrar shall be responsible for adding an option for minor on the application for graduation.
10. Student Transcript. Listing the minor and date completed on the student transcript will be the responsibility of the Registrar.
11. Completion of Requirements. After applying for graduation, if a student fails to complete the requirements for the minor but otherwise meets the requirements for graduation, the student may choose to graduate without the minor.

## University System and Technical College System of Articulation Agreement

See Board of Regents Policy Manual Section 3.3.5.
Associate Degrees, Diplomas \& Certificates
See Board of Regents Policy Manual Section 3.3.5.1.

## General Education Course Transfer

See Board of Regents Policy Manual Section 3.3.5.2

## Georgia Gwinnett College Credit Granting Policy

The credit hour at Georgia Gwinnett College (GGC) is the unit by which course work is measured. All courses originate at the school level and are reviewed based on the standards set forth by the College Curriculum Committee's Policy and Procedures.

GGC adheres to the view by the Department of Education indicating that learning outcomes are the final and most important result of varied educational platforms, and that individual institutions set standards for granting academic credit. Specific learning outcomes are assessed by each school.

A variety of teaching platforms (traditional day, evening, weekends) are available to the traditional and nontraditional students at GGC. Below are the typical formats used by GGC with the indicators of engaged learning time per credit to which the institution adheres. In addition, selected courses are offered in split sessions in the fall and spring semesters or mini sessions in the summer. The contact time for these different formats is equal to the full semester as per the chart below. Georgia Gwinnett College participates in eCore through the University of Georgia initiative (INGRESS). Contact hours for eCore courses are defined by the University System of Georgia.

| Academic Activity | Formula <br> $\mathbf{( 1 ) = 5 0}$ minutes <br> $\mathbf{1 =}$ hour of credit | Meeting Plan | Minimum <br> Instructional <br> Minutes Per Day | Minimum Engaged <br> Learning Time Per <br> Credit Per <br> Semester |
| :--- | :--- | :--- | :--- | :--- |
| Classroom | $(1)-1$ | 15 Weeks: 3 <br> meetings per week | 50 minutes per day | 750 minutes |
| Classroom | $(1)-1$ | 15 Weeks: 2 <br> meetings per week | 75 minutes per day | 750 minutes |
| Classroom | $(1)-1$ | 15 Weeks: 1 <br> meeting per week | 150 minutes per day | 750 minute |
| Laboratory | $(3)-1$ | 15 Weeks: 1 <br> meeting per week | 100 minutes per day | 1500 minutes per <br> credit hour in <br> classroom |
| Internship | (3)-1 | 15 Weeks | Varies per <br> internship; however <br> minimum of 450 <br> minutes of time on <br> task per week | 2250 minutes per <br> credit |
| Externship |  | Varies per <br> externship; <br> minimum of 450 <br> minutes of time on <br> task per week | 2250 minutes per <br> credit hour |  |
| Student Teaching ( 8 <br> CR) |  | Minimum of 2400 <br> minutes of field <br> time on task each <br> week | 5015 minutes per <br> credit hour |  |

## Programs of Study

## Programs of Study School of Business

## BACHELOR OF BUSINESS ADMINISTRATION

The School of Business offers the Bachelor of Business Administration, B.B.A., degree with concentrations in Accounting, Economics, Finance, International Business, Management, Management Information Systems, and Marketing.

Students in the School of Business must meet all University admission, academic progression and graduation requirements. In addition, the Bachelor of Business Administration (BBA) degree has the following requirements:

- A minimum cumulative grade point average of 2.25 in the concentration courses.
- A minimum of 12 semester hours completed in residence for the concentration.
- MGMT 4700, Strategic Management, taken in residence.
- The recommendation of the faculty.


## CURRICULUM

## General Education Requirements (60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a Bachelor in Business Administration (BBA) degree will share a common body of knowledge drawn from a broad spectrum of subject areas.

## Additional Requirements

(3 hours)
The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution)
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements

(60 hours)
The major requirements consist of three areas of study: Required Business Courses, Concentration, and General Electives. The Required Business Courses are designed to ensure that students receiving the BBA degree will share a common body of knowledge needed for a wide range of private and public sector organizations. Concentration courses allow students to delve further into areas of specialization. General Electives give students an opportunity to explore topics of interest at an advanced level.

The following program goals and specific learning objectives are a result of a School of Business charter faculty consensus and reflect what knowledge and abilities would be expected as a result of Bachelor of Business Administration completion. These outcomes reflect general business knowledge, analytical and cognitive skills and discipline-specific information. Thus, a graduate with a BBA degree with a concentration in Accounting, Finance, Economics, International Business, Management, Management Information Systems, or Marketing will:

1) Demonstrate the ability to make decisions and to think critically based on the acquisition of theoretical and applied business knowledge.

- Students will be able to identify key assumptions used in business decision-making.
- Students will be able to examine business issues and problems using appropriate analytical techniques.
- Students will have an understanding of the cross-functional and interdisciplinary nature of business issues and decisions.
- Students will be able to conduct a strategic analysis of a real or simulated business organization.
- Students will have an understanding of key concepts of the business disciplines (i.e., management, marketing, and economics/finance).

2) Demonstrate an understanding of the importance of ethical, legal and economic perspectives in contemporary business environments.

- Students will be able to identify and apply a framework for examining ethical dilemmas in business situations.
- Students will be able to identify key concepts in business.
- Students will be able to critique business decisions with regard to social responsibility.

3) Students will have an understanding of global business issues.

- Students will be able to identify current global issues in light of their effect on business opportunities and decisions.
- Students will be able to demonstrate understanding of cultural similarities and differences and their effects on organizations.
- Students will be able to understand effects of political/legal/economic environments on global operations.

4) Demonstrate effective oral and written communication.

- Students will be able to create well written documents on a business issue or problem.
- Students will be able to deliver an effective oral presentation on a business topic.
- Students will use appropriate technologies to enhance their written and oral presentations.


## Bachelor of Business Administration (BBA)

| Concentration Accounting <br> General Education: ( 60 semester hours) |
| :--- | ---: |
| AREA A - Essential Skills: (9 semester hours) |

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)4

AREA C - Humanities/Fine Arts (6 semester hours)

| Choose one from the following: |  |
| :--- | ---: |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) |  |
| Select one from the following: | 3 |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |

AREA D - Natural Sciences, Math, Technology (11 semester hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
Select (Survey of Chemistry II) 4
Select one from the following:
ITEC 2110 (Digital Media) 4
ITEC 2120 (Intro to Programming) 4

AREA E - Social Science (12 semester hours)
POLS 1101 (American Government) 3
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I) 3
HIST 1112 (World History II) 3
HIST 1121 (Western Civilization I) 3
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of Study (18 semester hours)
ACCT 2101 (Introduction to Financial Accounting) 3
ACCT 2102 (Introduction to Managerial Accounting) 3
BUSA 2105 (Communications in Business Environment) 3
BUSA 2106 (Legal Environment of Business) 3
ECON 2105 (Principles of Macroeconomics) 3
ECON 2106 (Principles of Microeconomics) 3

Additional Requirements (3 hours)

Physical Education Requirement

Choices for Life

Additional Physical Education

Program of Study ( 60 semester hours)
Required Business Courses ( 36 semester hours)
BUSA 2000 (Statistical Analysis for Business)
BUSA 3000 (Quantitative Analysis)
BUSA 3100 (Management Information Systems)
BUSA 3200 (Global Business)
FINA 3000 (Financial Management I)
MKTG 3000 (Principles of Marketing)
MGMT 3000 (Principles of Management)
MGMT 3040 (Human Resource Management)
MGMT 3400 (Ethics and Corporate Social Responsibility)
MGMT 4100 (Organizational Behavior)
MGMT 4600 (Operations Management)
MGMT 4700 (Strategic Management - Capstone)
Accounting Concentration (21 semester hours)
ACCT 3101 (Financial Accounting and Reporting I)
ACCT 3102 (Financial Accounting and Reporting II)
ACCT 3201 (Fundamentals of Income Taxation)
ACCT 4103 (Auditing)
ACCT 4300 (Regulation of the Accounting Profession)
Accounting Electives (must be at the 3000/4000 level)
General Electives (3 semester hours)
Any 2000-4000 Level Course

## Bachelor of Business Administration (BBA)

## Concentration Economics

| General Education: ( 60 semester hours) |  |
| :---: | :---: |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1001 (Quantitative Skills \& Reasoning) or MATH 1111 (College Algebra) | 3 |
| MATH 1111 (College Algebra) |  |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Choose one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate Level or Higher Spanish, French or Chinese | 3 |

## AREA D - Natural Sciences, Math, Technology <br> (11 semester hours) <br> Select one sequence from the following:

PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)4
$\xlongequal[\text { AREA } \boldsymbol{E} \text { - Social Science (12 semester hours) }]{\text { POLS } 1101 \text { (American Government) }}$
$\begin{array}{ll}\text { POLS } 1101 \text { (American Government) } & 3 \\ \text { HIST } 2111 \text { or HIST } 2112 \text { (U.S. History I \& II) } & 3\end{array}$
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I) $\quad 3$
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of Study (18 semester hours)
ACCT 2101 (Introduction to Financial Accounting) 3
ACCT 2102 (Introduction to Managerial Accounting) 3
BUSA 2105 (Communications in Business Environment) 3
BUSA 2106 (Legal Environment of Business) 3
ECON 2105 (Principles of Macroeconomics) 3
ECON 2106 (Principles of Microeconomics) 3


## Bachelor of Business Administration (BBA) 123 credits required for graduation

| Concentration Finance <br> General Education: $(60$ semester hours) |
| :--- |
| AREA A - Essential Skills: (9 semester hours) |

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
AREA C-Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation)
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature) 3
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
3
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese
3

## AREA D - Natural Sciences, Math, Technology <br> (11 semester hours) <br> Select one sequence from the following:

PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
elect one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)4
$\underline{\text { AREA } E \text { - Social Science (12 semester hours) }}$

| POLS 1101 (American Government) | 3 |
| :--- | :--- |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |

Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I) 3
HIST 1112 (World History II) 3
HIST 1121 (Western Civilization I) 3
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of Study (18 semester hours)
ACCT 2101 (Introduction to Financial Accounting) 3
ACCT 2102 (Introduction to Managerial Accounting) 3
BUSA 2105 (Communications in Business Environment) 3
BUSA 2106 ((Legal Environment of Business) 3
ECON 2105 (Principles of Macroeconomics) 3
ECON 2106 (Principles of Microeconomics) 3

| Additional Requirements (3 hours) |  |
| :--- | ---: |
| Physical Education Requirement | 1 |
| Choices for Life | 2 |
| Additional Physical Education |  |
|  |  |
| Program of Study (60 semester hours) |  |
| Required Business Courses (36 semester hours) |  |
| BUSA 2000 (Statistical Analysis for Business) | 3 |
| BUSA 3000 (Quantitative Analysis | 3 |
| BUSA 3100 (Management Information Systems) | 3 |
| BUSA 3200 (Global Business) | 3 |
| FINA 3000 (Financial Management I) | 3 |
| MKTG 3000 (Principles of Marketing) | 3 |
| MGMT 3000 (Principles of Management) | 3 |
| MGMT 3040 (Human Resource Management) | 3 |
| MGMT 3400 (Ethics and Corporate Social Responsibility) | 3 |
| MGMT 4100 (Organizational Behavior) | 3 |
| MGMT 4600 (Operations Management) | 3 |
| MGMT 4700 (Strategic Management - Capstone) | 3 |
|  |  |
| Finance Concentration (21 semester hours- |  |
| Required Courses 12 hours) | 3 |
| FINA 3102 (Financial Management II) | 3 |
| FINA 4101 (International Finance) | 3 |
| FINA 4103 (Investments \& Stock Mkt Simulation) | 3 |
| 4000 level FINA Elective, BUSA/MKTG 4500, Studies Abroad, | 3 |
| or FINA 4751 Finance Internship | 3 |
| Finance electives (Must be at the 4000 level) | 9 |

General Electives (3 semester hours)
Any 2000-4000 Level Course

## Bachelor of Business Administration (BBA)

| Concentration International Business |
| :--- |
| General Education: ( $\mathbf{6 0}$ semester hours) |
| AREA A - Essential Skills: (9 semester hours) |
| ENGL 1101 (English Composition I) |
| ENGL 1102 (English Composition II) |
| MATH 1001 (Quantitative Skills \& Reasoning ) or |
| MATH 1111 (College Algebra) |

AREA B - Institutional Option (4 semester houts) ITEC 1001 (Introduction to Computing)4

AREA C-Humanities/Fine Arts (6 semester houts)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation)
ENGL 2110 ((World Literature)
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
3
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese

## AREA D - Natural Sciences, Math, Technology

(11 semester hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)
$\xrightarrow[\text { AREA } \boldsymbol{E} \text {-Social Science (12 semester hours) }]{\text { POLS } 1101 \text { (American Government) }}$
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of Study (18 semester hours)
ACCT 2101 (Introduction to Financial Accounting) 3
ACCT 2102 (Introduction to Managerial Accounting) 3
BUSA 2105 (Communications in Business Environment) 3
BUSA 2106 (Legal Environment of Business)
ECON 2105 (Principles of Macroeconomics)
ECON 2106 (Principles of Microeconomics)

| Additional Requirements (3 hours) |  |
| :--- | ---: |
| Physical Education Requirement |  |
| Choices for Life | 2 |
| Additional Physical Education |  |
|  |  |
| Program of Study (60 semester hours) |  |
| Required Business Courses (36 semester hours) |  |
| BUSA 2000 (Statistical Analysis for Business) | 3 |
| BUSA 3000 (Quantitative Analysis) | 3 |
| BUSA 3100 (Management Information Systems) | 3 |
| BUSA 3200 (Global Business) | 3 |
| FINA 3000 (Financial Management I) | 3 |
| MKTG 3000 (Principles of Marketing) | 3 |
| MGMT 3000 (Principles of Management) | 3 |
| MGMT 3040 (Human Resource Management) | 3 |
| MGMT 3400 (Ethics and Corporate Social Responsibility) | 3 |
| MGMT 4100 (Organizational Behavior) | 3 |
| MGMT 4600 (Operations Management) | 3 |
| MGMT 4700 (Strategic Management - Capstone) | 3 |
|  |  |
| International Business Concentration (18 hours) |  |
| Select 18 hours from the following courses. |  |
| ACCT 3301 (International Accounting) | 3 |
| BUSA 4500 (Studies Abroad) | 3 |
| BUSA 4700 (Selected Topics in Business) | 3 |
| BUSA 4751 (Business Internship) | 3 |
| ECON 4101 (International Economics) | 3 |
| FINA 4101 (International Finance) | 3 |
| MGMT 4101 (International Management) | 3 |
| MKTG 4650 (International Management of IT) | 3 |
| MKTG 4400 (International Marketing) | 3 |
| MKTG 4450 (Global Marketing and the Internet) | 3 |

General Electives (6 semester hours)
Any 2000-4000 Level Course
Bachelor of Business Administration (BBA) 123 credits required for graduation

| Concentration Marketing <br> General Education: ( 60 semester hours) |
| :--- | :--- |
| AREA A - Essential Skills: (9 semester hours) |

AREA B - Institutional Option (4 semester hours) ITEC 1001 (Introduction to Computing)

| AREA $\boldsymbol{C}-\boldsymbol{H}$ umanities/Fine Arts (6 semester |  |
| :--- | ---: |
| hours) |  |
| Select one from the following: |  |
| $\quad$ MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| $\quad$ RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate Level or Higher Spanish, French or Chinese | 3 |

## AREA D - Natural Sciences, Math, Technology (11 semester hours) <br> Select one sequence from the following:

PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
4
ITEC 2120 (Intro to Programming) 4
$\xrightarrow[\text { AREA } \boldsymbol{E}-\text { Social Science (12 semester hours) }]{\text { POLS } 1101 \text { (American Government) }}$
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of Study (18 semester hours)
ACCT 2101 (Introduction to Financial Accounting) 3
ACCT 2102 (Introduction to Managerial Accounting) 3
BUSA 2105 (Communications in Business Environment) 3
BUSA 2106 (Legal Environment of Business)
ECON 2105 (Principles of Macroeconomics)
ECON 2106 (Principles of Microeconomics)

| Additional Requirements (3 hours) |  |
| :---: | :---: |
| Physical Education Requirement |  |
| Choices for Life | 1 |
| Additional Physical Education | 2 |
| Program of Study ( 60 semester hours) |  |
| Required Business Courses (36 semester hours) |  |
| BUSA 2000 (Statistical Analysis for Business) | 3 |
| BUSA 3000 (Quantitative Analysis) | 3 |
| BUSA 3100 (Management Information Systems) | 3 |
| BUSA 3200 (Global Business) | 3 |
| FINA 3000 (Financial Management I) | 3 |
| MKTG 3000 (Principles of Marketing) | 3 |
| MGMT 3000 (Principles of Management) | 3 |
| MGMT 3040 (Human Resource Management) | 3 |
| MGMT 3400 (Ethics and Corporate Social Responsibility) | 3 |
| MGMT 4100 (Organizational Behavior) | 3 |
| MGMT 4600 (Operations and Project Management) | 3 |
| MGMT 4700 (Strategic Management - Capstone) | 3 |
| Marketing Concentration (21semester hours) |  |
| MKTG 3050 (Consumer Behavior) | 3 |
| MKTG 4025 (Marketing Research) | 3 |
| MKTG 4400 (International Marketing) | 3 |
| MKTG 4751 (Business Internship/Experiential Learning) or (4000 level Business Elective Course) | 3 |
| Marketing Electives (must be at the 3000/4000 level) | 9 |

General Electives (3 semester hours)
Any 2000-4000 Level Course

## Bachelor of Business Administration (BBA) 123 credits required for graduation

## Concentration Management

| General Education: (60 semester hours) |  |
| :--- | :--- |
| $\boldsymbol{A R E A} \boldsymbol{A}$ - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II ) | 3 |
| MATH 1001 (Quantitative Skills \& Reasoning) or | 3 |
| MATH 1111 (College Algebra) |  |

$$
3
$$

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing) 4
AREA C-Humanities/Fine Arts (6 semester hours)

| Select one from the following: |  |
| :--- | ---: |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: | 3 |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |

AREA D - Natural Sciences, Math, Technology
(11 semester hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I) 4
PSCI 1102 (Physical Science II)
BIOL1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)33

MATH 1001 (Quantitative Skills \& Reasoning ) or

Select one from the following:
ITEC 2110 (Digital Media) 4
ITEC 2120 (Intro to Programming) 4

AREA E-Social Science (12 semester hours)
POLS 1101 (American Government) 3

HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I) 3
HIST 1112 (World History II) 3
HIST 1121 (Western Civilization I) 3
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of

## Study (18 semester hours)

ACCT 2101 (Introduction to Financial Accounting) 3
ACCT 2102 (Introduction to Managerial Accounting) 3
BUSA 2105 (Communications in Business Environment) 3
BUSA 2106 (Legal Environment of Business) 3
ECON 2105 (Principles of Macroeconomics) 3
Georgia Gwinnett College 2015-16 Catalog

| Additional Requirements (3 hours) |  |
| :--- | :--- |
| Physical Education Requirement |  |
| Choices for Life | 1 |
| Additional Physical Education | 2 |
|  |  |
| Program of Study (60 semester hours) |  |
| Required Business Courses (36 semester hours) |  |
| BUSA 2000 (Statistical Analysis for Business) | 3 |
| BUSA 3000 (Quantitative Analysis) | 3 |
| BUSA 3100 (Management Information Systems) | 3 |
| BUSA 3200 (Global Business) | 3 |
| FINA 3000 (Financial Management I) | 3 |
| MKTG 3000 (Principles of Marketing) | 3 |
| MGMT 3000 (Principles of Management) | 3 |
| MGMT 3040 (Human Resource Management) | 3 |
| MGMT 3400 (Ethics and Corporate Social Responsibility) | 3 |
| MGMT 4100 (Organizational Behavior) | 3 |
| MGMT 4600 (Operations Management) | 3 |
| MGMT 4700 (Strategic Management - Capstone) | 3 |

Management Concentration (18 semester hours) Bachelor of Business Administration (BBA)

A minimum cumulative grade point average of 2.25 is required

## Required Courses

LEAD 3000 (Essential of Leadership) 3
MGMT 4220 (Project Management)
MGMT 4101 International Management)

## Business Electives

Select 3 courses from the following:
LEAD 3100 (Leading Org. Change)
LEAD 3500 (Leadership in Teams)
LEAD 3700 (Decision Making \& Creativity)
MGMT 4105 (Theories of Motivation)
MGMT 4400 (Negotiations)
BUSA 4500 (Studies Abroad)
BUSA 4751 (Business Internship)
MGMT 3250 (Management of Non-Profit Organizations)
MGMT 4300/MKTG 4301 (Entrepreneurship)
MGMT 4350 (Leadership in the $21^{\text {st }}$
General Electives (6 semester hours)
Any 2000-4000 Level Course

## Concentration Management Information Systems

$$
123 \text { credits required for graduation }
$$

| General Education: (60 semester hours) |  |
| :---: | :---: |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1001 (Quantitative Skills \& Reasoning) or | 3 |
| MATH 1111 (College Algebra) |  |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) |  |
| ARTS 1100 (Arts Appreciation) |  |
| ENGL 2110 ((World Literature) |  |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate Level or Higher Spanish, French or Chinese | 3 |

```
```

AREA D - Natural Sciences, Math, Technology

```
```

AREA D - Natural Sciences, Math, Technology
(11 semester hours)
(11 semester hours)
Select one sequence from the following:
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1101K (Physical Science I)
PSCI }1102\mathrm{ (Physical Science II)
PSCI }1102\mathrm{ (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1101K (Biological Science I)
BIOL }1102\mathrm{ (Biological Science II)
BIOL }1102\mathrm{ (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1151K (Survey of Chemistry I)
CHEM 1151K (Survey of Chemistry I)
CHEM 1151K (Survey of Chemistry I)
Select one from the following:
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2110 (Digital Media)
ITEC }2120\mathrm{ (Intro to Programming)

```
```

    ITEC }2120\mathrm{ (Intro to Programming)
    ```
```

AREA E - Social Science (12 semester hours)

## AREA $E$ - Social Science (12 semester hours)

| POLS 1101 (American Government) | 3 |
| :--- | ---: |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: | 3 |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) |  |

## AREA F - Courses Related to the Program of

 Study (18 semester hours)ACCT 2101 (Introduction to Financial Accounting) 3
ACCT 2102 (Introduction to Managerial Accounting) 3
BUSA 2105 (Communications in Business Environment) 3
BUSA 2106 (Legal Environment of Business)
ECON 2105 (Principles of Macroeconomics)
ECON 2106 (Principles of Microeconomics)

| Additional Requirements (3 hours) |  |
| :--- | ---: |
| Physical Education Requirement |  |
| Choices for Life | 1 |
| Additional Physical Education | 2 |
|  |  |
| Program of Study (60 semester hours) |  |
| Required Business Courses (36 semester hours) |  |
| BUSA 2000 (Statistical Analysis for Business) | 3 |
| BUSA 3000 (Quantitative Analysis) | 3 |
| BUSA 3100 (Management Information Systems) | 3 |
| BUSA 3200 (Global Business) | 3 |
| FINA 3000 (Financial Management I) | 3 |
| MKTG 3000 (Principles of Marketing) | 3 |
| MGMT 3000 (Principles of Management) | 3 |
| MGMT 3040 (Human Resource Management) | 3 |
| MGMT 3400 (Ethics and Corporate Social Responsibility) | 3 |
| MGMT 4100 (Organizational Behavior) | 3 |
| MGMT 4600 (Operations Management) | 3 |
| MGMT 4700 (Strategic Management - Capstone) | 3 |



## MIS Concentration (18 semester hours) Minor in Business Administration-Non-Business Majors

Minors, for students not pursuing the BBA degree, are offered in Business Administration. A 2.0 cumulative grade point average must be earned for the prescribed courses in the minor and at least 6 semester hours of Upper Division work (3000 and 4000 level) in the minor must be completed in residence.

The requirements for a minor in Business Administration include the following six courses:
ACCT 2101 - Introduction to Financial Accounting or ACCT 2102 Introduction to Managerial Accounting BUSA 2105 - Business Communications or BUSA 2106 Legal Environment of Business
ECON 2105 - Principles of Macroeconomics or ECON 2106 - Principles of Microeconomics
Select three of following: (after the completion of any required prerequisites)
MGMT 3000 - Principles of Management
MKTG 3000 - Principles of Marketing
FINA 3000 - Financial Management I
BUSA 3200 - Global Business

Three 3000 lever or higher business courses must be taken in residence to satisfy the Business Minor Requirement

If the student already has transfer credit for MKTG 3000 and/or MGMT 3000 and/or FINA 3000 and/or BUSA 3200, the student must take higher level MKTG and/or MGMT and/or FINA and/or BUSA courses in resident.

A minimum grade of "C" must be earned in each of the six courses
A student in any degree program other than Business Administration (BBA) can add a Business Minor. The student's final transcript will note that the student satisfied the requirements for a business minor.

Students should fill out the form "Application for Business Minor for Non-Business Majors" and deliver to the School of Business.

## Programs of Study School of Education

The School of Education offers two B.S.Ed. programs that lead to certification in Early Childhood Education and Special Education.

## BACHELOR OF SCIENCE - EARLY CHILDHOOD EDUCATION

The B.S. degree in Early Childhood Education prepares students to teach grades preschool through five, and includes an endorsement for English for Speakers of Other Languages (ESOL). The program utilizes an integrated approach to curriculum design and delivery that addresses the needs of all learners. Through a combination of academic and fieldbased learning, the program encourages the development of caring, competent and collaborative teachers who are committed to helping all students reach their highest potential. Each semester, GGC Early Childhood Education majors will undertake field experiences in diverse settings in the Gwinnett County Public Schools in preschool through grade five to ensure that they are prepared to teach in a variety of settings. During the final semester, students will participate in a semester-long student teaching experience and complete a leadership seminar. Refer to the GGC website for the most up-to-date program plan.

## BACHELOR OF SCIENCE - SPECIAL EDUCATION

Through a combination of classroom and field-based learning, GGC's Special Education program gives future educators an opportunity to acquire the necessary assessment, instructional and consultation skills for working effectively with culturally and linguistically diverse children and/or adolescents who have special educational needs. The goal of the program is the development of sensitive, informed and dedicated educators to address the full spectrum of educational needs for this population. In addition, students will learn about accessible instructional materials, assistive technology, curriculum access and alignment, classroom designs for success, and family/community engagement. Graduates will be prepared to work with students with special needs in preschool settings through grade 12. Refer to the GGC website for the most up-to-date program plan.

## TEACHER CERTIFICATION PROGRAMS

The School of Education works collaboratively with the Schools of Liberal Arts and Science and Technology to offer programs leading the certification to teach grades six through twelve in five disciplinary content areas: biology, English, history, mathematics, and political science. Each B.S. or B.A, program includes a major in the appropriate disciplinary area plus professional preparation to teach in a Georgia secondary school.

## ADMISSION TO THE TEACHER EDUCATION PROGRAMS

Admission to the Teacher Education Programs is required for admission to junior- and senior-level courses in the majors. The following requirements must be met for admission into the Early Childhood Education and Special Education majors, as well as the Teacher Certification Tracks of the biology, English, history, mathematics, and political science majors.

1) The applicant must be a student in good standing at Georgia Gwinnett College. This means that the applicant should not be on academic warning or academic probation.
2) The applicant must have completed 45 semester hours of college level credit by the end of the semester of application with an overall GPA of 2.5 or better.
3) The applicant must have completed either ENGL 1101 or ENGL 1102 at GGC with a grade of C or higher OR must satisfy the GGC Competency Test OR must have previously exempted/satisfied the Regents' Test requirement.
4) The applicant must have earned a grade of C or better in EDUC 2110, EDUC 2120, and EDUC 2130 (or have approved course substitutions) by the end of the semester of application.
5) The applicant must pass or exempt the GACE Basic Skills Assessment by the end of the semester of application.
6) The applicant must authorize a criminal background check and agree to have the results reviewed by the Teacher Education Advisory Committee, if necessary.
7) The applicant must receive satisfactory ratings on the Pre-Professional Practices and Behavior in EDUC 2110, EDUC 2120, and EDUC 2130 OR submit a recommendation form from a professor at the non-GGC institution where the candidate took the EDUC courses.
8) The applicant must have a satisfactory performance on an oral presentation in EDUC 2110, EDUC 2120, or EDUC 2130 OR an oral interview with a faculty mentor at GGC.
9) The applicant must submit evidence of liability insurance. Liability insurance may be obtained through membership in a professional educators' organization.
10) The applicant must submit an Application for Admission to Teacher Education which includes all of the required documentation referenced in items \#1-\#9.

Prospective applicants to the Teacher Education Programs may obtain application information from their mentors or from the School of Education.

## TEACHER EDUCATION OUTCOMES

The teacher education unit at Georgia Gwinnett College is designed to prepare teachers who are committed to enabling all students to reach high levels of achievement. Teacher preparation at Georgia Gwinnett College focuses on the development of five domains of teacher expertise that we believe are essential in fostering student success. These domains and their associated candidate learning outcomes are listed below:

Domain 1: Interpersonal Expertise
1.1 Candidates foster environments that reflect ethical behavior, respect, kindness, safety, and care.
1.2 Candidates create culturally inclusive learning environments that capitalize on the developmental characteristics and life experiences of learners.

Domain 2: Content and Pedagogical Expertise
1.1 Candidates know the content they are expected to teach.
1.2 Candidates utilize a variety of content appropriate instructional strategies that maximize learning for all students.
1.3 Candidates seamlessly integrate technology into the design, delivery, and assessment of learning environments and experiences.
1.4 Candidates manage learning environments to maximize student success.

Domain 3: Assessment and Analytical Expertise
1.1 Candidates assess student learning using appropriate assessment tools.
1.2 Candidates organize, analyze, and interpret assessment data from multiple sources.
1.3 Candidates' instructional decisions are data-driven.

Domain 4: Leadership Expertise
4.1 Candidates assume leadership roles in classrooms and other school/community environments.
4.2 Candidates collaborate effectively with peers, school personnel, families, and community members.

Domain 5: Adaptive Expertise
5.1 Candidates exhibit routine and adaptive expertise for teaching.

## Bachelor of Science - Education (B.S.Ed.) 123 credits required for graduation

Early Childhood Education
General Education: ( 60 semester hours)
AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I)
ENGL 1102 (English Composition II)
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) or higher

AREA B - Institutional Option (4 semester hours) ITEC 1001 (Introduction to Computing)4

AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation)
ENGL 2110 ((World Literature)
FILM 1005 (Introduction to Film)
Select one from the following:
RELN 1100 (World Religions)
3
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese
3

## AREA D - Natural Sciences, Math, Technology

## (11 semester hours)

Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)4

AREA E-Social Science (12 semester hours)

POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II)

Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
lect one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology)

## AREA F - Courses Related to the Program of

## Study (18 semester hours)

EDUC 2110 Critical and Cont Issues in Educ* 3
EDUC 2120 Exploring Diversity Issues in Educ* 3
EDUC 2130 Exploring Learning and Teaching* 3
ISCI 2001 Integrated Science: Life and Earth 3
ISCII 2002 (Integrated Science: Physical) 3
MATH 2008 (Foundations of Numbers \& Operations 3

Additional Requirements (3 hours)
Physical Education Requirement
Choices for Life
Additional Physical Education
Program of Study ( 60 semester hours)
Formal Admission to Teacher Education Required
Literacy Education (15 hours)
ELAN 3000 (Language, Literacy and Culture) 3
READ 3200 (Literacy Foundations)
READ 3600 (Literacy Assessment)
$-\quad 4$
Math Content (9 hours)
MATH 3011 (Geometry for Teachers) 3
MATH 3111 (Algebra and Problem Solving) 3
MATH 3311 (Probability, Statistics, \& Problem Solving) 3
Foundations, Curriculum, and Methods (24 hours)
ECED 3100 (Characteristics of Learners )
ECED 3300 (Instructional Foundations)
ECED 3500 (Instructional Design and Delivery)
ECED 4100 (Instructional Assessment and Adaptation) 8
Leadership and Clinical Experiences (9 hours)
EDUC 4010 (Opening of School Experience: ECE)
EDUC 4800 (Leadership Seminar)
EDUC 4815A (Student Teaching:: Professional Practices)
EDUC 4815B (Studernt Teaching: Planning and Assessment)

## General Elective (3 hours)

GEOG 1101 Intro to Human Geography (if not taken in Area C) 3 OR 1000-4000 level course

## Bachelor of Science in Education (B.S.Ed.) 123 credits required for graduation



## AREA F - Courses Related to the Program of

## Study (18 semester hours)

EDUC 2110 Critical and Cont Issues in Educ*

EDUC 2120 Exploring Diversity Issues in Educ* 3
EDUC 2130 Exploring Learning and Teaching* 3
MATH Content Course (Except MATH 2008) 3
Two Content Courses in one of the following 6
History, Science, Social Science, or English
*required prior to admission to Teacher EducationPhysical Education Requirement
for Lif2
Program of Study ( 60 semester hours)
Literacy Education ( 15 hours)
ELAN 300 (Lange Litecy, and ..... 3READ 300 (Literacy Assessmen)4Math Content (9 hours)3
MATH 3008 (Numeracy Applications)3SPED 3100 (Characteristics of Learners with Exceptionalities) 4
SPED 3300 (Instructional Foundations in Special Ed)48
Leadership and Clinical Experiences (9 hours)EDUC 4020 (Opening of School Experience: ECE)0EDUC 4825A ( Student Teaching: Professional Practices)4General Elective (3 hours)

## Program of Study School of Health Sciences

## Bachelor of Science - Nursing

The School of Health Sciences offers a Bachelor of Science of Nursing (B.S.N.) degree.

## CLINICAL COURSES

Several courses in the Nursing Program include both a class and clinical components. The clinical and class components complement each other as integrated elements of a course that facilitate the accomplishment of Course Outcome Goals. Students must pass both the clinical and class. If a student is unsuccessful either the class or the clinical component, he/she will receive a fail grade and must repeat both components of the class.

## ACCREDITATION

The nursing baccalaureate program in the School of Health Sciences has provisional approval by the Georgia Board of Nursing and will seek national accreditation by the Commission on Collegiate Nursing Education.

## CURRICULUM

## General Education Requirements ( 60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a degree will be exposed to a common set of learning experiences that draw from a broad spectrum of subject areas. These common learning experiences are designed so that a student who completes the general education requirements will achieve the general education program goals as well as take the core set of sciences which are prerequisites to the courses in the program of study curriculum.

## Additional Requirements (3 hours)

The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution of the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1. HIST 2111 or HIST 2112 satisfies the Georgia and U.S. History requirement (if taken at a University System of Georgia Institute)
2. POLS 1101 satisfies the Georgia and U.S. Constitution requirement (if taken at a University System of Georgia Institute)
3. Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## NURSING PROGRAM ADMISSION REQUIREMENTS \& PROCEDURES

The Nursing Program at GGC requires eligible students to have completed areas A-F from the Nursing Program of Study (PDF) prior to the first semester of being enrolled in the first nursing courses. Note ITEC 1001, Introduction to Computing and PE, Physical Education may be taken after enrollment in the nursing program prior to graduation. A student applying to the Nursing program for Fall semester may not be enrolled in any science courses during the preceding summer semester.

- Students who have been previously enrolled in a nursing program may apply to the GGC nursing program if they have received only 1 " $D$ " or " "F" in a nursing course. Additional information will be requested by the School of Health Sciences Admission Committee upon application.


## The following criteria will need to be completed before seeking admission to the baccalaureate nursing program:

1. Declare a pre-major in Nursing through enrollment registration.
2. Be in good standing at Georgia Gwinnett College or other accredited academic institutions with 2.0 overall GPA.
3. Minimum overall GPA of 2.5 in required general education courses for nursing and a minimum of a 3.0 overall science GPA (cumulative GPA of all required science courses: CHEM 1151K and CHEM 1152K or CHEM 1211 K and CHEM 1212 K ; BIOL 2451 K and BIOL 2452 K ; and BIOL 2516 K )
a. Course history will be evaluated in determining acceptance into program (this means that all attempts of all required courses will be used to determine overall GPA)
b. A student who has received one D or F in a previous nursing course will have the grade calculated into cumulative overall GPA.
c. Science courses required for the program must be less than 6 years old. Note: GGC has a policy that if a student repeats a course, the higher grade is recorded on the transcript; however, ALL grades will be used in determining overall general education GPA and science GPA for admission to the Nursing Program. Withdraws "W" from courses noted on transcripts are not used in GPA calculations.
4. Complete the TEAS V Test, only the first two attempts will be reviewed. Note: The TEAS V Test must be taken within one (1) year of submitting an application. The reading and mathematics portion of the exam is required.
5. Obtain two (2) letters of recommendation from faculty in higher education/college level, in two disciplines, addressing your academic behavior, academic ethics and evidence to support why you would be a good nurse. Each letter of recommendation submitted should be on official letterhead.
6. Obtain one (1) letter of recommendation from a professional reference addressing your professional behavior and evidence to support why you would be good nurse.
7. Complete and submit the volunteer verification form (PDF) documenting community service activity within the past 3-5 years.

## Major Requirements

(60 hours)
The 60 credit nursing curriculum, offered over four semesters, has 16 courses which include four integrated Wellness/Illness courses/ health assessment, research, integrated pathophysiology and pharmacology, three professional nursing courses, two public health courses, two leadership courses, a capstone, and a four credit elective. The number of professional and leadership courses reflects a commitment to core-values espoused by the faculty, and particularly, by the local health care community, and will create a medium for connecting program concepts. The health assessment, research, and integrated pathophysiology and pharmacology courses have strong bases in the sciences and liberal arts which create a solid foundation for nursing knowledge.

Course credits are evenly distributed across four semesters with no current plans to offer clinical courses in the summer. By not offering clinical courses in the summer students will have the opportunity to pursue nurse extern positions proposed by surrounding health care facilities. Externship serve to augment learning and will produce a more marketable, valued, and well-rounded nursing graduate. Healthcare partners have indicated that externships help prepare graduates for employment.

## PROGRAM OUT GOALS

Bachelor of Science - Nursing
The School of Health Sciences Nursing Program Outcomes are congruent with the mission and philosophy of the nursing program, with role expectations for professional nursing as defined by the American Nurses Association, the American Association of Colleges of Nursing Baccalaureate Essentials, and Quality and Safety Education, and the needs of our community stakeholders.
Upon completion of the Nursing Program the student will:

1. Describe how a personal philosophy of caring as a mode of being can affect health outcomes.
2. Demonstrate application of nursing knowledge and skill to promote health, prevent illness, and manage care in individuals, families, groups, communities, and populations across the lifespan.
3. Effectively communicate as care giver, educator, advocate, and professional.
4. Recognize and respect the unique perspectives of all individuals by valuing oneself and others of diverse backgrounds and cultures.
5. Apply principles of leadership to collaborate intra-professionally and inter-disciplinarily.
6. Incorporate technology and informatics in the research, delivery, and evaluation of care.
7. Describe the importance of theory in the development of nursing knowledge and evidence-based practice.
8. Understand the impact of social, political, and economic influences on the access and delivery of health care locally, nationally, and globally.
9. Utilize critical thinking and problem-solving skills to deliver competent, patient-centered care.
10. Demonstrate professionalism and commitment to the School of Health Sciences core values, which include ethics, integrity, responsibility, accountability, and life-long learning.

## Bachelor of Science (BS) - Nursing

| General Education ( 60 semester hours) |  |
| :---: | :---: |
| Area A - Essential Skills: (9 hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| Select one of the following: |  |
| MATH 1001 (Quantitative Skills and Reasoning) | 3 |
| MATH 1111 (College Algebra) | 3 |
| MATH 1113 (Pre-Calculus) |  |
| MATH 2200 (Calculus) | 4 |
| Area B - Institutional Option (4 hours) |  |
| ITEC 1001(Introduction to Computing) | 4 |
| Area C-Humanities/Fine Arts (6 hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) |  |
| Intermediate Level or Higher Spanish, French or Chinese | 3 |
| Area D - Natural Sciences, Math, Technology (11 |  |
| hours) |  |
| Select one sequence from the following: |  |
| CHEM 1151K (Survey of Chemistry I) | 4 |
| CHEM 1152K (Survey of Chemistry II) | 4 |
| CHEM 1211K (Principles of Chemistry I) |  |
| CHEM 1212K (Principles of Chemistry II) | 4 |
| Select one from the following: |  |
| ITEC 2110 (Digital Media) | 4 |
| ITEC 2120 (Intro to Programming) | 4 |
| Area E-Social Science (12 hours) |  |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| PSYC 1102 (Introduction to Psychology) | 3 |

PSYC 1102 (Introduction to Psychology)

BIOL 2451K (Human Anatomy \& Physiology I w/lab)
BIOL 2452K (Human Anatomy\& Physiology II w/lab)
PSYC 2500 (Lifespan Development in Psychology
MATH 2000 (Statistics)
BIOL 2516K (Microbiology w/lab)

## Additional Requirements (3 hours)

## Physical Education Requirement

Choices for Life
Additional Physical Education (2 hours)

## Program of Study ( 60 semester hours)

Required Nursing Courses:

## First Sermester

NURS 3000 (Health Assessment) 4
NURS 3040 (Nursing Research)
NURS 3020 (Wellness \& Illness I)
NURS 3030 (Professional Nursing I

Second Semester
NURS 3021 (Wellness \& Illness II) 7
NURS 3031 (Professional Nursing II) 2
NURS 3010 (Integrated Pathophysiology \&Pharmacology) 4
NURS 3050 (Public Health Nursing I)

Third Semester
NURS 4020 (Wellness \& Illness III) 7
NURS 4050 (Public Health Nursing III) 2
NURS 4010 (Nursing Leadership I) 2
NURS 4000 (Nursing Elective) 4

Fourth Semester
NURS 4021 (Wellness \& Illness IV) 7
NURS 4032 (Professional Nursing III) 3
NURS 4011 (Nursing Leadership II) 2
NURS 4040 (Nursing Capstone) 3

Comments: See pre and co-requisites to follow proper sequence for nursing courses; a grade of "C" in Nursing courses is a numeric grade of " 75 "

NURS 3040 may be taken in summer semester prior to second semester courses after Fall 2014.

## Area F-Courses Related to the Program of Study (18 hours)

## Programs of Study School of Liberal Arts

## BACHELOR OF SCIENCE - CRIMINAL JUSTICE/CRIMINOLOGY

The School of Liberal Arts offers the Bachelors of Science degree with a major in Criminal Justice/Criminology. The B.S. in Criminal Justice/Criminology is an intensive overview of each of the components of the criminal justice system as well as an analysis of the societal and behavioral influences of deviant behavior.
The Criminal Justice/Criminology program emphasizes a "theory-into practice" approach. Students will take foundation courses with Area F that prepare them for upper division study. The will then complete a seven course common core curriculum. Students may (in consultation with their mentor) then select six additional CJCR courses based upon their individual interests. They will also select two courses from an approved list of major related electives. This curriculum will expose students to current national and international trends in Criminal Justice studies. Students graduating from GGC Criminal Justice/Criminology program will be f meeting the academic needs of agencies which comprise the Criminal Justice system and using their academic foundations to continue at the graduate level in Criminal Justice, Criminology, Public Administration, Legal Studies or other graduate programs.

## CURRICULUM

## General Education Requirements (60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a Bachelors of Science in Criminal Justice/Criminology (BS) degree will share a common body of knowledge drawn from a broad spectrum of subject areas.

## Additional Requirements

## (3 hours)

The physical education requirement is comprised of one credit hour of Wellness, two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements

## (60 hours)

The major requirements consist of three areas of study: Criminal Justice/Criminology Core, Concentrations, and General Electives. The Criminal Justice/Criminology Core is designed to ensure that students receiving the BS degree in Criminal Justice/Criminology will share a common body of knowledge needed for a wide range of private and public sector organizations. Concentration courses allow students to delve further into areas of specialization. General Electives give students an opportunity to explore topics of interest at an advanced level.

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Criminal Justice/Criminology

1) Skills in the ability to gather, evaluate, and synthesize information necessary to present clear logical ideas and thoughts leading to effective solutions to various issues in Criminal Justice and Criminology
2) An ongoing and clear appreciation for the ethical standards and principled practices of those involved in Criminal Justice and Criminology
3) A knowledge and understanding of the component areas of the Criminal Justice system including courts, police and corrections, which will provide for active and informed citizens, and potential practitioners in Criminal Justice or Criminology
4) Through the examination of our own rich national culture, its unique historical development, and continued evolution, an awareness of how the key theories within Criminal Justice and Criminology have developed, matured, and transformed, and continue to change
5) A thorough understanding of the political, social and international influences on both human and institutional behaviors in courts, police and corrections
6) Through internships and the senior seminar, practical real world knowledge and experience in the application of the theoretical underpinnings of Criminal Justice and Criminology.
7) Skills in the ability to gather, evaluate, and synthesize information necessary to present clear logical ideas and thoughts leading to effective solutions to various issues in Criminal Justice and Criminology.
8) An ongoing and clear appreciation for the ethical standards and principled practices of those involved in Criminal Justice and Criminology.
9) A knowledge and understanding of the component areas of the Criminal Justice system including courts, police and corrections, which will provide for active and informed citizens, and potential practitioners in Criminal Justice or Criminology
10) Through the examination of our own rich national culture, its unique historical development, and continued evolution, an awareness of how the key theories within Criminal Justice and Criminology have developed, matured, and transformed, and continue to change
11) A thorough understanding of the political, social and international influences on both human and institutional behaviors in courts, police and corrections
12) Through an internship/capstone program, practical real world knowledge and experience in the application of the theoretical underpinnings of Criminal Justice and Criminology.

Bachelor of Science (BS) - Criminal Justice/Criminology
General Education ( 60 semester hours)
Area A - Essential Skills: (9 hours)
ENGL 1101 (English Composition I) 3

ENGL 1102 (English Composition II)
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) (or higher)
Area B - Institutional Option (4 hours)
ITEC 1001 (Introduction to Computing)
Area C-Humanities/Fine Arts (6 hours)
Select one from the following:
MUSC 1100 (Music Appreciation)3
ARTS 1100 (Arts Appreciation) ..... 3
ENGL 2110 ((World Literature)ENGL 2100 (Transatlantic English Literature)FILM 1005 (Introduction to Film)Select one from the following:RELN 1100 (World Religions)3,
3GEOG 1101(Human Geography)
Intermediate Level or Higher Spanish, French or Chinese ..... 3
Area D - Natural Sciences, Math, Technology (11

hours)

Select one sequence from the following:

    PSCI 1101K (Physical Science I)
    
hours)
PSCI 1101K (Physical Science I)4
BIOL 1101K (Biological Science I)
CHEM 1151K (Survey of Chemistry I)
ITEC 2110 (Digital Media)

    ITEC 2120 (Intro to Programming)
    ITEC 2120 (Intro to Programming) ..... 4
Area $E$ - Social Science (12 hours)
POLS 1101 (American Government) ..... 3
HIST 2111 or HIST 2112 (U.S. History I \& II) ..... 3Select one from the following:HIST 2111 (if not used above)3
HIST 2112 (if not used above) ..... 3
HIST 1111 (World History I)3
HIST 1112 (World History II) ..... 3
HIST 1121 (Western Civilization I) ..... 3
HIST 1122 (Western Civilization II) ..... 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) ..... 3
ANTH 1102 (Introduction to Anthropology) ..... 3
ECON 2100 (Introduction to Economics) ..... 3
Area F-Courses Related to the Program of Study (18 hours)
CJCR 1100 (Introduction to Criminal Justice)3
CJCR 2000 (Administration Justice) ..... 3
CJCR 2400 (Ethics in Criminal Justice) ..... 3
PSYC 1102 (Introduction to Psychology) ..... 3
SOCI1160 (Introduction to Social Problems) ..... 3

    PSCI 1102 (Physical Science II) ..... 3BIOL 1101K (Biological Science I)4
    
    BIOL 1102 (Biological Science II)CHEM 1151K (Survey of Chemistry I)3
    
    CHEM 1152K (Survey of Chemistry II)
    CHEM 1152K (Survey of Chemistry II) ..... 4

Select one from the following:
lect one from the following:
ITEC 2110 (Digital Media)
Select one from the following: 3
POLS 2201 State and Local Government
GEOG 1101* Introduction to Human Geography
(*If not used in another area)
PSYC 2400 Introduction to Abnormal Psychology
Additional Requirements (3 hours) Physical Education Requirement
Choices for Life
Additional Physical Education (2 hours) ..... 1
2
Program of Study ( 60 semester hours)Required Criminal Justice/Criminology Courses(21 hours)
CJCR 3100 (Research Methods) ..... 3
CJCR 3200 (Criminology)
CJCR 3300 (American Courts \& Legal Systems)CJCR 3500 (Corrections)CJCR 3600 (Statistics for the Social Sciences)
CJCR 4940 (Senior Seminar)3
CJCR 3400 (American Police Systems) ..... 3
3Required Criminal Justice Courses (18 hours)
Select six from the following:
CJCR 3210 (Organized Crime)3
CJCR 3220 (Juvenile Delinquency) ..... 3
CJCR 3230 (Gangs)3
CJCR 3700 (Criminal Procedure) ..... 3
3
CJCR 3810 (Juvenile Justice)CJCR 4000 (Special Topics)3
3CJCR 4120 (Race, Ethnicity \& Crime)3
3
CJCR 4130 (Gender, Crime \& Justice) ..... 3
CJCR 4210 (Criminal and Deviant Behavior)CJCR 4230 (Criminal Violence)
CJCR 4240 (Victimology)
CJCR 4250 (Crime Prevention)
CJCR 4340 (Homeland Security \& Terrorism)
CJCR 4350 (Criminal Law)
CJCR 4410 (Police \& the Community)CJCR 4510 (Community Based Corrections)
CJCR 4720 (Constitutional Law: Civil Liberties)
CJCR 4930 (Internship in Criminal Justice)3
3Additional Criminal Justice Discipline Electives(6 hours)
Select two from the following courses:
ANTH 3010/ENGL 4520/ GEOG 3320/HIST 3135/ POLS 3200/General Electives (15 hours)
1000-4000 level
See GGC Course catalog

## CRIMINAL JUSTICE/CRIMINOLOGY MINOR

The minor in Criminal Justice/Criminology is consistent with the B.S. major in Criminal Justice/Criminology as an intensive overview of each of the components of the criminal justice system as well as an analysis of the societal and behavioral influences of deviant behavior. It emphasized the "theory-into practice" approach upon which the criminal justice/criminology program is based.

The Criminal Justice/Criminology minor consists of fifteen (15) credit hours of coursework. The following are required classes:
CJCR 1100 Introduction to Criminal Justice 3 hours

CJCR $3200 \quad$ Criminology 3 hours
Nine (9) additional hours from the following upper division courses:

| CJCR | 3210 | Organized Crime |
| :--- | :--- | :--- |
| CJCR | 3220 | Juvenile Delinquency |
| CJCR | 3230 | Gangs |
| CJCR | 3300 | The Judicial System |
| CJCR | 3400 | American Police Systems |
| CJCR | 3500 | Corrections |
| CJCR | 3510 | Institutional Correction |
| CJCR | 3600 | Statistics for the Social Sciences |
| CJCR | 3700 | Criminal Procedures |
| CJCR | 3800 | Criminal Justice Administration |
| CJCR | 3810 | Juvenile Justice |
| CJCR | 4120 | Gender, Ethnicity and Justice |
| CJCR | 4210 | Criminal and Deviant Behavior |
| CJCR | 4220 | White Collar and Cybercrime |
| CJCR | 4230 | Criminal Violence |
| CJCR | 4240 | Victimology |
| CJCR | 4250 | Crime Prevention |
| CJCR | 4340 | Homeland Security and Terrorism |
| CJCR | 4350 | Criminal Law |
| CJCR | 4410 | Police and the Community |
| CJCR | 4420 | Comparative Criminal Justice Systems |
| CJCR | 4510 | Community Based Corrections |

## BACHELOR OF ARTS - ENGLISH

The School of Liberal Arts offers the Bachelors of Arts degree with a major in English. The B.A. program in English serves students interested in examining literature and culture with a course of studies and degree that equip them for a variety of careers and vocations, including education, marketing and sales, communications, public relations, journalism, publishing, law, business administration and more. The English program provides students with learning experiences of increasing levels of complexity and enrichment. The program offers four tracks, including a track for students interested in teaching English at the secondary education level: Writing and Rhetoric, Language and Literature, Interdisciplinary Studies and Teacher Certification

## CURRICULUM

## General Education Requirements (60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a Bachelors of Arts in English (BA) degree will share a common body of knowledge drawn from a broad spectrum of subject areas.

## Additional Requirements (3 hours)

The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements (60 hours)

The major requirements consist of six areas of study: 2000-level proficiency in a foreign language, English Core, Concentration, and General Electives, a service learning course, and a senior capstone experience. The foreign language proficiency ensures majors have an enriched understanding of the diversity of languages, literacies, and cultures. The English Core is designed to promote a common body of knowledge needed for proficiency across a wide range of educational institutions and settings, and private and public sectors organizations. The service learning requirement gives majors a real-world understanding of how their learning and work in English can impact communities and organizations. Concentration courses and the senior capstone experience allow students to delve further into their areas of specialization. General electives give students an opportunity to explore topics of interest at an advanced level.

## PROGRAM OUTCOME GOALS

## Bachelor of Arts - English

## Concentration: Teacher Certification

Students in the English Major (Teacher Certification Track) will be able to:

1) Demonstrate understanding of critical and theoretical approaches to the study of literature, language, and the arts.
2) Read, interpret, and evaluate texts, especially literary ones, as aesthetic works and sites of cultural production and exchange.
3) Demonstrate effective communication skills in and about a variety of media related to the study of literature, language and culture.
4) Demonstrate proficiency in research and scholarly methods.
5) Engage with, understand, and support the relevance of literature, art, and textual study within a globally diverse community

Georgia Gwinnett College 2015-16 Catalog
6) Satisfy the 12 Candidate Outcomes identified for the Teacher Education Unit.

## TEACHER EDUCATION OUTCOMES

Georgia Gwinnett College's teacher education program teachers committed to enabling all students to reach high levels of achievement. Teacher preparation at Georgia Gwinnett College focuses on the development of five domains of teacher expertise that we believe are essential in fostering student success. These domains and their associated candidate learning outcomes are listed below:

Domain 1: Interpersonal Expertise
1.1 Candidates foster environments that reflect ethical behavior, respect, kindness, safety, and care.
1.2 Candidates create culturally inclusive learning environments that capitalize on the developmental characteristics and life experiences of learners.

Domain 2: Content and Pedagogical Expertise
2.1 Candidates know the content they are expected to teach.
2.2 Candidates utilize a variety of content appropriate instructional strategies that maximize learning for all students.
2.3 Candidates seamlessly integrate technology into the design, delivery, and assessment of learning environments and experiences.
2.4 Candidates manage learning environments to maximize student success.

Domain 3: Assessment and Analytical Expertise
3.1 Candidates assess student learning using appropriate assessment tools.
3.2 Candidates organize, analyze, and interpret assessment data from multiple sources.
3.3 Candidates' instructional decisions are data-driven.

Domain 4: Leadership Expertise
4.1 Candidates assume leadership roles in classrooms and other school/community environments.
4.2 Candidates collaborate effectively with peers, school personnel, families, and community members.

Domain 5: Adaptive Expertise
5.1 Candidates exhibit routine and adaptive expertise for teaching.

## ADMISSION TO THE TEACHER EDUCATION PROGRAMS

Admission to the Teacher Education Programs is required for admission to junior- and senior-level courses in the majors. The following requirements must be met for admission into the Early Childhood Education and Special Education majors, as well as the Teacher Certification Tracks of the biology, English, history, mathematics, and political science majors.

1) The applicant must be a student in good standing at Georgia Gwinnett College. This means that the applicant should not be on academic warning or academic probation.
2) The applicant must have completed 45 semester hours of college level credit by the end of the semester of application with an overall GPA of 2.5 or better.
3) The applicant must have completed either ENGL 1101 or ENGL 1102 at GGC with a grade of C or higher OR must satisfy the GGC Competency Test OR must have previously exempted/satisfied the Regents' Test requirement.
4) The applicant must have earned a grade of C or better in EDUC 2110, EDUC 2120, and EDUC 2130 (or have approved course substitutions) by the end of the semester of application.
5) The applicant must pass or exempt the GACE Basic Skills Assessment by the end of the semester of application.
6) The applicant must authorize a criminal background check and agree to have the results reviewed by the Teacher Education Advisory Committee, if necessary.
7) The applicant must receive satisfactory ratings on the Pre-Professional Practices and Behavior in EDUC 2110, EDUC 2120, and EDUC 2130 OR submit a recommendation form from a professor at the non-GGC institution where the candidate took the EDUC courses.
8) The applicant must have a satisfactory performance on an oral presentation in EDUC 2110, EDUC 2120, or EDUC 2130 OR an oral interview with a faculty mentor at GGC.
9) The applicant must submit evidence of liability insurance. Liability insurance may be obtained through membership in a professional educators' organization.
10) The applicant must submit an Application for Admission to Teacher Education which includes all of the required documentation referenced in items \#1-\#9.

Prospective applicants to the Teacher Education Programs may obtain application information from their mentors or from the School of Education.

## PROGRAM OUTCOME GOALS

## Bachelor of Arts - English

Concentrations: Writing and Rhetoric, Language and Literature, or Interdisciplinary Studies
Students in the English Major will be able to:

1) Demonstrate understanding of critical and theoretical approaches to the study of literature, language, and the arts.
2) Read, interpret, and evaluate texts, especially literary ones, as aesthetic works and sites of cultural production and exchange.
3) Demonstrate effective communication skills in and about a variety of media related to the study of literature, language and culture.
4) Demonstrate proficiency in research and scholarly methods.
5) Engage with, understand, and support the relevance of literature, art, and textual study within a globally diverse community

## Bachelor of Arts (BA) English

## Concentration - Writing and Rhetoric

| General Education: (60 semester hours) |  |
| :---: | :---: |
| Area A - Essential Skills: (9 hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1001 (Quantitative Skills and Reasoning or MATH 1111 (College Algebra) (or higher) |  |
|  |  |
| Area B-Institutional Option (4 hours) |  |
| ITEC 1001(Introduction to Computing) | 4 |
| $\underline{\text { Area } C \text {-Humanities/Fine Arts (6 hours) }}$ |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) |  |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate Level or Higher Spanish, French or Chinese | 3 |

Area D - Natural Sciences, Math, Technology (11 hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)
Area $E$ - Social Science (12 hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II)
Select one from the following:
HIST 2111 (if not used above)3

HIST 2112 (if not used above)

3

HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology)
ANTH 1102 (Introduction to Anthropology)
ECON 2100 (Introduction to Economics)
PSYC 1102 (Introduction to Psychology)
Area F-Courses Related to the Program of Study
(18 hours)
Select three 2000 level English literature courses from the following: *
ENGL 2100 (Transatlantic Literature)
ENGL 2110 (Survey of World Literature)
ENGL 2120 (Survey of British Literature)
ENGL 2130 (Survey of American Literature)
3
ENGL 2111 (Survey of World Literature I)
ENGL 2112 (Survey of World Literature II)
ENGL 2121 (Survey of British Literature I)

123 credits required for graduation

ENGL 2122 (Survey of British Literature II) 3
ENGL 2131 (Survey of American Literature I) 3
ENGL 2132 (Survey of American Literature II)
ENGL 2801 (Introduction to Rhetorical Studies)
3

* Students must complete a minimum of one Survey of World

Literature either in Area C or Area F. Students who took a 2000 level ENGL literature survey to satisfy Area C are required to select only two 2000 level ENGL literature courses in Area F (for a total of three literature survey courses).

Students will satisfy the remaining requirements for Area F by taking 1000-2000 level foreign language courses (if needed) or Liberal Arts courses, excluding PHED courses [all English majors must demonstrate 2001 level proficiency in Foreign Language]

Additional Requirements (3 semester hours) Physical Education Requirement
Choices for Life
Additional Physical Education 2

Program of Study ( 60 semester hours)
Required English Courses (24 hours)
ENGL 4000 Internship/Field Experience 3
ENGL 4850 Senior Seminar 3
Two 3000/4000 level courses from the Writing and
Rhetoric Elective Area (see catalogue for courses)
Four 3000/4000 level courses from the Language and 12
Literature Elective Area (see catalogue for courses)

## Writing and Rhetoric Electives (18 hours)

Select 18 hours of 3000/4000 level courses from the following:
ENGL 3001 (Introduction to English Studies)
ENGL 3050 (Modern English Grammar) 3
ENGL 3070 (Principles of Technical \& Professional Editing)
ENGL 3600 (Advanced Composition)
ENGL 3800 (Introduction to Creative Writing)
ENGL 3822 (Creative Writing Workshop: Fiction)
ENGL 3825 (Theories and Practices for Peer Tutoring)
ENGL 3832 (Creative Writing Workshop: Poetry)
ENGL 3850 (History of Rhetoric)
ENGL 3857 (Technical Writing and Comm. Practices)
ENGL 3866 (Introduction to Professions in Writing)
ENGL 3870 (Basic News Writing and Reporting)
ENGL 3880 (Writing and Digital Media)
ENGL 3890 (Rhetorical Criticism)
ENGL 4200 (Special Topics in English)
ENGL 4860 (Visual Rhetoric)
ENGL 4875 (Applied Journalism)
ENGL 4880 (Digital Rhetoric)
$\square$
$\square$

## General Electives ( 18 hours)

Select 9 hours of 3000/4000 level courses from any disciple or school (see catalog for courses) in consultation with advisor.

Select 9 hours of 2000 level or higher courses from any discipline or school (See catalog for courses) in consultation with advisor $\qquad$

## Bachelor of Arts (BA) English

## Concentration - Language and Literature

General Education: ( 60 semester hours)
Area A - Essential Skills: (9 hours)
ENGL 1101 (English Composition I) ..... 3
ENGL 1102 (English Composition II) ..... 3
MATH 1111 (College Algebra) (or higher) ..... 3
Area B - Institutional Option (4 hours)
ITEC 1001(Introduction to Computing) ..... 4
Area C-Humanities/Fine Arts (6 hours)
MUSC 1100 (Music Appreciation) ..... 3
ENGL 2110 ((World Literature) ..... 3
FILM 1005 (Introduction to Film) ..... 3
RELN 1100 (World Religions) ..... 3
3
Intermediate Level or Higher Spanish, French or Chinese ..... 3
Area D-Natural Sciences, Math, Technology(11 hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I) ..... 4
PSCI 1102 (Physical Science II)BIOL 1101K (Biological Science I)4
BIOL 1102 (Biological Science II) ..... 3
CHEM 1151K (Survey of Chemistry I) ..... 4
CHEM 1152K (Survey of Chemistry II) ..... 4
Select one from the following:
ITEC 2110 (Digital Media)4
ITEC 2120 (Intro to Programming) ..... 4
Area E-Social Science (12 hours)
POLS 1101 (American Government) ..... 3
HIST 2111 or HIST 2112 (U.S. History I \& II) ..... 3
Select one from the following:
HIST 2111 (if not used above) ..... 3
HIST 2112 (if not used above) ..... 3
HIST 1111 (World History I)
HIST 1112 (World History II) ..... 3
HIST 1121 (Western Civilization I) ..... 3
HIST 1122 (Western Civilization II) ..... 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) ..... 3
ANTH 1102 (Introduction to Anthropology) ..... 3
3
PSYC 1102 (Introduction to Psychology) ..... 3
Area F-Courses Related to the Program of Study (18 hours)
Select three 2000 level English literature courses from the following: * ENGL 2100 (Transatlantic Literature)3
ENGL 2110 (Survey of World Literature) ..... 3
ENGL 2120 (Survey of British Literature) ..... 3
ENGL 2130 (Survey of American Literature) ..... 3
ENGL 2111 (Survey of World Literature I) ..... 3
ENGL 2112 (Survey of World Literature II) ..... 3
ENGL 2121 (Survey of British Literature I) ..... 3

$$
\begin{array}{ll}
\text { ENGL } 2122 \text { (Survey of British Literature II) } & 3 \\
\text { ENGL } 2131 \text { (Survey of American Literature I) } & 3 \\
\text { ENGL } 2132 \text { (Survey of American Literature II) } & 3 \\
\text { ENGL } 2801 \text { (Introduction to Rhetorical Studies) } & 3
\end{array}
$$3

* Students must complete a minimum of one Survey of World
Literature either in Area C or Area F. Students who took a 2000 level ENGL literature survey to satisfy Area C are required to select only two 2000 level ENGL literature courses in Area F (for a total of three literature survey courses).

Students will satisfy the remaining requirements for Area F by taking
1000-2000 level foreign language courses (if needed) or Liberal Arts
courses, excluding PHED courses [all English majors must
demonstrate 2001 level proficiency in Foreign Language]
Additional Requirements (3 semester hours) Physical Education Requirement
Additional Physical Education ..... 1
Program of Study ( 60 semester hours)
Required English Courses (24 hours)
ENGL 4000 Internship/Field Experience ..... 3
ENGL 4850 Senior Seminar ..... 3
Two 3000/4000 level courses from the Writing and ..... 6
Rhetoric Elective Area (see catalogue for courses)Four 3000/4000 level courses from the Language and 12Literature Elective Area (see catalogue for courses)
Language and Literature Electives (18 hours)Select 18 hours of 3000/4000 level courses from the following:ENGL 3001 (Introduction to English Studies)3
ENGL 3050 (Modern English Grammar) ..... 3
ENGL 3040 ((Introduction to Language and Linguistics) ..... 3
ENGL 3222 (Literature and Science)
ENGL 3250 (Studies in Women's Literature)ENGL 3330 (Studies in the American Renaissance)3
ENGL 3331 (Major Movements in American Lit I)3
3
ENGL 3332 (Major Movements in American Lit II) ..... 3
ENGL 3343 (African American Literature)
ENGL 3350 (Ancient and Medieval Literature) ..... 3
ENGL 3435 (Movements in 19c British Literature) ..... 3
3
ENGL 3436 (Victorian Literature) ..... 3
(Twentieth-Century British Literature)3
ENGL 3561 (Studies in Literature of the Americas) ..... 3
ENGL 4200 (Special Topics in English)3
ENGL 4410 (Studies in Neo-Classical Literature)3
ENGL 4620 (Studies in Modern Poetry and Poetics)
ENGL 4630 (Studies in Modern Fiction)3
ENGL 4720 (Studies in American Realism and Naturalism) ..... 3

## General Electives ( 18 hours)

Select 9 hours of $3000 / 4000$ level courses from any discipline or school (see catalog for courses) in consultation with advisor
Select 9 hours of 2000 level or higher course from any discipline or school (see catalog for courses) in consultation with advisor

## Bachelor of Arts (BA) English

123 credits required for graduation

Area F-Courses Related to the Program of Study
(18 hours)
Select three 2000 level English literature courses from the following: *
ENGL 2100 (Transatlantic Literature)3
ENGL 2110 (Survey of World Literature) ** 3
ENGL 2120 (Survey of British Literature)
ENGL 2111 (Survey of World Literature I) **
ENGL 2112 (Survey of World Literature II) **
ENGL 2121 (Survey of British Literature I)
ENGL 2122 (Survey of British Literature II)
ENGL 2131 (Survey of American Literature I)
ENGL 2132 (Survey of American Literature II)
3
ENGL 2801 (Introduction to Rhetorical Studies) 3
* Students must complete a minimum of one Survey of World
Literature either in Area C or Area F. Students who took a 2000 level
ENGL literature survey to satisfy Area C are required to select only
two 2000 level ENGL literature courses in Area F (for a total of three
hiterature survey courses).
Students will satisfy the remaining requirements for Area F by taking
(000-2000 level foreign language courses (if needed) or Liberal Arts
courses, excluding PHED courses [all English majors must
Additional Requirements (3 hours)
Physical Education Requirement
Choices for Life2
Required English Courses (24 hours)
ENGL 4000 Internship/Field Experience
GL 4850 Senior Seminar
Two 3000/4000 level courses from the Writing and
6
Four 3000/4000 level courses from the Language and 12
Literature Elective Area (see catalogue for courses)

## Electives (18 hours)

Select 18 hours of 3000/4000 level courses from any of the and Spanish) in consultation with advisor

## General Electives (18 hours)

Select 9 hours of 3000/4000 level courses from any discipline or Select 9 hours of 2000 level or higher courses from any discipline or school (see catalog for course) in consultation with advisor

Bachelor of Arts (BA) English 128 credits required for graduation

| Teacher Certification |  |
| :---: | :---: |
| General Education: (60 semester hours) |  |
| Area A - Essential Skills: (9 hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1001 (Quantitative Skills and Reasoning or |  |
| MATH 1111 (College Algebra) (or higher) | 3 |
| Area B - Institutional Option (4 hours) |  |
| ITEC 1001( Introduction to Computing) | 4 |
| Area C-Humanities/Fine Arts (6 hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate Level or Higher Spanish, French or Chinese | 3 |

Area D - Natural Sciences, Math, Technology (11 hours)

| Select one sequence from the following: |  |
| :--- | :--- |
| PSCI 1101K (Physical Science I) | 4 |
| PSCI 1102 (Physical Science II) | 3 |
| BIOL 1101K (Biological Science I) | 4 |
| BIOL 1102 (Biological Science II) | 4 |
| CHEM 1151K (Survey of Chemistry I) | 4 |
| CHEM 1152K (Survey of Chemistry II) |  |
| Select one from the following: | 4 |
| ITEC 2110 (Digital Media) | 4 |


| Area $\boldsymbol{E}$ - Social Science (12 hours) |
| :--- |
| POLS 1101 (American Government) |

HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3

## AREA F - Courses Related to the Program of Study (18 semester hours)

Select three 2000 level English literature courses from the following: *

ENGL 2100 (Transatlantic Literature)
ENGL 2110 (Survey of World Literature) **
ENGL 2120 (Survey of British Literature)
ENGL 2130 (Survey of American Literature)
ENGL 2111 (Survey of World Literature I) ** 3

ENGL 2112 (Survey of World Literature II) ** 3
ENGL 2121 (Survey of British Literature I) 3
ENGL 2122 (Survey of British Literature II) 3
ENGL 2131 (Survey of American Literature I) 3
ENGL 2132 (Survey of American Literature II) 3
ENGL 2801 (Introduction to Rhetorical Studies) 3
** Recommended choices for Area C
*Students who have taken a 2000 level ENGL literature survey in
Area C are required to select only two 2000 level ENGL literature
courses in Area F (for a total of three literature survey courses).
**All students must complete a minimum of one Survey of World
Literature either in Area C or Area F
Area F includes 1000-2000 Foreign Language (if needed) or Liberal
Arts excluding PE courses.
***2001 level proficiency in Foreign Language required
See Program Notes for further information

## Additional Requirements (3 hours)

## Physical Education Requirement

Choices for Life
Additional Physical Education 2
Program of Study ( 65 semester hours)
Required English Courses (30 hours)
ENGL 3040 (Intro. to Language and Linguistics) 3
ENGL 3350 (Ancient and Medieval Literature) 3
ENGL 3450 (Renaissance Literature) 3
ENGL 4410 (Studies in Restoration and Neo-Classical Literature
ENGL 3331 (Major Movements in American Lit I)
ENGL 3332 (Major Movements in American Lit II) 3
ENGL 3435 (Movements in 19 c British Literature) 3
ENGL 3437 (20c. British Literature) 3
ENGL 4850 (Senior Seminar) 3
Select one of the following:
ENGL 3600 (Advanced Composition) 3
ENGL 3800(Introduction to Creative Writing) 3
Required Education Courses (35 hours)
(Formal Admission to Teacher Education Required)
ENGL 3000 (Content Methods)
EDUC 2110 (Critical and Contemporary Issues in Education)* 3
EDUC 2120 (Exploring Socio-Cultural Perspectives on Diversity)*
EDUC 2130 (Exploring Teaching and Learning)* 3
EDUC 3300 (Teaching Exceptional Learners)
EDUC 3350 (Models of Teaching and Learning)
EDUC 4040 (Opening of School Experience: English) 0
EDUC 4500 (Assessment)
EDUC 4550 (Instructional Adaptation)
3
EDUC 4800 (Leadership Seminar)
EDUC 4845B (Student Teaching: Planning and Assessment) 4
*required prior to Admission to Teacher Education

## Minor in English

The Minor in English allows students to enhance skills in critical thinking, writing and effective communication that are invaluable in today's society. The Minor program will build upon the foundation in rhetoric and writing skills formed in the Gen Ed core and will introduce students to the basics of literary studies. With nine credits of advanced, elective study, students will have the freedom to increase either breadth or depth in writing, rhetoric or literature.

Requires 18 credit hours, all completed with a grade of C or higher, as delineated below:
Core Writing Competency ( 3 credit hours):
ENGL 3600 (Advanced Composition)
Core Literature ( 6 credit hours):
Two 2000-level ENGL courses, excluding ENGL/BUSA 2105 and any course taken as a part of the Gen Ed core in Areas A through E

Advanced Study (9 credit hours):
Three ENGL courses at the 3000-level or higher

## BACHELOR OF ARTS - HISTORY

The School of Liberal Arts offers the Bachelors of Arts degree with a major in History. The B.A. degree in History is for students interested in a wide range of career choices ranging from education to law to the business world. The History major consists of two tracks: History with Teacher Certification and History. Students pursuing the History with Teacher Certification track will take a combination of comprehensive education and history courses designed to prepare graduates for careers as educators. Students pursuing the History track will take upper-level courses that provide a broad foundation for the study of history, including advanced study in one of the four concentrations: United States History, World History, Western Civilization, and Interdisciplinary/Thematic History. The History track also allows students to take additional courses to build a second history field of study or to establish a concentration in another discipline.

## CURRICULUM

## General Education Requirements

(60 hours)
The primary objective of the general education requirements is to guarantee that all students seeking a Bachelors of Arts in History (BA) degree will share a common body of knowledge drawn from a broad spectrum of subject areas.

## Additional Requirements

(3 hours)
The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements

## (60 hours)

The major requirements consist of three areas of study: History Core, Concentrations, and General Electives. The History Core is designed to ensure that students receiving the BA degree in History will share a common body of knowledge needed for a wide range of private and public sector organizations. Concentration courses allow students to delve further into areas of specialization. General Electives give students an opportunity to explore topics of interest at an advanced level.

## PROGRAM OUTCOME GOALS

## Bachelor of Arts - History

## Concentrations: United States History, World History, Western Civilization, or Interdisciplinary/Thematic History

Students in the History Major will be able to:

1) Demonstrate an ability to identify, locate, analyze, differentiate, and interpret primary and secondary source data.
2) Demonstrate proficiency in communicating historical research in multiple forms of expression.
3) Demonstrate fluency in the language of the discourse of historical analysis.
4) Have a broad knowledge of both world and US historical geography
5) Demonstrate an understanding of how human interaction with nature shaped history.
6) Have a broad knowledge and a select mastery of key people, trends, and events, in world and U.S. History.
7) Demonstrate proficiency in understanding how past actions have influenced the direction of current events, as well as how current conditions have shaped our understanding of the past.
8) Develop an awareness of the skills needed for future endeavors and careers arising from and enhanced by the study of history.

## PROGRAM OUTCOME GOALS

## Bachelor of Arts - History

## Concentration: Teacher Certification

Students in the History Major (Teacher Certification Track) will be able to:

1) Demonstrate an ability to identify, locate, analyze, differentiate, and interpret primary and secondary source data.
2) Demonstrate proficiency in communicating historical research in multiple forms of expression.
3) Demonstrate fluency in the language of the discourse of historical analysis.
4) Have a broad knowledge of both world and US historical geography
5) Demonstrate an understanding of how human interaction with nature shaped history.
6) Have a broad knowledge and a select mastery of key people, trends, and events, in world and U.S. History.
7) Demonstrate proficiency in understanding how past actions have influenced the direction of current events, as well as how current conditions have shaped our understanding of the past.
8) Develop an awareness of the skills needed for future endeavors and careers arising from and enhanced by the study of history.
9) Satisfy the 12 Candidate Outcomes identified for the Teacher Education Unit.

## TEACHER EDUCATION OUTCOMES

The teacher education unit at Georgia Gwinnett College is designed to prepare teachers who are committed to enabling all students to reach high levels of achievement. Teacher preparation at Georgia Gwinnett College focuses on the development of five domains of teacher expertise that we believe are essential in fostering student success. These domains and their associated candidate learning outcomes are listed below:

Domain 1: Interpersonal Expertise
1.1 Candidates foster environments that reflect ethical behavior, respect, kindness, safety, and care.
1.2 Candidates create culturally inclusive learning environments that capitalize on the developmental characteristics and life experiences of learners.

Domain 2: Content and Pedagogical Expertise
2.1 Candidates know the content they are expected to teach.
2.2 Candidates utilize a variety of content appropriate instructional strategies that maximize learning for all students.
2.3 Candidates seamlessly integrate technology into the design, delivery, and assessment of learning environments and experiences.
2.4 Candidates manage learning environments to maximize student success.

Domain 3: Assessment and Analytical Expertise
3.1 Candidates assess student learning using appropriate assessment tools.
3.2 Candidates organize, analyze, and interpret assessment data from multiple sources.
3.3 Candidates' instructional decisions are data-driven.

Domain 4: Leadership Expertise
4.1 Candidates assume leadership roles in classrooms and other school/community environments.
4.2 Candidates collaborate effectively with peers, school personnel, families, and community members.

Domain 5: Adaptive Expertise
5.1 Candidates exhibit routine and adaptive expertise for teaching.

## ADMISSION TO THE TEACHER EDUCATION PROGRAMS

Admission to the Teacher Education Programs is required for admission to junior- and senior-level courses in the majors. The following requirements must be met for admission into the Early Childhood Education and Special Education majors, as well as the Teacher Certification Tracks of the biology, English, history, mathematics, and political science majors.

1) The applicant must be a student in good standing at Georgia Gwinnett College. This means that the applicant should not be on academic warning or academic probation.
2) The applicant must have completed 45 semester hours of college level credit by the end of the semester of application with an overall GPA of 2.5 or better.
3) The applicant must have completed either ENGL 1101 or ENGL 1102 at GGC with a grade of C or higher OR must satisfy the GGC Competency Test OR must have previously exempted/satisfied the Regents' Test requirement.
4) The applicant must have earned a grade of C or better in EDUC 2110, EDUC 2120, and EDUC 2130 (or have approved course substitutions) by the end of the semester of application.
5) The applicant must pass or exempt the GACE Basic Skills Assessment by the end of the semester of application.
6) The applicant must authorize a criminal background check and agree to have the results reviewed by the Teacher Education Advisory Committee, if necessary.
7) The applicant must receive satisfactory ratings on the Pre-Professional Practices and Behavior in EDUC 2110, EDUC 2120, and EDUC 2130 OR submit a recommendation form from a professor at the non-GGC institution where the candidate took the EDUC courses.
8) The applicant must have a satisfactory performance on an oral presentation in EDUC 2110, EDUC 2120, or EDUC 2130 OR an oral interview with a faculty mentor at GGC.
9) The applicant must submit evidence of liability insurance. Liability insurance may be obtained through membership in a professional educators' organization.
10) The applicant must submit an Application for Admission to Teacher Education which includes all of the required documentation referenced in items \#1-\#9.

Prospective applicants to the Teacher Education Programs may obtain application information from their mentors or from the School of Education.

Bachelor of Arts (BA) History 123 credits required for graduation
Concentration - United States History

| General Education: (60 semester hours) |  |
| :--- | :--- |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition I) | 3 |
| MATH 1001 (Quantitative Skills and Reasoning or |  |
| MATH 1111 (College Algebra) or higher | 3 |

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
4
AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation) 3
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature) 3
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
3
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese 3

## AREA D - Natural Sciences, Math, Technology (11

 semester hours)Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)

| AREA E - Social Science (12 semester hours) |  |
| :--- | :--- |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |
| PSYC 1102 (Introduction to Psychology) | 3 |

## AREA F - Courses Related to the Program of Study (18 semester hours)

One 1000/2000 level history course sequence**
Two Foreign language courses (in sequence)
One from the following (not used in Area C):
RELN 1100 (World Religions)
GEOG 1101 (Human Geography)

One 2000 level non-US History course. 3
**U.S. History sequence must be taken if not used in Area E

Additional Requirements (3 hours)
Physical Education Requirement

Choices for Life
Additional Physical Education ..... 2

Program of Study ( 60 semester hours)
Required History Courses (18 semester hours)
HIST 4900 Senior Capstone Seminar
One 3000/4000 level General History Elective 3
Select one 3000 level course from each of the following US History
Western Civilization 3
World History
Thematic/Interdisciplinary History
U.S. History Electives (15 semester hours)

Select 3000/4000 level courses from the U.S. History elective area*
HIST 3110 America to 1789
HIST 3115 (Early National US History 1790-1840) 3
HIST 3120 (Civil War and Reconstruction)
HIST 3125 (America in the Gilded Age \& Progressive Era)
HIST 3135 (America since 1945)
HIST 3150 (Economic History of America
HIST 3185 (America Military History)
HIST 3200 (African American History to 1877)
HIST 3205 (African-American History since 1877)
HIST 3250 (American Environmental History)
HIST 3265 (History of Georgia)
HIST 3710 (History of Bus in America, Britain \& Japan)
HIST 3850 (Introduction to Public History)
HIST 4145 (Sixties America)
HIST 4240 (History of American Education)
HIST 4250 (Intellectual \& Cultural History of Colonial America)
HIST 4388 (World War II)
HIST 4990 (Special Topics)**
*at least one course must be at the 4000 level
** must be a course in American history; students cannot take more than two special-topics courses in history

Additional History/Outside Discipline Electives (15 hours)
Select only 3000/4000 level bistory electives or courses from a non-bistory discipline

## General Electives (12 semester hours)

1000-4000 level

## Bachelor of Arts (BA) History 123 credits required for graduation

## Concentration Interdisciplinary/Thematic History

| General Education: (60 semester hours) |  |
| :---: | :---: |
| Area A - Essential Skills: (9 hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1001 (Quantitative Skills and Reasoning or |  |
| MATH 1111 (College Algebra) (or higher) | 3 |
| Area B - Institutional Option (4 hours) |  |
| ITEC 1001( Introduction to Computing) | 4 |
| Area C-Humanities/Fine Arts (6 hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate Level or Higher Spanish, French or Chinese | 3 |

Area D - Natural Sciences, Math, Technology (11 hours)
Select one sequence from the following:

| PSCI 1101K (Physical Science I) | 4 |
| :--- | :--- |
| PSCI 1102 (Physical Science II) | 3 |
| BIOL 1101K (Biological Science I) | 4 |
| BIOL 1102 (Biological Science II) | 3 |
| CHEM 1151K (Survey of Chemistry I) | 4 |
| CHEM 1152K (Survey of Chemistry II) | 4 |
| elect one from the following: |  |
| ITEC 2110 (Digital Media) | 4 |
| ITEC 2120 (Intro to Programming) | 4 |

Area $E$ - Social Science (12 hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics)
AREA F - Courses Related to the Program of Study (18 semester hours)
One 1000/2000 level history course sequence**

| Two Foreign language courses (in sequence) | 6 |
| :--- | :---: |
| One from the following (not used in Area C): |  |
| RELN 1100 (World Religions) |  |
| GEOG 1101 (Human Geography) | 3 |
| One 2000 level non-US History course. | 3 |
|  | 3 |
| ** U.S. History sequence must be taken if not used in Area E |  |
|  |  |
| Additional Requirements (3 hours) |  |
| Physical Education Requirement | 1 |
| Choices for Life | 2 |
| Additional Physical Education |  |
|  |  |
| Program of Study (60 semester hours) |  |
| Required History Courses (18 semester hours) | 3 |
| HIST 4900 Senior Capstone Seminar | 3 |
| One 3000/4000 level General History Elective |  |
| Select one 3000 level course from each of the following | 3 |
| US History | 3 |
| Western Civilization | 3 |
| World History |  |
| Thematic/Interdisciplinary History |  |

## Thematic/Interdisciplinary Electives (15 semester hours)

Select 3000/4000 level courses from the Thematic and Interdisciplinary Elective areas*
HIST 3185 (American Military History)
3
HIST 3250 (American Environmental History) 3
HIST 3710 (History of Business in American, Britain, Japan)
HIST 3721 (History of Ancient and Medieval Science \& Tech)
HIST 3722 (History of Modern Science and Technology)
HIST 3740 (Ancient and Medieval Military History)
HIST 3760 (History of Politics and Culture from Antiquity to the Enlightenment)
HIST 3775 (History of Medieval Life, Religion and Thought)
HIST 3850 (Introduction to Public History)
HIST 4780 (Cultural \& Intellectual History of Ancient Med))
HIST 4990 (Special Topics) ${ }^{* *}$
*at least one course must be at the 4000 level
** must be as course on a thematic topic; students cannot take more than two special-topics courses in history.

Additional History/Outside Discipline Electives (15 hours)
Select only 3000/4000 level history electives or courses from a non-bistory discipline
General Electives (12 semester hours)
1000-4000 level

Bachelor of Arts (BA) History 123 credits required for graduation
Concentration - Western Civilization

| General Education: (60 semester hours) |  |
| :--- | :--- |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition I) | 3 |
| MATH 1001 (Quantitative Skills and Reasoning or |  |
| MATH 1111 (College Algebra) or higher | 3 |

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
4
AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation)
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature) 3
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
GEOG 1101(Human Geography)
3
Intermediate Level or Higher Spanish, French or Chinese 3

| AREA D - Natural Sciences, Math, Technology (11 |  |
| :--- | ---: |
| semester hours) |  |
| Select one sequence from the following: | 4 |
| PSCI 1101K (Physical Science I) | 3 |
| PSCI 1102 (Physical Science II) | 4 |
| BIOL 1101K (Biological Science I) | 3 |
| BIOL 1102 (Biological Science II) | 4 |
| CHEM 1151K (Survey of Chemistry I) | 4 |
| CHEM 1152K (Survey of Chemistry II) |  |
| Select one from the following: | 4 |
| ITEC 2110 (Digital Media) | 4 |
| ITEC 2120 (Intro to Programming) |  |
|  |  |
| AREA $\boldsymbol{E}$ - Social Science (12 semester hours) | 3 |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) |  |
| Select one from the following: | 3 |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) |  |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |
| PSYC 1102 (Introduction to Psychology) | 3 |

[^0]BIOL 1101K (Biological Science I)BIOL 1102 (Biological Science II)3
CHEM 1152K (Survey of Chemistry II) ..... 4
ITEC 2110 (Digital Media) ..... 4
POLS 1101 (American Government)3
3
llowing:HIST 2112 (if not used above)3
HIST 1111 (World History I) ..... 3
HIST 1121 (Western Civilization I)3Select one from the following.
SNI 1102 (Indulution to Andory)3
ECON 2100 (Introduction to Economics) ..... 3
PSYC 1102 (Introduction to Psychology)

| One 1000/2000 level history course sequence** | 6 |
| :--- | :--- |
| Two Foreign language courses (in sequence) | 6 |
| One from the following (not used in Area C): | 3 |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101 (Human Geography) | 3 |
| One 2000 level non-US History course. |  |
| **U.S. History sequence must be taken if not used in Area $\boldsymbol{E}$ |  |

Additional Requirements (3 hours)
Physical Education Requirement
Choices for Life ..... 1
Additional Physical Education ..... 2
Program of Study ( 60 semester hours)
Required History Courses (18 semester hours) HIST 4900 Senior Capstone Seminar ..... 3
One 3000/4000 level General History Elective ..... 3
select one 3000 level course from each of the following US History ..... 3
World History ..... 3
3
Thematic/Interdisciplinary History ..... 3
Western Civilization Electives (15 semester hours)
Select 3000/4000 level courses from the Western Civilization elective area
HIST 3310 (Greece and the Ancient Near East) ..... 3
HIST 3315 (Rome and the Mediterranean) ..... 3
HIST 3330 (Early Modern Europe, 1500-1789) ..... 3
HIST 3335 (Europe since 1789)HIST 3406 (History of Britain to 1688)
HIST 3407 (Modern Britain and the Empire)HIST 3427 (Modern Germany)HIST 3525 (Europe and the Islamicate World, 600-1800)HIST 3710 (History of Business in American, Britain, Japan)HIST 3721 (History of Ancient \& Medieval Science \& Tech)HIST 3722 (History of Modern Science \& Technology)HIST 3740 (Ancient and Medieval Military History)HIST 3760 (History of Politics \& Culture from Antiquity To theEnlightenment)HIST 4388 (World War II)HIST 4527 (Christians and Jews in the Islamicate World)HIST 4780 (Cultural \& Intellectual History of Ancient Med.)
HIST 4999 (Special Topics) ${ }^{* *}$
*at least one course must be at the 4000 level
** must be a course in European history; students cannot take more than two special-topics courses in history.
Additional History/Outside Discipline Electives (15 hours)
Select only 3000/4000 level history electives or courses from a non-history discipline
$\frac{\text { General Electives (12 semester hours) }}{1000-4000 \text { level }}$

Bachelor of Arts (BA) History 123 credits required for graduation

Concentration - World History
General Education: ( 60 semester hours)
AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I)
ENGL 1102 (English Composition II )
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) or higher
AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
4
AREA C-Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation)
ENGL 2110 ((World Literature)
3

ENGL 2100 (Transatlantic English Literatur
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese 3
AREA D - Natural Sciences, Math, Technology (11 semester hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)
AREA E - Social Science (12 semester hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II)
Select one from the following:
HIST 2111 (if not used above)
HIST 2112 (if not used above)
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology

One 1000/2000 level history course sequence** 6
Two Foreign language courses (in sequence) 6
One from the following (not used in Area C):
RELN 1100 (World Religions)


GEOG 1101 (Human Geography 3
One 2000 level non-US History course
3
${ }^{* *}$ U.S. History sequence must be taken if not used in Area $E$
Additional Requirements (3 hours)
Physical Education Requirement
Choices for Life
Additional Physical Education
Program of Study ( 60 semester hours)
Required History Courses (18 semester hours)
HIST 4900 Senior Capstone Seminar
One 3000/4000 level General History Elective 3
Select one 3000 level course from each of the following

## US History

Western Civilization
World History
Thematic/Interdisciplinary History 3
World History Electives ( 15 semester hours)
Select 3000/4000 level courses from the World History elective area
HIST 3500 (The Atlantic World) 3
HIST 3507 (Modern Mexico) 3
HIST 3510 (Colonial Latin American History)
HIST 3520 (History of the Middle East and India)
HIST 3525 (Europe and the Islamicate World, 600-1800)
HIST 3535 (History of Modern India \& South Asia)
HIST 3540 (History of China and Japan)
HIST 3710 (History of Business in America, Britain, Japan)
HIST 4388 (World War II)
HIST 4527 (Christians and Jews in the Islamicate World)
HIST 4575 (The Atlantic Slave Trade)
HIST 4670 (Social Revolutions I Modern Latin America)
HIST 4990 (Special Topics) ${ }^{* *}$
3
*at least one course must be at the 4000 level
**must be a course in world history; student cannot take more than two
special-topics courses in history
Additional History/Outside Discipline Electives (15 hours)
Select only 3000/4000 level bistory electives or courses from a non-history discipline

## General Electives (12 semester hours)

1000-4000 level

## Bachelor of Arts (BA) History 128 credits required for graduation

Concentration: Teacher Certification

General Education: ( 60 semester hours)
AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I)
ENGL 1102 (English Composition II)
3
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) or higher
AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
4
AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation) 3
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature) 3
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese 3

## AREA D - Natural Sciences, Math, Technology (11

## semester hours)

Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)
$\xrightarrow[\text { AREA } \boldsymbol{E} \text { - Social Science (12 semester hours) }]{\text { POLS } 1101 \text { (American Government) }}$
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II)
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)

| 3 |
| :--- |
| $\quad-\quad 3$ |

(Western Civilization I) 3
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 33333
Program of Study ( 60 semester hours)
Required History Courses ( 30 semester hours)
HIST 3110 America to 1789 ..... 3
HIST 3135 America since 1945 ..... 3
HIST 3150 Economic History of America
HIST 3265 History of Georgia ..... 3
HIST 3335 Europe since 1789 ..... 3
HIST 3500 The Atlantic World ..... 3
HIST 3540 History of China and Japan ..... 3
Select one from the following:
HIST 3315 Rome and the Mediterranean ..... 3
3
Select one from the following.
HIST 3721 History of Ancient and Medieval Science ..... 3
HIST 3775 Medieval Life, Religion and Thought ..... 3

## Required Education Courses (35 hours)

(Formal Admission to Teacher Education Required)EDUC 2110 (Critical and Contemporary Issues in Education)*
${ }^{\text {tives on Diversity)* }}$ ..... 3
EDUC 2130 (Exploring Teaching and Learning)*
EDUC 3300 (Teaching Exceptional Learners)3
3
EDUC 3350 (Models of Teaching and Learning) ..... 3
(History Content Methods)EDUC 4050 (Opening of School Experience: History)EDUC 4550 (Instructional Adaptation)EDUC 4800 (Leadership Seminar)EDUC 4855A (Student Teaching: Professional Practices)EDUC 4855B (Student Teaching: Planning and Assessment)0
EDUC 4500 (Assessment)

AREA F - Courses Related to the Program of Study (18 semester hours)
One 1000/2000 level history course sequence** 6
Two Foreign language courses (in sequence) 6
One from the following (not used in Area C):
RELN 1100 (World Religions)3

GEOG 1101 (Human Geography)
One 2000 Level non-US History Course
${ }^{* *}$ U.S. History sequence must be taken if not used in Area $\mathbf{E}$
Additional Requirements (3 hours) Physical Education Requirement
Choices for Life2

Additional Physical Education
2

Minor in History
A minor in History is offered for students pursuing a degree in another academic subject. A 2.0 cumulative grade point average must be earned for courses completed in the minor and at least 6 semester hours of upper division courses

Georgia Gwinnett College 2015-16 Catalog
(3000-4000 level) in the minor must be completed at GGC. The requirements for a minor in History include the completion of 15 semester hours of upper division history courses, selected in consultation with a faculty member in the History program. Entry into 3000-4000 level courses requires the completion of the English 1102 and the Area E history requirement. Courses used for a student's major may not be used toward a history minor.

## BACHELOR OF ARTS - POLITICAL SCIENCE

The School of Liberal Arts offers the Bachelors of Arts degree with a major in Political Science. The B.A. degree in Political Science is for students interested in a wide range of career choices, including government service, advocacy, legislative assistance, international non-government organizations, non-profit management, education, law school and graduate school. The Political Science major consists of two tracks: Political Science with Teacher Certification and General Political Science. Students pursuing the Teacher Certification track will take a combination of comprehensive education and political science courses designed to prepare graduates for careers as teachers. Students pursuing the General Political Science track will take upper-level courses that provide a broad foundation for the study of political science, including advanced study in one of the five concentrations: American Government, Comparative Politics, International Relations, Legal Studies and General. The General Political Science track also allows students to take additional political science courses or to take electives in another discipline.

## CURRICULUM

## General Education Requirements

(60 hours)
The primary objective of the general education requirements is to guarantee that all students seeking a Bachelors of Arts in Political Science (BA) degree will share a common body of knowledge drawn from a broad spectrum of subject areas.

## Additional Requirements

## (3 hours)

The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitutions of the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements

(60 hours)
The major requirements consist of four areas of study: Political Science Required Courses, Concentrations, Additional Political Science/Outside Discipline electives and General Electives. The Political Science Core is designed to ensure that students receiving the BA degree in Political Science will share a common body of knowledge needed for a wide range of private and public sector organizations. Concentration courses allow students to delve further into areas of specialization. Additional Political Science/Outside Discipline electives and General Electives give students an opportunity to explore topics of interest at an advanced level.

## PROGRAM OUTCOME GOALS

## Bachelor of Arts - Political Science

## Concentration: Teacher Certification

Students in the Political Science Major (Teacher Certification Track) will be able to:

1) Demonstrate skills in critical analysis, ability to synthesize information and present logical arguments leading to creative solutions of various political problems
2) Demonstrate knowledge of different political systems, including the US/GA government, enabling them to become informed and responsible citizens and preparing them for careers in related fields;
3) Demonstrate international/multicultural awareness: Political science majors will demonstrate the ability to analyze a variety of current global issues, including international development and global security and comprehend the roles played by various international actors, including international organizations
4) The ability to explore a variety of approaches to politics and the study of government.
5) Satisfy the 12 Candidate Outcomes identified for the Teacher Education Unit.

## TEACHER EDUCATION OUTCOMES

The teacher education unit at Georgia Gwinnett College is designed to prepare teachers who are committed to enabling all students to reach high levels of achievement. Teacher preparation at Georgia Gwinnett College focuses on the development of five domains of teacher expertise that we believe are essential in fostering student success. These domains and their associated candidate learning outcomes are listed below:

Domain 1: Interpersonal Expertise
1.1 Candidates foster environments that reflect ethical behavior, respect, kindness, safety, and care.
1.2 Candidates create culturally inclusive learning environments that capitalize on the developmental characteristics and life experiences of learners.

Domain 2: Content and Pedagogical Expertise
2.1 Candidates know the content they are expected to teach.
2.2 Candidates utilize a variety of content appropriate instructional strategies that maximize learning for all students.
2.3 Candidates seamlessly integrate technology into the design, delivery, and assessment of learning environments and experiences.
2.4 Candidates manage learning environments to maximize student success.

Domain 3: Assessment and Analytical Expertise
3.1 Candidates assess student learning using appropriate assessment tools.
3.2 Candidates organize, analyze, and interpret assessment data from multiple sources.
3.3 Candidates' instructional decisions are data-driven.

Domain 4: Leadership Expertise
4.1 Candidates assume leadership roles in classrooms and other school/community environments.
4.2 Candidates collaborate effectively with peers, school personnel, families, and community members.

Domain 5: Adaptive Expertise
5.1 Candidates exhibit routine and adaptive expertise for teaching.

## ADMISSION TO THE TEACHER EDUCATION PROGRAMS

Admission to the Teacher Education Programs is required for admission to junior- and senior-level courses in the majors. The following requirements must be met for admission into the Early Childhood Education and Special Education majors, as well as the Teacher Certification Tracks of the biology, English, history, mathematics, and political science majors.

1) The applicant must be a student in good standing at Georgia Gwinnett College. This means that the applicant should not be on academic warning or academic probation.
2) The applicant must have completed 45 semester hours of college level credit by the end of the semester of application with an overall GPA of 2.5 or better.
3) The applicant must have completed either ENGL 1101 or ENGL 1102 at GGC with a grade of C or higher OR must satisfy the GGC Competency Test OR must have previously exempted/satisfied the Regents' Test requirement.
4) The applicant must have earned a grade of C or better in EDUC 2110, EDUC 2120, and EDUC 2130 (or have approved course substitutions) by the end of the semester of application.
5) The applicant must pass or exempt the GACE Basic Skills Assessment by the end of the semester of application.
6) The applicant must authorize a criminal background check and agree to have the results reviewed by the Teacher Education Advisory Committee, if necessary.
7) The applicant must receive satisfactory ratings on the Pre-Professional Practices and Behavior in EDUC 2110, EDUC 2120, and EDUC 2130 OR submit a recommendation form from a professor at the non-GGC institution where the candidate took the EDUC courses.
8) The applicant must have a satisfactory performance on an oral presentation in EDUC 2110, EDUC 2120, or EDUC 2130 OR an oral interview with a faculty mentor at GGC.
9) The applicant must submit evidence of liability insurance. Liability insurance may be obtained through membership in a professional educators' organization.
10) The applicant must submit an Application for Admission to Teacher Education which includes all of the required documentation referenced in items \#1-\#9.

Prospective applicants to the Teacher Education Programs may obtain application information from their mentors or from the School of Education.

## PROGRAM OUTCOME GOALS

## Bachelor of Arts - Political Science Major

Concentrations: American Government, Comparative Politics, International Relations, Legal Studies and General Political Science.
Students in the Political Science Major (General Political Science Track) will be able to:

1) Demonstrate skills in critical analysis, ability to synthesize information and present logical arguments leading to creative solutions of various political problems;
2) Demonstrate knowledge of different political systems, including the US/GA government, enabling them to become informed and responsible citizens and preparing them for careers in related fields;
3) Demonstrate international/multicultural awareness: Political science majors will demonstrate the ability to analyze a variety of current global issues, including international development and global security and comprehend the roles played by various international actors, including international organizations
4) The ability to explore a variety of approaches to politics and the study of government.

## Bachelor of Arts (BA) Political Science

## Concentration American Government

General Education: ( 60 semester hours)
AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I)
3
ENGL 1102 (English Composition II )
3
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) or higher
AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
4
AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation) 3
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature)
FILM 1005 (Introduction to Film)
Select one from the following:
RELN 1100 (World Religions)
3

GEOG 1101(Human Geography)
3

| 3 |
| :--- |

Intermediate Level or Higher Spanish, French or Chinese

## AREA D - Natural Sciences, Math, Technology (11

 semester hours)Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II) 4
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming) 4

| AREA E-Social Science (12 semester hours) |  |
| :---: | :---: |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: |  |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |
| PSYC 1102 (Introduction to Psychology) | 3 |
| Area F-Courses Related to the Program of Study (18 |  |
| hours) |  |
| POLS 2101 (Introduction to Political Science) | 3 |
| POLS 2280 (Research Methods) | 3 |
| Select one of the following: |  |
| POLS 2201 (State and Local Government | 3 |
| POLS 2401(Global Issues) | 3 |
| Two social sciences not chosen in Area E |  |
| (Recommend a HIST sequence not taken in Area E) |  |
| One semester of a foreign language | 3 |

AREA E-Social Science (12 semester hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above)
HIST 2112 (if not used above)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I) 3
HIST 1122 (Western Civilization II)

SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics)

Area F-Courses Related to the Program of Study (18 hours)
POLS 2101 (Introduction to Political Science) 3
POLS 2280 (Research Methods) 3

Select one of the following:

- 3

Two social sciences not chosen in Area E
Recommend a HIST sequence not taken in Area E)
One semester of a foreign language

- 


## Bachelor of Arts (BA) Political Science

Concentration: Comparative Politics
General Education: ( 60 semester hours)
AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I)
ENGL 1102 (English Composition II ) 3
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) or higher
AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)4

AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation) 3
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature) 3
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
3
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese 3

## AREA D - Natural Sciences, Math, Technology (11 <br> semester hours) <br> Select one sequence from the following:

PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming) 4
AREA E-Social Science (12 semester hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology 3

Area F - Courses Related to the Program of Study (18

## hours)

POLS 2101 (Introduction to Political Science) 3
POLS 2280 (Research Methods)
Select one of the following:
POLS 2201 (State and Local Government 3
POLS 2401(Global Issues) 3
Two social sciences not chosen in Area E

## Bachelor of Arts (BA) Political Science

123 credits required for graduation

| (Recommend a HIST sequence not taken in Area E) One semester of a foreign language | 3 |
| :---: | :---: |
| Additional Requirements (3 hours) |  |
| Physical Education Requirement |  |
| Choices for Life | 1 |
| Additional Physical Education | 2 |
| Program of Study (60 semester hours) |  |
| Required Political Science Courses (18 hours) |  |
| POLS 3100 (Comparative Politics) | 3 |
| POLS 3400 (International Relations) | 3 |
| POLS 3450 (Modern Political Theory) | 3 |
| POLS 4490 (Senior Seminar) | 3 |
| Select one from the following: |  |
| POLS 4170 (Congress) | 3 |
| POLS 4180 (Presidency) | 3 |
| POLS 4160 (American Judicial Process) | 3 |
| Select one of the following: |  |
| POLS 4425 (Political Negotiation/Conflict Res) | 3 |
| POLS 4990 (Internship) | 3 |
| POLS 4989 (Directed Research) | 3 |
| POLS 3550 (Public Policy Process) | 3 |
| POLS 4700 (Constitutional Law: Powers of Government) | 3 |
| Comparative Politics Electives (15 hours) |  |
| Select 15 credit hours from the following: |  |
| POLS 3200 (Comparative Legal Systems) | 3 |
| POLS 3550 (Public Policy Process) | 3 |
| POLS 4001 (International Development) | 3 |
| POLS 4040 (Comparative Foreign Policy) | 3 |
| POLS 4220 (Topics in Comparative Politics) | 3 |
| POLS 4425 (Political Negotiation/Conflict Resolution) | 3 |
| POLS 4990 (Internship) | 3 |
| Additional Political Science/Outside Discipline Electives |  |
| (15 hours) |  |
| Select all 3000/4000 level political science courses (any 3000/4 course), OR all 3000/4000 level courses from a non-political scien | sip |

General Electives (12 hours)
(See GGC course catalog)

## Concentration: General

Georgia Gwinnett College 2015-16 Catalog

## General Education: ( 60 semester hours)

AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I)
ENGL 1102 (English Composition II )
3
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) or higher

## AREA B - Institutional Option (4 semester hours) <br> ITEC 1001 (Introduction to Computing) 4

AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation)
3
ENGL 2110 ((World Literature)
3
ENGL 2100 (Transatlantic English Literature) 3
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese 3
AREA D - Natural Sciences, Math, Technology (11
semester hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
4
ITEC 2120 (Intro to Programming) 4
$\underline{\text { AREA } E \text { - Social Science (12 semester hours) }}$
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
$\begin{array}{ll}\text { ANTH } 1102 \text { (Introduction to Anthropology) } & 3 \\ \text { ECON } 2100 \text { (Introduction to Economics) } & 3\end{array}$
$\begin{array}{ll}\text { ECON } 2100 \text { (Introduction to Economics) } & 3 \\ \text { PSYC } 1102 \text { (Introduction to Psychology) } & 3\end{array}$
PSYC 1102 (Introduction to Psychology)
Area F-Courses Related to the Program of Study (18

## hours)

POLS 2101 (Introduction to Political Science) 3
POLS 2280 (Research Methods)
Select one of the following:
POLS 2201 (State and Local Government 3
POLS 2401(Global Issues)
Two social sciences not chosen in Area E
(Recommend a HIST sequence not taken in Area E)
One semester of a foreign language

## Additional Requirements (3 hours) <br> Physical Education Requirement <br> Choices for Life 1 <br> Additional Physical Education 2

## Program of Study ( 60 semester hours)

## Required Political Science Courses (18 hours)

POLS 3100 (Comparative Politics) 3

POLS 3400 (International Relations) 3
POLS 3450 (Modern Political Theory) 3
3
Selec one of the 3
Select one of the following:
POLS 4170 (Congress) 3
POLS 4180 (Presidency) 3
POLS 4160 (American Judicial Process) 3
Select one of the following:
POLS 4425 (Political Negotiation/Conflict Resolution) 3
POLS 4990 (Internship) 3
POLS 4989 (Directed Research)
POLS 3550 (Public Policy Process)
POLS 4700 (Constitutional Law: Powers of Govt.)
General Political Science Electives (15 hours)
Select 15 credit hours of any 3000/4000 level POLS courses (excluding any courses taken to complete the Program of Study)

Additional Political Science/Outside Discipline Electives (15 hours)<br>Select all 3000/4000 level political science courses (any 3000/4000 level<br>POLS course) OR all 3000/4000 level courses from a non-political science discipline

General Electives (12 hours)
(See GGC course catalog)

## Bachelor of Arts (BA) Political Science

Concentration: International Relations
General Education: ( 60 semester hours)
AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I)
ENGL 1102 (English Composition II ) 3
MATH 1001 (Quantitative Skills and Reasoning or MATH 1111 (College Algebra) or higher

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation)
3
ARTS 1100 (Arts Appreciation)
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature)
FILM 1005 (Introduction to Film)
Select one from the following:
RELN 1100 (World Religions)
GEOG 1101(Human Geography)
Intermediate Level or Higher Spanish, French or Chinese 3
AREA D - Natural Sciences, Math, Technology (11 semester hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming) 4
AREA E - Social Science (12 semester hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above)
HIST 2112 (if not used above)
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology)
ANTH 1102 (Introduction to Anthropology)
ECON 2100 (Introduction to Economics)
PSYC 1102 (Introduction to Psychology)
4

Area F-Courses Related to the Program of Study (18

## hours)

POLS 2101 (Introduction to Political Science) 3
POLS 2280 (Research Methods) 3
Select one of the following:
POLS 2201 (State and Local Government 3
POLS 2401(Global Issues)
Two social sciences not chosen in Area E
(Recommend a HIST sequence not taken in Area E)
One semester of a foreign language

123 credits required for graduation

| Additional Requirements (3 hours) |  |
| :---: | :---: |
| Physical Education Requirement |  |
| Choices for Life | 1 |
| Additional Physical Education | 2 |
| Program of Study ( 60 semester hours) |  |
| Required Political Science Courses (18 hours) |  |
| POLS 3100 (Comparative Politics) | 3 |
| POLS 3400 (International Relations) | 3 |
| POLS 3450 (Modern Political Theory) | 3 |
| POLS 4490 (Senior Seminar) | 3 |
| Select one of the following: |  |
| POLS 4170 (Congress) | 3 |
| POLS 4180 (Presidency) | 3 |
| POLS 4160 (American Judicial Process) | 3 |
| Select one of the following: |  |
| POLS 4425 (Political Negotiation/Conflict Resolution) | 3 |
| POLS 4990 (Internship) | 3 |
| POLS 4989 (Directed Research) | 3 |
| POLS 3550 (Public Policy Process) | 3 |
| POLS 4700 (Constitutional Law: Powers of Government) | 3 |
| International Relations Electives (15 hours) |  |
| Select 15 credit hours from the following: |  |
| POLS 3550 (Public Policy Process) | 3 |
| POLS 3350 (US Foreign Policy) | 3 |
| POLS 4000 (International Organizations) | 3 |
| POLS 4001 (International Development) | 3 |
| POLS 4240 (Topics in International Relations) | 3 |
| POLS 4400 (International Law) | 3 |
|  | 3 |
| POLS 4425 (Political Negotiation/Conflict Resolution) | 3 |
| POLS 4460 (US Security Studies) | 3 |
|  | 3 |
| POLS 4990 (Internship) | 3 |
|  | 3 |
| Additional Political Science/Outside Discipline Electives |  |
| (15 hours) |  |
| Select all 3000/4000 level political science courses (any 3000/4000 level POLS course) OR all 3000/4000 level courses from a non-political science discipline |  |
|  |  |
| General Electives (12 hours) |  |
| (See GGC course catalog) |  |

## Bachelor of Arts (BA) Political Science

## Concentration Legal Studies

General Education: ( 60 semester hours)
AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I)
3
ENGL 1102 (English Composition II )
3
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) or higher
AREA B - Institutional Option (4 semester houts)
ITEC 1001 (Introduction to Computing)
AREA C-Humanities/Fine Arts (6 semester hours)
Select one from the following:

| MUSC 1100 (Music Appreciation) | 3 |
| :--- | :--- |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| elect one from the following: | 3 |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) |  |

Intermediate Level or Higher Spanish, French or Chinese 3
AREA D - Natural Sciences, Math, Technology (11 semester hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II) 3
BIOL 1101K (Biological Science I) 4
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II) 4
Select one from the following:
ITEC 2110 (Digital Media) 4
ITEC 2120 (Intro to Programming) 4

AREA E - Social Science (12 semester hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I) 3
HIST 1112 (World History II)
HIST 1121 (Western Civilization I) 3
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
Area F-Courses Related to the Program of Study (18

## hours)

POLS 2101 (Introduction to Political Science) 3
POLS 2280 (Research Methods)
Select one of the following:
POLS 2201 (State and Local Government 3
POLS 2401(Global Issues)
Two social sciences not chosen in Area E
(Recommend a HIST sequence not taken in Area E)

| One semester of a foreign language | 3 |
| :---: | :---: |
| Additional Requirements (3 hours) |  |
| Physical Education Requirement |  |
| Choices for Life | 1 |
| Additional Physical Education | 2 |
| Program of Study (60 semester hours) |  |
| Required Political Science Courses (18 hours) |  |
| POLS 3100 (Comparative Politics) | 3 |
| POLS 3400 (International Relations) | 3 |
| POLS 3450 (Modern Political Theory) | 3 |
| POLS 4490 (Senior Seminar) | 3 |
| Select one from the following: |  |
| POLS 4170 (Congress) | 3 |
| POLS 4180 (Presidency) | 3 |
| POLS 4160 (American Judicial Process) | 3 |
| Select one from the following: |  |
| POLS 4425 (Political Negotiation/Conflict Res) | 3 |
| POLS 4990 (Internship) | 3 |
| POLS 4989 (Directed Research) | 3 |
| POLS 3550 (Public Policy Process) | 3 |
| POLS 4700 (Constitutional Law: Powers of Government) | 3 |
| Legal Studies Electives (15 hours) |  |
| Select 15 credit hours from the following: |  |
| POLS 3200 (Comparative Legal Systems) | 3 |
| POLS 4400 (International Law) | 3 |
| POLS 4160 (American Judicial Process) | 3 |
| POLS 4350 (Criminal Law) | 3 |
| POLS 4390 (Legal Research and Writing) | 3 |
| POLS 4425 (Political Negotiation/Conflict Resolution) | 3 |
| POLS 4480 (Practicum in ADR) | 3 |
| POLS 4700 (Constitutional Law) | 3 |
| POLS 4720 (Constitution Law: Civil Liberties \& Civil Rights) | 3 |
| POLS 4990 (Internship) | 3 |
| Additional Political Science/Outside Discipline Electives |  |
| (15 hours) |  |
| Select all 3000/4000 level political science courses (any 3000/4000 level POLS course), OR all 3000/4000 level courses from a non-political science discipline |  |
| General Electives (12 hours) |  |
| (See GGC course catalog) |  |

Additional Requirements (3 hours)
Physical Education Requirement
Choices for Life 1
Additional Physical Education
Program of Study ( 60 semester hours)
Required Political Science Courses (18 hours)
POLS 3100 (Comparative Politics)
POLS 3450 (Modern Political Theory) 3
POLS 4490 (Senior Seminar) 3
Select one from the following:
POLS 4170 (Congress) 3
POLS 4180 (Presidency) 3
POLS 4160 (American Judicial Process) 3
POLS 4425 (Political Negotiation/Conflict Res) 3
POLS 4990 (Internship)
OLS 4989 (Directed Research)
POLS 3550 (Public Policy Process) 3

## Legal Studies Electives (15 hours)

Select 15 credit hours from the following:
POLS 3200 (Comparative Legal Systems) 3
POLS 4160 (American Judicial Process)
POLS 4350 (Criminal Law) 3
POLS 4390 (Legal Research and Writing)
POLS 4425 (Political Negotiation/Conflict Resolution)
POLS 480 (Practicum in ADR)
POLS 4700 (Constitutional Law)
POLS 4990 (Internship)
Additional Political Science/Outside Discipline Electives (15 hours)
Select all 3000/4000 level political science courses (any 3000/4000 level POLS
course), OR all 3000/4000 level courses from a non-political science discipline
General Electives (12 hours)
(See GGC course catalog)

## Bachelor of Arts (BA) Political Science

Concentration: Teacher Certification
General Education: ( 60 semester hours)
AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I) 3
ENGL 1102 (English Composition II ) 3
MATH 1001 (Quantitative Skills and Reasoning or
MATH 1111 (College Algebra) or higher
AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
4
AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation) 3
ENGL 2110 ((World Literature) 3
ENGL 2100 (Transatlantic English Literature) 3
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
3
GEOG 1101(Human Geography) 3
Intermediate Level or Higher Spanish, French or Chinese 3
AREA D - Natural Sciences, Math, Technology (11
semester hours)
Select one sequence from the following:
PSCI 1101K (Physical Science I)
PSCI 1102 (Physical Science II)
BIOL 1101K (Biological Science I)
BIOL 1102 (Biological Science II)
CHEM 1151K (Survey of Chemistry I)
CHEM 1152K (Survey of Chemistry II)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming)

## AREA $E$ - Social Science (12 semester hours) <br> POLS 1101 (American Government)

HIST 2111 or HIST 2112 (U.S. History I \& II)
Select one from the following:
HIST 2111 (if not used above)
3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
Area F - Courses Related to the Program of Study (18

## hours)

POLS 2101 (Introduction to Political Science) 3
POLS 2280 (Research Methods) 3
Select one of the following:
POLS 2201 (State and Local Government 3
POLS 2401(Global Issues) 3
Two social sciences not chosen in Area E
(Recommend a HIST sequence not taken in Area E)
One semester of a foreign language

| Additional Requirements (3 hours) |  |
| :---: | :---: |
| Physical Education Requirement |  |
| Choices for Life | 1 |
| Additional Physical Education | 2 |
| Program of Study (65 semester hours) |  |
| Required Political Science Courses (30 hours) |  |
| POLS 3100 (Comparative Politics) | 3 |
| POLS 3400 (International Relations) | 3 |
| POLS 3450 (Modern Political Thought) | 3 |
| POLS 4425 (Political Negotiation and Conflict Res) | 3 |
| POLS 3350 (US Foreign Policy) | 3 |
| POLS 4125 (Georgia Politics) | 3 |
| POLS 4170 (Congress) | 3 |
| POLS 4180 (The Presidency) | 3 |
| POLS 4490 (Senior Seminar) | 3 |
| HIST 3135 (America Since 1945) | 3 |
| Required Education Courses (35 hours) |  |
| (Formal Admission to Teacher Education Required) |  |
| EDUC 2110 (Critical and Contemporary Issues in Education)* | 3 |
| EDUC 2120 (Exploring Socio-Cultural Perspectives on Diversity)* | 3 |
| EDUC 2130 (Exploring Teaching and Learning)* | 3 |
| EDUC 3300 (Teaching Exceptional Learners) | 3 |
| EDUC 3350 (Models of Teaching and Learning) | 3 |
| POLS 3600 (Political Science Content Methods) | 4 |
| EDUC 4070 (Opening of School Experience: Political Science) | 0 |
| EDUC 4500 (Assessment) | 3 |
| EDUC 4550 (Instructional Adaptation) | 4 |
| EDUC 4800 (Leadership Seminar) | 1 |
| EDUC 4875A (Student Teaching: Professional Practices) | 4 |
| EDUC 4875B (Student Teaching: Planning and Assessment) | 4 |
| *required prior to Admission to Teacher Education |  |

Minor in Political Science
The minor in Political Science provides students in various majors across the college the opportunity to explore American and/or international politics in a way to complement their chosen fields. Additionally, an understanding of government and politics is critical to being an engaged citizen and contributor to one's community. The minor in Political Science is structured to give students the flexibility to gain either a breadth of knowledge by selecting courses across the different subfields within Political Science or to gain an in depth knowledge by selecting courses within one subfield. A successful minor will complete 15 credit hours with a minimum grade of "C" in each course. 6 hours of courses for a major course of study may be used for completion of a minor in Political Science. Courses completed for the minor will consist of the following:

Required Courses:
POLS 2101 - Introduction to Political Science
POLS 2280 - Research Methods in Political Science
Nine Credit Hours of Political Science Courses at the 3000 and/or 4000 Level

## BACHELOR OF SCIENCE - PSYCHOLOGY MAJOR

The School of Liberal Arts offers the Bachelors of Science degree with a major in Psychology with specializations in Cognitive Neuroscience, Social/Applied, Clinical/Personality, \& Developmental/Education. Students majoring in Psychology must complete a rigorous plan of study specifically focusing on identified program goals. The goals of the program have been identified as being key components that would enable students to transition seamlessly into a graduate program or workplace environment. All students are required to complete core courses related to the major. In addition, students will complete lower and upper level psychology courses representing more specialized areas in the field. The structure of the program provides students with a realistic view of career and educational options available in the field of psychology. Students demonstrate competence in the field of psychology through major coursework.

## CURRICULUM

## General Education Requirements (60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a Bachelors of Science in Psychology (BS) degree will share a common body of knowledge drawn from a broad spectrum of subject areas.

## Additional Requirements (3 hours)

The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements (60 hours)

The major requirements consist of two areas of study: Psychology Core and a specialization. The Psychology Core is designed to ensure that students receiving the BS degree in Psychology will share a common body of knowledge needed to apply psychological principles both in the work place and academic settings. Specialization courses allow students to delve further into an area of specialization.

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Psychology

Students graduating from the Psychology Program will:

1) Understand a full spectrum of general theoretical approaches to Psychology.
2) Understand that psychology sub-disciplines are related.
3) Be able to relate theory to real world situations.
4) Understand basic topics of research methodology.
5) Understand the statistical tools appropriate to single variable and two variable analyses.
6) Demonstrate competence in communication (written, verbal, numeric \& graphic).
7) Demonstrate competence in critical/analytic thinking.
8) Demonstrate the ability to apply Psychological theory and/or research methodology.
9) Demonstrate capacity to work collaboratively to solve problems.
10) Demonstrate appreciation of historical/philosophical context.
11) Understand that normative human behavior and experience is varied and multidimensional.
12) Demonstrate a commitment to the ethical foundations/ethical principles of psychology.

## COURSE PREREQUISITES

The following course outline the minimum prerequisites for 3000/4000 level courses; almost all 3000/4000 level courses have further prerequisites beyond the minimum.

Prerequisite for $\mathbf{3 0 0 0}$ level courses:
PSYC 1102 The Introduction to Psychology 3 semester hours

Prerequisites for 4000 level courses:
PSYC 1102 Introduction to Psychology
3 semester hours
PSYC 2010 Writing in Psychology
3 semester hours
PSYC 3020 Statistics for Behavioral Sciences
4 semester hours
PSYC 3030 Research Methods and Design
4 semester hours

## Other Program Notes

Students will be required to complete one introductory course from each of the Areas of Specialization listed on the Program of Study Outline on the next page. Upon completion of those courses, students are expected to choose areas of specialization and complete three courses each in the chosen specialization. At least one course out of the three courses chosen in the specialization must be at the 4000 level.

Additional requirements for program completion include:

- PSYC 3000 Applications in Psychology
- PSYC 4600 History and Systems of Psychology


## Bachelor of Science (BS) Psychology

123 credits required for graduation

| General Education (60 semester hours) |  |
| :--- | :--- |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II ) | 3 |
| MATH 1001 (Quantitative Skills and Reasoning or |  |
| MATH 1111 (College Algebra) or higher | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101 (Human Geography) | 3 |
| Intermediate Level or Higher Spanish, French or Chinese | 3 |


| AREA D - Natural Sciences, Math, Technology(11 |  |
| :--- | ---: |
| semester hours) |  |
| Select one sequence from the following: | 4 |
| PSCI 1101K (Physical Science I) | 3 |
| PSCI 1102 (Physical Science II) | 4 |
| BIOL 1101K (Biological Science I) | 3 |
| BIOL 1102 (Biological Science II) | 4 |
| CHEM 1151K (Survey of Chemistry I) | 4 |
| CHEM 1152K (Survey of Chemistry II) |  |
| Select one from the following: | 4 |
| ITEC 2110 (Digital Media) | 4 |

AREA E - Social Science (12 semester hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above)
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology)
3

## Specialization Courses

## Clinical/Personality Specialization Courses

PSYC 3310 Human Sexuality
PSYC $3350 \quad$ Forensic Psychology
PSYC $3400 \quad$ Personality Psychology
PSYC $3410 \quad$ Psychopathology
PSYC $3420 \quad$ Health Psychology
PSYC 3430 Models of Psychotherapy
PSYC $3440 \quad$ Clinical Psychology
PSYC $4220 \quad$ Psychopharmacology
PSYC 4401 Community Psychology
PSYC $4410 \quad$ Psychological Assessment
PSYC 4430 Developmental Psychopathology
PSYC 4525 School Psychology
PSYC 4560 Trauma Across the Lifespan
PSYC $4490 \quad$ Special Topics in Clinical/Personality
Psychology
PSYC $4690 \quad$ Special Topics in General Psychology
Developmental/Educational Specialization Courses
PSYC $3330 \quad$ Psychology and Culture
PSYC $3400 \quad$ Personality Psychology
PSYC $3500 \quad$ Educational Psychology
PSYC $3510 \quad$ Child Development
PSYC 3520 Adolescence
PSYC $3530 \quad$ Adult Development and Aging
PSYC $3540 \quad$ Psychology of Gender
PSYC $4410 \quad$ Psychological Assessment
PSYC 4430 Developmental Psychopathology
PSYC $4500 \quad$ Social \& Moral Development*
PSYC $4510 \quad$ Cultural \& Ethnic Diversity
PSYC 4525 School Psychology
PSYC $4530 \quad$ Marriage and Family
PSYC 4560 Trauma Across the Lifespan

PSYC $4590 \quad$ Special Topics in Developmental/Educational
Psychology
PSYC $4690 \quad$ Special Topics in General Psychology
Cognitive Neuroscience Specialization Courses
PSYC 3120 Sensation and Perception
PSYC $3130 \quad$ Cognitive Neuroscience
PSYC $3220 \quad$ Comparative Psychology
PSYC $3420 \quad$ Health Psychology
PSYC $4110 \quad$ Memory
PSYC $4200 \quad$ Behavioral Neuroscience
PSYC 4220 Psychopharmacology
PSYC $4190 \quad$ Special Topics in Cognitive Neuroscience
PSYC $4690 \quad$ Special Topics in General Psychology
Social/Applied Specialization Courses
PSYC $3310 \quad$ Human Sexuality
PSYC $3330 \quad$ Psychology and Culture
PSYC $3350 \quad$ Forensic Psychology
PSYC 3370 Industrial/Organizational Psychology
PSYC $3400 \quad$ Personality Psychology
PSYC $3420 \quad$ Health Psychology
PSYC $3540 \quad$ Psychology of Gender
PSYC 4301 Advanced Social Psychology
PSYC $4320 \quad$ Group Dynamics
PSYC $4380 \quad$ Psychology of Prejudice
PSYC 4401 Community Psychology
PSYC $4500 \quad$ Social \& Moral Development
PSYC $4510 \quad$ Cultural \& Ethnic Diversity
PSYC $4530 \quad$ Marriage and Family
PSYC $4390 \quad$ Special Topics in Social/Applied Psychology
PSYC 4690 Special Topics in General Psychology

## FILM MINOR

The minor in film fosters literacy in film, video and other forms of media in today's highly dynamic and globally charged media landscape. It provides students with a critical understanding of the numerous modes of film and media that shape their experiences of the world. The film minor combines historical, theoretical, industrial, and critical perspectives on film and media, through an in-depth familiarity with American and international film history, supplemented by an understanding of production practices. The concentration on history, theory, and criticism prepares students to purse a degree in film studies, complements a major in Digital Media, enables students to critique media that shape our culture, and gives students the opportunity to combine cinema studies with other areas of interest in major programs, such as English, History, and Psychology. Students who wish to minor in film must take 15 hours of FILM courses toward the minor, including at least 12 semester hours at the 3000 level or above.

Minor requirements:
FILM 2700 is required for all film minors. FILM 1005 does not fulfill minor hours but it is a prerequisite for all FILM courses above the 2000 level. A grade of " C " or better is required in all courses counting towards the minor.

FILM $2700 \quad$ Film History
Select 4 courses from the following:

| FILM 3010 | Video Production I |
| :--- | :--- |
| FILM 3180 | International Cinemas |
| FILM 3280 | Film Genres |
| FILM 3380 | Film Authorship |
| FILM 4000K | Special Topics |
| FILM 4080 | Film and Gender |

Minor Geography
Geography is the study of spatial distributions and interactions of peoples, places and environments throughout the world. The discipline describes, analyzes and represents these spatial phenomena. The world is built of countries and regions that are undergoing transformations at many different spatial scales, local to global. Major sub-fields include Human Geography, Physical Geography, World Regions, Economic Geography, Cultural Geography, Environmental Geography, World Population, Mapping Science, Urban/Regional Planning, and Global Conflict. What these studies have in common is the spatial perspective. Students who wish to minor in geography must take 15 hours of GEOG courses toward the minor. GEOG 1101 Introduction to Human Geography does not fulfill minor hours but serves as a prerequisite for many GEOG courses at Georgia Gwinnett College. There is one required course GEOG 2201, World Regional Geography. Student will then take 12 hours of GEPG courses from any available at Georgia Gwinnett College, excluding GEOG 1101 and GEOG 2201 with at least 12 semester hours at the 3000 or above. A grade of "C" or better is required in all courses counting towards the minor.

Minor Requirements
GEOG 2201 World Regional Geography
12 credit hours at the 3000/4000 level with GEOG prefix

## Minor Sociology

A minor in sociology will prepare students to develop a framework for analyzing social relations from everyday life interactions to large-scale structural transformations. All sociology courses incorporate a theoretical, methodological, and practical component, helping students to learn to think critically about the social world from the local to the global. Students who minor in sociology are better prepared to seek careers in the $21^{\text {st }}$ century economy including the nonprofit sector, governmental agencies, business, and social services.

Minor Requirements:
The Sociology minor requires 15 credit hours in sociology with 9 required hours at the 3000/4000 level
SOCI 1101 (Introduction to Sociology) (Can only be used if not taken in Area E of the General Education Curriculum)
SOCI 1160 (Social Problems) Required
SOCI 2293 (Introduction to Marriage and Family) (If needed, if SOCI 1101 is taken in Area E)
9 credit hours at the 3000/4000 Sociology Prefix

## Programs: Certificate in Latin American Studies

The Certificate in Latin American Studies (CLAS) is a collaborative program of the University System of Georgia and the Americas Council. It is open to students in all majors. To apply for acceptance into this program, a student must first complete 30 credit hours, maintain a 2.8 GPA (or above) and complete one 3 -credit hour course that focuses on contemporary Latin America or a 3-credit hour course on Latin American culture and civilization. Applications are available from the CLAS coordinator.

To earn a CLAS, students must complete 18 credit-hours in specific courses. Six credit-hours must be in a foreign language (French, Spanish, Portuguese, Haitian Creole or Quechua) at or above the 3000 -level. The remaining 12 credithours must be in courses that focus on Latin America.

Language requirement (six credit-hours)
Students pursuing a CLAS must:
Complete six (6) hours of Spanish at the 3000-level or above with a minimum grade of "C." These hours can be chosen from the following courses:

| Spanish 3010 | Spanish Conversation and Composition |
| :--- | :--- |
| Spanish 4020 | Survey of Latin American Literature |

These hours also may be taken as part of an approved study abroad program as long as the course is beyond the intermediate level; or

Demonstrate written and oral proficiency in Spanish, Portuguese, French, Haitian Creole or Quechua. Demonstration of language proficiency above the intermediate level as defined by ACTFL standards through examination or successful completion of an oral and written examination evaluated by a qualified University System of Georgia faculty member.

## Latin American studies requirement ( 12 credit-hours)

Students pursuing a CLAS must:
Complete one 3-credit hour course that focuses on contemporary Latin America or a 3-credit hour course on Latin American culture and civilization.

Options include:
History $3507 \quad$ History of Modern Mexico
History $4670 \quad$ Social Revolutions in Modern Latin America
Anthropology $3000 \quad$ People and Culture of Latin America
History $3510 \quad$ Colonial Latin America

Complete three 3-credit-hour courses (nine hours) in Latin American studies. Two of these must be outside the student's major. All of them must fall within the following guidelines:

Any upper-division Latin American courses offered in the University System of Georgia
Six (6) hours may come from courses that have a minimum 25 percent Latin American component
No more than 6 (six) hours from study abroad or internships.
Options include:

| Anthropology 3000 | People and Culture of Latin America |
| :--- | :--- |
| English 3561 | Studies in the Literature of the Americas |
| Film 3180 | International Film: Latin America |
| History 3507 | History of Modern Mexico |
| History 4670 | Social Revolutions in Modern Latin America |
| Spanish 3010 | Spanish Conversation and Composition |
| History 3510 | Colonial Latin America |

NOTE: All courses, study abroad programs and internships must be approved by the campus Certificate in Latin American Studies coordinator. All courses require a grade of " $C$ " (2.0) or better. No more than one course may be taken at the 1000-2000 level. The CLAS is awarded upon graduation from GGC; it is not awarded before the student graduates.
Georgia Gwinnett College 2015-16 Catalog

## Programs of Study School of Science and Technology

## BACHELOR OF SCIENCE - BIOLOGY

The School of Science and Technology offers a Bachelor of Science (B.S.) degree with a major in Biology. The Biology Major includes concentrations in General Biology, Cell Biology and Biotechnology, Biochemistry and Teacher Certification.

## LABORATORY COURSES

Many courses in the School of Science and Technology include both a class and a laboratory component. The laboratory and class components complement each other as integrated elements of a course that facilitate the accomplishment of the Course Outcome Goals. As such they cannot be separated. Students must pass both the lab and class. If a student fails either the class or the laboratory component, they will receive a fail grade and must repeat both components of the class.

## CURRICULUM

## General Education Requirements <br> (60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a degree will be exposed to a common set of learning experiences that draw from a broad spectrum of subject areas. These common learning experiences are designed so that a student who completes the general education requirements will achieve the general education program goals as well as take introductory courses in the biology major that are prerequisite to courses in the program of study curriculum.

## Additional Requirements (3 hours)

The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements

## (60 hours)

The courses in the Biology Major consist of both required and elective courses. The required courses are designed to ensure that all students receiving the BS Biology degree will share a common set of learning experiences toward achievement of the Program Outcome Goals. In addition, students will apply these learning experiences in the accomplishment of a research project or internship. Elective courses allow students to delve further into areas of specialization that provide breadth and/or depth of learning.

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Biology

## Concentration: General Biology

Graduates who complete the Biology Major (General Biology Concentration) will be able to:

1) Effectively and clearly communicate scientific information in written and oral form.
2) Use library and Internet resources to gather, organize, and understand scientific information.
3) Collect, present, and analyze scientific data gathered in the laboratory.
4) Understand basic chemistry and math and be able to apply them to a study of the life sciences.
5) Know the structures and functions of cells.
6) Know the structures and functions of biomolecules (DNA, proteins, lipids, carbohydrates).
7) Understand the structure-function relationships at all levels of organization of living organisms (molecules $\rightarrow$ cells $\rightarrow$ tissues $\rightarrow$ organs $\rightarrow$ organ systems $\rightarrow$ organism $\rightarrow$ population $\rightarrow$ ecosystem).
8) Understand the organization, diversity, and interdependence of living organisms.
9) Understand and gain an appreciation for the applications of the life sciences in Society.

## Bachelor of Science (BS) BIOLOGY 123 credits required for graduation

| Concentration General Biology <br> General Education: ( 60 semester hours) |  |
| :--- | :--- |
| AREA A - Essential Skills: (9 semester hours) |  |

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:

| MUSC 1100 (Music Appreciation) | 3 |
| :--- | :---: |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |

AREA D - Natural Sciences, Math, Technology (11 semester hours)
CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media) 4
ITEC 2120 (Intro to Programming 4
AREA E - Social Science (12 semester hours)

| POLS 1101 (American Government) | 3 |
| :--- | :--- |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |

Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I) 3
HIST 1112 (World History II) 3
HIST 1121 (Western Civilization I) 3
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of Study

## 18 semester hours

BIOL 1107K (Principles of Biology I)
BIOL 1108K (Principles of Biology II)
CHEM 2211K (Organic Chemistry I)
CHEM 2212K (Organic Chemistry II)
Two hours from areas A \& D

Additional Requirements (3 hours)

Physical Education Requirement

PHED 1101 (Choices for Life)

Additional Physical Education
Program of Study ( 60 semester hours)
Required Biology Courses (25 semester hours) BIOL 3000 (Evolution)
BIOL 3500 K (Ecology)
BIOL 3500K (Ecology) 4
BCHM 3100K (Biochemistry) 4
BIOL 3200K (Genetics)
BIOL 3400K (Cell Biology)
BIOL 4700 (Interdisciplinary Applications of Biology) 3
Select one from the following:
STEC 4500 (Undergraduate Research Project) 3
BIOL 4800 (Internship
BIOL 4560 (Research Methods in Biology)
BIOL 4570 (Experimental Methods in Biology)
Other Required Courses (11-15 semester hours)
Select one PHYS sequence from the following:
PHYS 2211K (Principles of Physics I) 4
PHYS 2212K (Principles of Physics II) 4
or
PHYS 1111K (Introduction to Physics I)
PHYS 1112K (Introduction to Physics II) 4

MATH 2000 (Statistics) 3
MATH 2200 (Calculus I) (if not taken in Area A) 4

## General Biology Electives (8 semester hours)

Select two of the following:
BIOL 3300K (Microbiology) 4
BIOL 3310K (Botany)
BIOL 3350K (Mycology)
BIOL 3600K (Zoology)
Additional Electives (12-16 semester hours)
One elective must have a BIOL or BCHM prefix.
9 hours must be 3000-4000 level to total 39 hours.
Students may take a maximum of 6 credit hours for STEC 4500
(Undergraduate Research Project) and a maximum of 3 credit
hours for BIOL 4800 (Internship)

## PROGRAM OUTCOME GOALS

Bachelor of Science - Biology
Concentration: Cell Biology and Biotechnology
Graduates who complete the Biology Major (Cell Biology and Biotechnology Concentration) will be able to:

1) Effectively and clearly communicate scientific information in written and oral form.
2) Demonstrate proficiency in current laboratory techniques, data collection and analysis.
3) Use library and Internet resources to gather, organize, and understand scientific information.
4) Understand basic chemistry and math and be able to apply them to a study of the life sciences.
5) Know the basic structures and functions of cells.
6) Know the structures and functions of biomolecules (DNA, proteins, lipids, carbohydrates).
7) Know the difference in the structures and function between prokaryotic and eukaryotic cells and understand the diversity within these major cell types
8) Understand the use of cells and biomaterials in biotechnology.
9) Understand the capabilities of biotechnology in Society, as well as its technical and ethical limitations.

## Bachelor of Science (BS) Biology 123 credits required for graduation

Concentration Cell Biology \& Biotechnology
General Education: ( 60 semester hours) AREA A - Essential Skills: (9 semester hours) ENGL 1101 (English Composition I)
ENGL 1102 (English Composition II)
MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I)

AREA B - Institutional Option (4 semester hours) ITEC 1001 (Introduction to Computing)

AREA C - Humanities/Fine Arts (6 semester houts)

| Select one from the following: |  |
| :--- | ---: |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: | 3 |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |

## AREA D - Natural Sciences, Math, Technology (11 semester hours)

CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media) 4
ITEC 2120 (Intro to Programming 4

| AREA $\boldsymbol{E}-$ Social Science (12 semester hours) |  |
| :--- | :--- |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: |  |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |
| PSYC 1102 (Introduction to Psychology) | 3 |

AREA F - Courses Related to the Program of Study 18 semester hours

BIOL 1107K (Principles of Biology I)

BIOL 1108K (Principles of Biology II)

CHEM 2211K (Organic Chemistry I)

CHEM 2212K (Organic Chemistry II)

Two hours from areas A \& D

Additional Requirements (3 hours)
Physical Education Requirement

PHED 1101 (Choices for Life)

Additional Physical Education

| Program of Study (60 semester hours) |  |
| :--- | ---: |
| Required Biology Courses (30 semester hours) |  |
| BCHM 3100K (Biochemistry) | 4 |
| BIOL 3200K (Genetics) | 4 |
| BIOL 3300K (Microbiology) | 4 |
| BIOL 3400K (Cell Biology) | 4 |
| BIOL 3900 (Biotechnology) | 3 |
| BIOL 4200 (Bioinformatics) | 3 |
| BIOL 4300 (Biotechnology Laboratory) | 2 |
| BIOL 4700 (Interdisciplinary Applications of Biology) | 3 |
| Select one of the following |  |
| STEC 4500 (Undergraduate Research Project) | 3 |
| BIOL 4800 (Internship) | 3 |
| BIOL 4560 (Research Methods in Biology) | 3 |
| BIOL 4570 (Experimental Methods in Biology) | 3 |

Other Required Courses (11-15 semester hours)
Select one PHYS Sequence from the following:
PHYS 2211K (Principles of Physics I) 4
PHYS 2212K (Principles of Physics II) 4
or
PHYS 1111K (Introduction to Physics I) 4
PHYS 1112K (Introduction to Physics II) 4
MATH 2000 (Statistics)
MATH 2200 (Calculus I) (if not taken in Area A)

## Additional Electives (15-19 semester hours)

One elective must have a BIOL or BCHM prefix.
9 hours must be 3000-4000 level to total 39 hours.
Students may take a maximum of 6 credit hours for STEC 4500 (Undergraduate Research Project) and a maximum of 3 credit hours for BIOL 4800 (Internship)

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Biology

Concentration: Biochemistry
Graduates who complete the Biology Major (Biochemistry Concentration) will be able to:

1) Effectively and clearly communicate scientific information in written and oral form.
2) Use library and Internet resources to gather, organize, and understand scientific information.
3) Collect, present, and analyze scientific data gathered in the laboratory.
4) Understand basic chemistry and math and be able to apply them to a study of the life sciences.
5) Know the structures and functions of cells.
6) Know the structures and functions of biomolecules (DNA, proteins, lipids, carbohydrates).
7) Apply appropriate biological, chemical and physical concepts to the study of life sciences at the molecular level.
8) Safely and effectively perform common biochemistry laboratory techniques, procedures, and experiments and analyze results.
9) Design procedures to investigate problems in biochemistry.

## Bachelor of Science (BS) Biology 123 credits required for graduation

## Concentration Biochemistry

| General Education: (60 semester hours) |  |
| :--- | :--- |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) | 3 |
| (extra hour will count in Area F) |  |

$\frac{\text { AREA B - Institutional Option (4 semester hours) }}{\text { ITEC } 1001 \text { (Introduction to Computing) }}$
AREA C - Humanities/Fine Arts (6 semester hours)
Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation) 3
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature) 3
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions) 3
GEOG 1101(Human Geography) 3
Intermediate level or higher Spanish, French or Chinese 3
AREA D - Natural Sciences, Math, Technology (11 semester hours)
CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media) 4
ITEC 2120 (Intro to Programming 4
$\underset{\text { POLS } 1101 \text { (American Government) }}{\text { AREA } \boldsymbol{E} \text { - Social Science (12 semester hours) }}$
$\begin{array}{ll}\text { POLS } 1101 \text { (American Government) } & 3 \\ \text { HIST } 2111 \text { or HIST } 2112 \text { (U.S. History I \& II) } & 3\end{array}$
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I) 3
HIST 1112 (World History II) 3
HIST 1121 (Western Civilization I) 3
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of Study 18 semester hours
BIOL 1107K (Principles of Biology I)
4
BIOL 1108K (Principles of Biology II)
CHEM 2211K (Organic Chemistry I)
CHEM 2212K (Otganic Chemistry II)
Two hours from areas A \& D

Additional Requirements (3 hours)

Physical Education Requirement

PHED 1101 (Choices for Life)

Additional Physical Education

| Program of Study (60 semester hours) |  |
| :--- | :--- |
| Required Biology Courses (30 semester hours) |  |
| BCHM 3100K (Biochemistry) | 4 |
| BCHM 4100K (Advanced Biochemistry) | 4 |
| BIOL 3200K (Genetics) | 4 |
| BIOL 3400K (Cell Biology) | 3 |
| BIOL 4700 (Interdisciplinary Applications of Biology) | 4 |
| CHEM 3000K (Analytical Chemistry) | 4 |
| CHEM 4201K (Physical Chemistry I) | 3 |
| Select one from the following: | 3 |
| STEC 4500 (Undergraduate Research Project) | 3 |
| BIOL 4800 (Internship) | 3 |
| BIOL 4560 (Research Methods in Biology) |  |
| BIOL 4570 (Experimental Methods in Biology) |  |

Other Required Courses (11-16 semester hours)
Select one PHYS sequence from the following:
PHYS 2211K (Principles of Physics I)
PHYS 2212K (Principles of Physics II) 4
or
PHYS 1111K (Introduction to Physics I
PHYS 1112K (Introduction to Physics II) 4

MATH 2200 (Calculus I) (if not taken in Area A) 4
$\begin{array}{ll}\text { Select one from the following: } & \\ \text { MATH } 2000 \text { (Statistics) } & 3 \\ \text { Math } 2210 \text { (Calculus II) } & 4\end{array}$
Science Elective (3-4 semester hours)
Select one of the following:
BIOL 3300K (Microbiology)
BIOL 3900 (Biotechnology)
4
3
CHEM 4100K (Instrumental Chemistry) 4
Additional Electives (11-16 semester hours)
One elective must have BIOL or BCHM prefix.
5-6 hours must be at 3000-4000 level to total 39 hours.
Students may take a maximum of 6 credit hours for STEC 4500
(Undergraduate Research Project) and a maximum of 3 credit
hours for BIOL 4800 (Internship)

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Biology

Concentration: Teacher Certification
Graduates who complete the Biology Major (Teacher Certification Concentration) will be able to:

1) Effectively and clearly communicate scientific information in written and oral form.
2) Use library and Internet resources to gather, organize, and understand scientific information.
3) Collect, present, and analyze scientific data gathered in the laboratory.
4) Understand basic chemistry and math and apply them to a study of the life sciences.
5) Know the structures and functions of cells.
6) Know the structures and functions of biomolecules (DNA, proteins, lipids, and carbohydrates).
7) Implement the scientific method by designing or revising appropriate experiments or demonstrations to address biological concepts.
8) Discuss biological concepts of real world issues and the importance of biology to society.
9) Satisfy the 12 Candidate Outcomes identified for the Teacher Education Unit.

## TEACHER EDUCATION OUTCOMES

The teacher education unit at Georgia Gwinnett College is designed to prepare teachers who are committed to enabling all students to reach high levels of achievement. Teacher preparation at Georgia Gwinnett College focuses on the development of five domains of teacher expertise that we believe are essential in fostering student success. These domains and their associated candidate learning outcomes are listed below:

Domain 1: Interpersonal Expertise
1.1 Candidates foster environments that reflect ethical behavior, respect, kindness, safety, and care.
1.2 Candidates create culturally inclusive learning environments that capitalize on the developmental characteristics and life experiences of learners.

Domain 2: Content and Pedagogical Expertise
2.1 Candidates know the content they are expected to teach.
2.2 Candidates utilize a variety of content appropriate instructional strategies that maximize learning for all students.
2.3 Candidates seamlessly integrate technology into the design, delivery, and assessment of learning environments and experiences.
2.4 Candidates manage learning environments to maximize student success.

Domain 3: Assessment and Analytical Expertise
3.1 Candidates assess student learning using appropriate assessment tools.
3.2 Candidates organize, analyze, and interpret assessment data from multiple sources.
3.3 Candidates' instructional decisions are data-driven.

Domain 4: Leadership Expertise
4.1 Candidates assume leadership roles in classrooms and other school/community environments.
4.2 Candidates collaborate effectively with peers, school personnel, families, and community members.

Domain 5: Adaptive Expertise
5.1 Candidates exhibit routine and adaptive expertise for teaching.

## ADMISSION TO TEACHER EDUCATION

Admission to Teacher Education is required for admission to junior- and senior-level courses in all majors leading to teacher certification. The following requirements must be met for admission into the Early Childhood Education and Special Education majors, as well as the Teacher Certification Tracks of the biology, English, history, mathematics, and political science majors.

1) The applicant must be a student in good standing at Georgia Gwinnett College. The applicant should not be on academic warning or academic probation.
2) The applicant must have completed 45 semester hours of college level credit by the end of the semester of application with an overall GPA of 2.5 or better.
3) The applicant must have completed either ENGL 1101 or ENGL 1102 at GGC with a grade of C or higher OR must satisfy the GGC Competency Test OR must have previously exempted/satisfied the Regents' Test requirement.
4) The applicant must have earned a grade of C or better in EDUC 2110, EDUC 2120, and EDUC 2130 (or have approved course substitutions) by the end of the semester of application.
5) The applicant must pass or exempt the GACE Basic Skills Assessment by the end of the semester of application.
6) The applicant must authorize a criminal background check and agree to have the results reviewed by the Teacher Education Advisory Council, if necessary.
7) The applicant must receive satisfactory ratings on the Pre-Professional Practices and Behavior in EDUC 2110, EDUC 2120, and EDUC 2130 OR submit a recommendation form from a professor at the non-GGC institution where the candidate took the EDUC courses.
8) The applicant must demonstrate satisfactory performance on an oral presentation in EDUC 2110, EDUC 2120 , or EDUC 2130 OR an oral interview with a faculty mentor at GGC.
9) The applicant must submit evidence of liability insurance. Liability insurance may be obtained through membership in a professional educators' organization.
10) The applicant must submit an Application for Admission to Teacher Education which includes all of the required documentation referenced in items \#1-\#9.

Prospective applicants to the Teacher Education Programs may obtain application information from their mentors or from the School of Education.

## Bachelor of Science (BS) Biology 128 credits required for graduation

| Concentration: Teacher Certification |  |
| :---: | :---: |
| General Education: ( 60 semester hours) |  |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) |  |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) (extra hour will count in Area F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |

AREA $D-$ Natural Sciences, Math, Technology
(11 semester hours)
CHEM 1211K (Principles of Chemistry I)
CHEM 1212K (Principles of Chemistry II)
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming

## AREA E - Social Science (12 semester hours)

POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II) 3

Select one from the following:
HIST 2111 (if not used above)
HIST 2112 (if not used above)
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3

## AREA F - Courses Related to the Program of

## Study 18 semester hours

BIOL 1107K (Principles of Biology I)
BIOL 1108K (Principles of Biology II)
4
CHEM 2211K (Organic Chemistry I)
CHEM 2212K (Organic Chemistry II)

[^1]Additional Requirements (3 hours)Physical Education RequirementPHED 1101 (Choices for Life)Additional Physical Education1
Program of Study ( 65 semester hours)
Required Science Courses (30-32 semester hours) $A$ grade of " $C$ " or better is required in all courses
BIOL 3200K (Genetics) ..... 4
BIOL 3300K (Microbiology) ..... 4
BIOL 3400K (Cell Biology) ..... 4
BIOL 3600K (Zoology) or BIOL 3310K (Botany) ..... 4
BIOL 3500K (Ecology) ..... 4
ISCI 2500K (Interdisciplinary Science) ..... 4
Select two of the following
BIOL 2451K (Human Anatomy \& Physiology I) ..... 4
BIOL 2452K (Human Anatomy \& Physiology II)) ..... 4
BIOL 3000 (Evolution) ..... 3
BIOL 3310K (Botany)) ..... 4
BIOL 3600K (Zoology)BIOL 3900 (Biotechnology)4BCHM 3100K (Bio3
4
Required Education Courses (35 semester hours)
(Formal Admission to Teacher Education Required)
EDUC 2110 (Critical and Contemporary Issues in Education)* ..... 3
EDUC 2120 (Exploring Socio-Cultural Perspectives3
EDUC 2130 (Exploring Learning and Teaching)* ..... 3EDUC 3350 (Models of Teaching and Learning)3
3EDUC 4030 (Opening of School Experience: Biology)
EDUC 4500 (Assessment)EDUC 4550 (Instructional Adaptation)EDUC 4835A (Student Teaching: Professional Practices)4
EDUC 4800 (Leadership Seminar)3EDUC 4835B (Student Teaching: Planning and Assessment)4*required prior to Admission to Teacher Education

## BACHELOR OF SCIENCE - CHEMISTRY

Chemistry is the study of matter and the energetics associated with chemical transformations. Chemists investigate an unseen scale of science in order to reveal chemical behavior and reactivity in chemical and biological systems. Unique laboratory experiences with appropriate instrumentation and theoretical, computational frameworks provide insight on studying the synthesis, characterization, properties and energetics of matter. Students will have a strong foundation in general, organic, analytical, inorganic, biochemistry, and physical chemistry.

The Chemistry program will offer career paths for students interested in immediate employment, pre-health professions, teaching at the secondary level, and preparation for a variety of graduate programs, both in chemistry and in the interdisciplinary applied sciences including nanotechnology, forensic science, biosciences and bioengineering, pharmaceuticals, nutrition, alternative energy, and environmental science.

The Chemistry Major Program will provide three concentrations: a General Chemistry Concentration with an explicit industrial focus; a Professional Chemistry Concentration intended for students planning to attend graduate or professional school; and a Chemistry Teacher Certification Concentration to prepare highly qualified candidates for careers as teachers. The three concentrations share a common foundation of chemistry courses including Organic Chemistry I, Organic Chemistry II, Analytical Chemistry, Inorganic Chemistry, Biochemistry and Physical Chemistry I. All concentrations also have a required two-course sequence of Physics (either Algebra or Calculus-based). Each concentration provides a distinct set of in-depth courses designed to prepare students for a variety of careers.

- General Chemistry Concentration: This program in the chemistry major has specifically been designed to train individuals entering Chemical Industry upon graduation. There are courses that emphasize specific industrial skills such as: 1) specific reduction in the level of calculus, 2) writing standard operating procedures (SOPs) and familiarization with industrial standards such as good laboratory practices (GLPs), and 3) a suggested internship experience at a local company. This concentration also offers more flexibility for students to develop minor studies.
- Professional Chemistry Concentration: This concentration is specifically designed to focus more on theoretical applications and mathematical concepts (higher level Calculus), and more laboratory courses as established by the American Chemical Society. Such higher level courses/experiences include Calculus II, Calculus-based Physics, Physical Chemistry II and a required research experience. Thus, students graduating with the Professional concentration will be prepared to pursue further post-baccalaureate studies.
- Chemistry Teacher Certification: In this concentration, the curriculum provides both depth of content knowledge and extensive preparation for dealing with the challenges of the 21 st century secondary classroom. The concentration includes content courses that assure that students will have sufficient content knowledge in chemistry and related fields. It also includes coursework and experiences that will allow for the development of content pedagogical and professional knowledge and skills for teaching. The Teacher Certification Concentration is aligned with the National Science Teachers Association standards and will meet the requirements of the Georgia Professional Standards Commission.


## Student Learning Outcomes: Chemistry

Core

- Effectively and clearly communicate scientific information in written and oral form.
- Employ 21 st century technology to investigate scientific questions and to gather, organize and effectively examine and evaluate the information obtained.
- Illustrate and interpret scientific data using graphs, tables, charts, and text.
- Apply the principles of physics and mathematics to describe, illustrate, investigate, calculate and explain chemical properties and processes.
- Perform experiments with, understand the operation of and correctly interpret data from modern chemical instrumentation.
- Apply the principles of chemical structure, reactivity, dynamics, kinetics and thermodynamics to describe, predict and critically analyze the behavior of chemical systems.

Georgia Gwinnett College 2015-16 Catalog

General

- Design, evaluate and perform safe, ethical lab procedures using the scientific method and sustainable practices that address questions of applied interest.
- Apply chemical principles to describe the production, formulation and manufacture of raw materials and consumer products.


## Professional

- Design, evaluate and perform safe, ethical lab procedures using the scientific method and sustainable practices that address questions of chemical interest.
- Utilize conceptual and mathematical models to analyze experimental design and evaluate the validity of experimental results in a variety of chemical systems.


## Chemistry Teacher Certification

- Design sustainable experiments and demonstrations to teach chemical concepts.
- Discuss chemical concepts in relation to real world issues and society.
- Know and appreciate the technicalities and ramifications of conducting safe laboratory experiments and demonstrations with small and large groups.
- Satisfy the 12 Candidate Outcomes identified for the Teacher Education Unit.


## TEACHER EDUCATION OUTCOMES

The teacher education unit at Georgia Gwinnett College is designed to prepare teachers who are committed to enabling all students to reach high levels of achievement. Teacher preparation at Georgia Gwinnett College focuses on the development of five domains of teach expertise that we believe are essential in fostering student success. These domains and their associated candidate learning outcomes are listed below:

## Domain 1: Interpersonal Expertise

1.3 Candidates foster environments that reflect ethical behavior, respect, kindness, safety, and care.
1.4 Candidates create culturally inclusive learning environment that capitalize on the developmental characteristics and life experiences of learners.

Domain 2: Content and Pedagogical Expertise
2.5 Candidates know the content they are expected to teach.
2.6 Candidates utilize a variety of content appropriate instructional strategies that maximize learning for all students.
2.7 Candidates seamlessly integrate technology into the design, delivery, and assessment of learning environments and experiences.
2.8 Candidates manage learning environments to maximize student success.

## Domain 3: Assessment and Analytical Expertise

3.4 Candidates assess student learning using appropriate assessment tools.
3.5 Candidates organize, analyze, and interpret assessment data from multiple sources.
3.6 Candidates' instructional decisions are data-driven.

Domain 4: Leadership Expertise
4.3 Candidates assume leadership goals in classrooms and other school/community environments.
4.4 Candidates collaborate effectively with peers, school personnel, families and community members.

Domain 5: Adaptive Expertise
5.2 Candidates exhibit routine and adaptive expertise for teaching.

## Admission to Teacher Education

Admission to Teacher Education is required for admission to junior and senior level courses in all major leading to teacher certification. The following requirement must be met for admission into the Early Childhood Education and

Special Education majors, as well as the Teacher Certification Tracks of the biology, English, history, mathematics and political science majors.

1) The applicant must be a student in good standing at Georgia Gwinnett College. The applicant should not be on academic warning or academic probation.
2) The applicant must have completed 45 semester hours of college level credit by the end of the semester of application with an overall GPA of 2.5 or better.
3) The applicant must have completed either ENGL 1101 or ENGL 1102 at GGC with a grade of C or higher OR must satisfy the GGC Competency Test OR must have previously exempted/satisfied the Regents' Test requirement.
4) The applicant must have earned a grade of C or better in EDUC 2110, EDUC 2120 and EDUC 2130 (or have approved course substitutions) by the end of the semester of application.
5) The applicant must pass or exempt the GACE Basic Skills Assessment by the end of the semester of application.
6) The applicant must authorize a criminal background check and agree to have the results reviewed by the Teacher Education Advisory Council, if necessary.
7) The applicant must receive satisfactory ratings on the Pre-Professional Practices and Behavior in EDUC 2110, EDUC 2120 and EDUC 2130 OR submit a recommendation form from a professor at the non-GGC institution where the candidate took the EDUC courses.
8) The applicant must demonstrate satisfactory performance on an oral presentation in EDUC 2110, EDUC 2120 or EDUC 2130 OR an oral interview with a faculty member at GGC.
9) The applicant must submit evidence of liability insurance. Liability insurance may be obtained through membership in a professional educators' organization.
10) The applicant must submit an Application for Admission to Teacher Education which includes all of the required documentation referenced in items \#1-\#9.

- Prospective applicants to the Teacher Education Program may obtain application information from their mentors or from the School of Education.


## Bachelor of Science (BS) Chemistry

Concentration: Professional Track
(ACS Certifiable Track) 123 credits required for graduation

## General Education: ( 60 semester hours)

AREA A - Essential Skills: (9 semester hours)
ENGL 1101 (English Composition I) ..... 3
MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) ..... 3

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing) ..... 4
AREA C-Humanities/Fine Arts (6 semester hours)
Select one from the following:
ARTS 1100 (Arts Appreciation) ..... 3
ENGL 2110 ((World Literature) ..... 3
ENGL 2100 (Transatlantic English Literature) ..... 3
FILM 1005 (Introduction to Film) ..... 3
Select one from the following: RELN 1100 (World Religions) ..... 3
GEOG 1101(Human Geography) ..... 3
Intermediate Level or Higher Spanish, French or Chinese ..... 3
AREA D - Natural Sciences, Math, Technology
(11 semester hours)
CHEM 1211K (Principles of Chemistry I) ..... 4
CHEM 1212K (Principles of Chemistry II) ..... 4
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media) ..... 4
ITEC 2120 (Intro to Programming ..... 4
AREA E - Social Science (12 semester hours)
POLS 1101 (American Government) ..... 3
HIST 2111 or HIST 2112 (U.S. History I \& II) ..... 3
Select one from the following:
HIST 2111 (if not used above) ..... 3
HIST 2112 (if not used above) ..... 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I) ..... 3
HIST 1122 (Western Civilization II) ..... 3 ..... 3
Select one from the following: SOCI 1101 (Introduction to Sociology) 3 ANTH 1102 (Introduction to Anthropology) 3

        ECON 2100 (Introduction to Economics) 3
    
        PSYC 1102 (Introduction to Psychology) ..... 3
    AREA F - Courses Related to the Program of Study 18 semester hours
CHEM 2211K (Organic Chemistry I) ..... 4
CHEM 2212K (Organic Chemistry II) ..... 4
CHEM 3000K (Analytical Chemistry) ..... 4
MATH 2200 (Calculus I) (If not taken in Area A) ..... 4
or Elective if MATH 2200 is taken in Area A

Two hours from areas A \& D ..... 2
Additional Requirements (3 hours)
Physical Education Requirement
PHED 1101 (Choices for Life)1
Additional Physical Education ..... 2
Program of Study ( 60 semester hours)
Required Chemistry Courses (27 semester hours)
CHEM 3100K (Inorganic Chemistry) ..... 4
BCHM 3100K (Biochemistry) ..... 4
CHEM 4100K (Instrumental Chemistry) ..... 4
CHEM 4201K (Physical Chemistry I) ..... 4
CHEM 4202K (Physical Chemistry II) ..... 4
CHEM 4701 (Integrated Lab I) ..... 2
CHEM 4702 (Integrated Lab II) ..... 2
STEC 4500 (Undergraduate Research Project) ..... 3
Other Required Courses ( 8 - 12 semester hours)PHYS 2211K (Principles of Physics I)4
PHYS 2212K (Principles of Physics II) ..... 4
MATH 2210 (Calculus II) ..... 4
Additional Chemistry/Biochemistry Electives (9
hours)
Must haveCHEM/ BCHM/ STEC prefix at 3000/4000
Level
Additional Electives (12-16 Hours)3 hours must be at 3000/4000 Level

## Bachelor of Science (BS) Chemistry 123 credits required for graduation

Concentration: General Track<br>General Education: ( 60 semester hours)<br>AREA A - Essential Skills: (9 semester hours)<br>ENGL 1101 (English Composition I)<br>ENGL 1102 (English Composition II)<br>MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I)<br>(extra hour will count in Area F)

3
3

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing) 4
AREA C - Humanities/Fine Arts (6 semester houts)
Select one from the following:

| MUSC 1100 (Music Appreciation) | 3 |
| :--- | :--- |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| elect one from the following: | 3 |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |

AREA D - Natural Sciences, Math, Technology (11 semester hours)
CHEM 1211K (Principles of Chemistry I)
CHEM 1212K (Principles of Chemistry II)
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming
AREA E - Social Science ( 12 semester hours)
POLS 1101 (American Government) 3

HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above)
3
HIST 2112 (if not used above) 3
HIST 1111 (World History I)
HIST 1112 (World History II)
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II)
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3

| AREA F-Courses Related to the Program of |  |
| :--- | ---: |
| Study $\mathbf{1 8}$ semester hours | 4 |
| CHEM 2211K (Organic Chemistry I) | 4 |
| CHEM 2212K (Organic Chemistry II) | 4 |
| CHEM 3000K (Analytical Chemistry) | 4 |
| MATH 2200 (Calculus I) (If not taken in Area A) | 2 |
| or Elective if MATH 2200 is taken in Area A |  |
| Two hours from areas A \& D |  |
|  |  |
| Additional Requirements (3 hours) |  |
| Physical Education Requirement | 1 |
| PHED 1101 (Choices for Life) | 2 |

Program of Study ( 60 semester hours)
Required Chemistry Courses (26 semester hours)
CHEM 3100K (Inorganic Chemistry) 4
BCHM 3100K (Biochemistry) 4
CHEM 3500 (Industrial Chemistry) 3
CHEM 4100K (Instrumental Chemistry) 4
CHEM 4201K (Physical Chemistry I) 4
CHEM 4701 (Integrated Lab I) 2
CHEM 4702 (Integrated Lab II) 2
Select one of the following:
STEC 4500 (Undergraduate Research Project) 3
CHEM 4800 (Internship)
Other Required Courses (11 semester hours)
Select one PHYS sequence from the following:
PHYS 2211K (Principles of Physics I) 4
PHYS 2212K (Principles of Physics II) 4
or
PHYS 1111K (Introduction to Physics I 4
PHYS 1112K (Introduction to Physics II) 4
MATH 2000 (Statistics) 3

Additional Elective (23-27 semester hours)
9 hours must be 3000/4000 level to total 39 hours

## Bachelor of Science (BS) Chemistry 125 credits required for graduation

| Concentration: Teacher Certification |  |
| :---: | :---: |
| General Education: ( 60 semester hours) |  |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) |  |
| ENGL 1102 (English Composition II) |  |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) (extra hour will count in Area F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C - Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |

## AREA D - Natural Sciences, Math, Technology (11 semester hours)

CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming
AREA E - Social Science (12 semester hours)

| POLS 1101 (American Government) | 3 |
| :--- | :--- |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |

Select one from the following:
HIST 2111 (if not used above)
HIST 2112 (if not used above)
HIST 1111 (World History I)
3
HIST 1112 (World History II) 3
$-3$
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3

## AREA F - Courses Related to the Program of

## Study 18 semester hours

CHEM 2211K (Organic Chemistry I) 4
CHEM 2212K (Organic Chemistry II)
CHEM 3000 K (Analytical Chemistry)
MATH 2200 (Calculus I) (If not taken in Area A) 4
or Elective if MATH 2200 is taken in Area A
Two hours from areas A \& D
Additional Requirements (3 hours)Physical Education RequirementPHED 1101 (Choices for Life)Additional Physical Education1
Program of Study ( 65 semester hours)Required Chemistry Courses (19 semester hours)
$A$ grade of " $C$ " or better is required in all courses
CHEM 3100K (Inorganic Chemistry) ..... 4
BCHM 3100K (Biochemistry)
CHEM 3200 (Environmental Chemistry) ..... 4
CHEM 4201K (Physical Chemistry I) ..... 3
4
ISCI 2800 (Integrated Science II: Life \& Earth Science7) ..... 4
Other Required Courses (8 hours)
Select one PHYS sequence from the following;
PHYS 2211K (Principles of Physics I and ..... 4
PHYS 2212K (Principles of Physics II) ..... 4
PHYS 1111K (Intro to Physics I) and ..... 4
PHYS 1112K (Intro to Physics II) ..... 4
Required Education Courses (35 semester hours)(Formal Admission to Teacher Education Required)
EDUC 2110 (Critical and Contemporary Issues in Education)* ..... 3
EDUC 2120 (Exploring Socio-Cultural Perspectiveson Diversity in Educational Contexts)*3
EDUC 2130 (Exploring Learning and Teaching)* ..... 3EDUC 3300 (Teaching Exceptional Learners)EDUC 3350 (Models of Teaching and Learning)3
CHEM 3600 (Chemistry Content Methods) ..... 4
EDUC 4080 (Opening of School Experience: Chemistry) ..... 0
EDUC 4500 (Assessment)3
EDUC 4550 (Instructional Adaptation) ..... 4
EDUC 4800 (Leadership Seminar)1
EDUC 4885A (Student Teaching: Professional Practices) ..... 4
EDUC 4885B (Student Teaching: Planning and Assessment) ..... 4

## BACHELOR OF SCIENCE - ENVIRONMENTAL SCIENCE

The School of Science and Technology offers a Bachelor of Science (B.S.) degree with a major in Environmental Science. The Environmental Science Major includes concentrations in Natural Science and Social Science.

## LABORATORY COURSES

Many courses in the School of Science and Technology include both a class and a laboratory component. The laboratory and class components complement each other as integrated elements of a course that facilitate the accomplishment of the Course Outcome Goals. As such they cannot be separated. Student must pass both the lab and class. If a student fails either the class or the laboratory component, they will receive a fail grade and must repeat both components of the class.

## CURRICULUM

## General Education Requirements ( 60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a degree will be exposed to a common set of learning experiences that draw from a broad spectrum of subject areas. These common learning experiences are designed so that a student who completes the general education requirements will achieve the general education program goals as well as take introductory courses in the environmental science major that are prerequisite to courses in the program of student curriculum.

Additional Requirements (3 hours)
The physical education requirement is comprised of one credit hours of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfied the Georgia and U.S. Constitution requirement (if taken at a University System of Georgia institution)
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements (60 hours)

The courses in the Environmental Science Major consist of both required and elective courses. The required courses are designed to ensure that all students receiving the BS Environmental Science degree will share a common set of learning experiences toward achievement of the Program Outcome Goals. In addition, student will apply these learning experiences in the accomplishment of a research project or internship. Elective courses allow students to delve further into areas of specialization that provide breadth and/or depth of learning.

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Environmental Science

Concentrations: Natural Science and Social Science
Graduates who complete the Environmental Science Major will be able to:

1) Communicate environmental science issues to various audiences in both written and oral form.
2) Develop critical thinking and analytical problem solving skills related to environmental science and public policy.
3) Apply natural and social scientific research methods and techniques to address environmental issues.
4) Demonstrate knowledge of the major scientific fields which contribute to environmental science including biology, chemistry and earth science.
5) Work collaboratively in inter- and multidisciplinary contexts.
6) Address the sociocultural and ethical issues connected to environmental matters.
7) Demonstrate knowledge of the legal, economic, and political frameworks involving environmental policymaking.

Georgia Gwinnett College 2015-16 Catalog

# Bachelor of Science (B.S) Environmental Science 

## Concentration: Natural Science

| General Education: (60 semester hours) |  |
| :---: | :---: |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Caluclus I) (extra hour will count inArea F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| $\underline{\text { AREA } C-H u m a n i t i e s / F i n e ~ A r t s ~(6 ~ s e m e s t e r ~}$ |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |
| AREA D - Natural Sciences, Math, Technology |  |
| (11 semester hours) |  |
| CHEM 1211K (Principles of Chemistry I) | 4 |
| CHEM 1212K (Principles of Chemistry II) | 4 |
| Select one from the following: |  |
| ITEC 2110 (Digital Media) | 4 |
| ITEC 2120 (Intro to Programming | 4 |
| AREA E - Social Science (12 semester hours) |  |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: |  |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |
| PSYC 1102 (Introduction to Psychology) | 3 |

## Area F-Courses Related to the Program of Study (18 hours) ("C" or better

ESNS 1101K (Intro to Environmental Science)
ESSS 1102 (Intro to Environmental Science)
POLS 2101 (Introduction to Political Science)
BIOL 1107K (Principles of Biology I)
BIOL 1108K (Principles of Biology II)

Additional Requirements (3 hours)

Physical Education Requirement

PHED 1101 (Choices for Life)

Additional Physical Education

## Program of Study ( 60 semester hours) <br> Required Courses (35-42 hours) <br> A grade of $C$ or better is required in all courses

CHEM 2211K (Organic Chemistry) ..... 4
GEOG 1101 (Intro to Human Geography) (if not taken in Area C) MATH 2000 (Statistics)

POLS 3550 (Public Policy Process)

GEOG 3320 (GIS)

BIOL 4750 (Environmental Toxicology)

ESSS 3010 (Environmental Ethics)

ESSS 3020 (Environmental Law)

ESNS/ESSS 4999 Capstone Interdisciplinary Research) or
STEC 4500 (Undergraduate Research Project)

BIOL 3500K (Ecology)

Select one from the following:

BIOL 3310K (Botany)

BIOL 3600K (Zoology)

(1 credit from Area A and 1 credit from Area D)

## Elective (12-16 Hours)

Complete one of the following foci:
Chemistry Focus
CHEM 2212K (Organic Chemistry) 4
CHEM 3000K (Analytical Chemistry) 4
CHEM 3200 (Environmental Chemistry) 4
Select at least 4 credits from the following:
CHEM 4100K (Instrumental Chemistry) 4
CHEM 3500 (Industrial Chemistry) 3
BCHM 3100K (Biochemistry) 3
4
CHEM 4701K (Integrated Lab I)
CHEM 3100K (Inorganic Chemistry) 4
Microbiology Focus
BIOL 3400K (Cell Biology)
4
BIOL 3300K (Microbiology) 4
Select one from the following: 3
BIOL 3350K (Mycology)
BCHM 3100K (Biochemistry)
BIOL 4000K (Parasitology)
BIOL 4410K (Industrial Microbiology) 4
Ecology Focus
Select at least 12 credits from the following;
BIOL 3050 (Topical Biology)
BIOL 3450 (Conservation Biology) 4
BIOL 3550K (Limnology)
BIOL 3650K (Terrestrial Ecology)
BIOL 3150 (Temperate Biology)
BIOL 3750K (Field Biology Techniques)
BIOL 4000K (Parasitology)
BIOL 3510K (Ichthyology)
Additional Electives (2-12 hours)
$1-2$ hours must be at $3000-4000$ level)

## Bachelor of Science (B.S) Environmental Science

## Concentration: Social Science

| General Education: (60 semester hours) |  |
| :---: | :---: |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Caluclus I) (extra hour will count inArea F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| $\underline{\text { AREA } C-H u m a n i t i e s / F i n e ~ A r t s ~(6 ~ s e m e s t e r ~}$ |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |
| AREA D - Natural Sciences, Math, Technology |  |
| (11 semester hours) |  |
| CHEM 1211K (Principles of Chemistry I) | 4 |
| CHEM 1212K (Principles of Chemistry II) | 4 |
| Select one from the following: |  |
| ITEC 2110 (Digital Media) | 4 |
| ITEC 2120 (Intro to Programming | 4 |
| AREA E - Social Science (12 semester hours) |  |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: |  |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |
| PSYC 1102 (Introduction to Psychology) | 3 |

## Area F-Courses Related to the Program of Study (18 hours) ("C" or better

ESNS 1101K (Intro to Environmental Science) 4
ESSS 1102 (Intro to Environmental Science)
POLS 2101 (Introduction to Political Science)
BIOL 1107K (Principles of Biology I)
BIOL 1108K (Principles of Biology II)3

Additional Requirements (3 hours)

Physical Education Requirement

PHED 1101 (Choices for Life)

Additional Physical Education
Program of Study ( 60 semester hours)
Required Courses ( $35-41$ hours)
$A$ grade of $C$ or better is required in all courses

## BIOL 3500K (Ecology)

4
ANTH 1102 (Intro to Anthropology) (if not taken in Area E) 3
GEOG 1101 (Intro to Human Geography) (if not taken in Area C) 3
MATH 2000 (Statistics)
POLS 3400 (International Relations)
POLS 3550 (Public Policy Process)
GEOG 3320 (GIS)
BIOL 4750 (Environmental Toxicology)
POLS 2201 (State and Local Government)
ESSS 3010 (Environmental Ethics)
ESSS 3020 (Environmental Law)
ESNS/ESSS 4999 Capstone Interdisciplinary Research) or
STEC 4500 (Undergraduate Research Project)
Select one from the following:
BIOL 3310K (Botany)
BIOL 3600K (Zoology)
Natural Science Elective (3-4 Hours)
Select one of the following foci:
BIOL 3030 (Tropical Biology)
BIOL 3450 (Conservation Biology)
BIOL 3550K (Limnology)
BIOL 3650K (Terrestrial Ecology)
ESNS/ESSS 3030 (Special Topics)
ITEC 2201 (Introduction to Information Systems)
ITEC 3200 (Introduction to Databases)
GEOG 4010 (Advanced GIS)
Social Science Electives (9 Hours) $1 \mathrm{hr} 3000 / 4000$ level minimum required
Select three from the following:
ANTH 3000 (People \& Culture of Latin America) 3
ANTH 3010 (Cultural Anthropology)
ANTH 4200 (Special Topics)
ANTH 4630 (Ethnographic Methods)
ECON 2105 (Principles of Macroeconomics)
ECON 2106 (Principles of Microeconomics)
GEOG 1111 (Intro to Physical Geography)
GEOG 1112 (Intro to Weather \& Climate)
ECON 4101 (International Economics)
POLS 4000 (International Organizations)
POLS 4390 (Legal Writing \& Research)
POLS 4400 (International Law)
POLS 4170 (Congress)
HIST 3250 (American Environmental History)
Additional Electives (6-13 hours)
5-6 hours must be at 3000-4000 level)

## BACHELOR OF SCIENCE - EXERCISE SCIENCE MAJOR

The School of Science and Technology offers a Bachelor of Science (B.S.) degree with a major in Exercise Science.

## LABORATORY COURSES

Many courses in the School of Science and Technology include both a class and a laboratory component. The laboratory and class components complement each other as integrated elements of a course that facilitate the accomplishment of the Course Outcome Goals. As such they cannot be separated. Students must pass both the lab and class. If a student fails either the class or the laboratory component, they will receive a fail grade and must repeat the class.

## CURRICULUM

## General Education Requirements <br> (60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a degree will be exposed to a common set of learning experiences that draw from a broad spectrum of subject areas. These common learning experiences are designed so that a student who completes the general education curriculum will achieve the general education program goals as well as take introductory courses in the exercise science major that are prerequisite to courses in the program of study curriculum.

## Additional Requirements

(3 hours)
The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to
4) contact the Testing Center regarding the legislative exams requirement.

## Major Requirements <br> (60 hours)

The courses in the Exercise Science Major consist of both required and elective courses. The required courses are designed to ensure that all students receiving the BS Exercise Science degree will share a common set of learning experiences toward achievement of the Program Outcome Goals. In addition, students will apply these learning experiences in the accomplishment of a research project or internship. Elective courses allow students to delve further into areas of specialization that provide breadth and/or depth of learning.

## PROGRAM OUTCOME GOALS

Bachelor of Science - Exercise Science
Concentration: Clinical
Graduates who complete the Exercise Science Major will demonstrate that they learned:

1) The principles of anatomy, physiology, kinesiology, chemistry, physics, and psychology as they relate to an understanding of human performance.
2) The dynamics of exercise at sub-cellular levels.
3) The risk factors associated with physical activity, contraindications to exercise testing and physical activity, and proper referral protocols and resources.
4) The role of exercise science in society.
5) To apply the principles of exercise science to:
a. Perform testing and interpret physiological data for indicated and contraindicated exercise.
b. Modify exercise prescriptions and activity schedules for various populations and conditions.
c. Assess, design and implement safe and effective fitness programs to improve health and performance

## Bachelor of Science (BS) Exercise Science

Concentration: Clinical 123 credits required for graduation

| General Education: ( 60 semester hours) |  |
| :--- | :--- |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101( English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 11133 Pre-Calculus) or MATH 2200 (Caluclus I) | 3 |
| (extra hour will count inAtra F) |  |

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing) ..... 4
AREA C-Humanities/Fine Arts (6 semester hours)
MUSC 1100 (Music Appreciation) ..... 3
ARTS 1100 (Arts Appreciation) ..... 3
ENGL 2110 ((World Literature) ..... 3
3
FILM 1005 (Introduction to Film) ..... 3
Select one from the following:
RELN 1100 (World Religions) ..... 3
Intermediate level or higher Spanish, French or Chinese ..... 3
AREA D - Natural Sciences, Math, Technology
(11 semester hours)
CHEM 1211K (Principles of Chemistry I) ..... 4
CHEM 1212K (Principles of Chemistry II) ..... 4
Select one from the following:
ITEC 2110 (Digital Media) ..... 4
ITEC 2120 (Intro to Programming ..... 4
AREA E - Social Science (12 semester hours)
POLS 1101 (American Government) ..... 3
HIST 2111 or HIST 2112 (U.S. History I \& II) ..... 3
Select one from the following:
HIST 2111 (if not used above) ..... 3
HIST 2112 (if not used above) ..... 3
HIST 1111 (World History I)
HIST 1112 (World History II) ..... 3
HIST 1121 (Western Civilization I) ..... 3
HIST 1122 (Western Civilization II) ..... 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) ..... 3
3
ECON 2100 (Introduction to Economics) ..... 3
PSYC 1102 (Introduction to Psychology) ..... 3
Area F - Courses Related to the Program of Study (18 hours)
BIOL 2451K (Human Anatomy and Physiology I)4
BIOL 2452K (Human Anatomy and Physiology II)
BIOL 1107K (Principles of Biology I)4PHYS 1111K (Introduction to Physics I)4
Additional Requirements (3 hours)
PHED 1101 (Choices for Life)
Additional Physical Education
Program of Study ( 60 semester hours)
Required Exercise Science Courses (24 hours) A grade of C or better is required in all courses
EXSC 3000 (Intro to Exercise Science \& Wellness Promotion) ..... 3
EXSC 3101K (Exercise Physiology) ..... 4
3
4EXSC 3500K (Biomechanics)
EXSC 3800 (Nutrition in Health \& Exercise) ..... 3
EXSC 4100K (Exercise Testing and Prescription) ..... 4Select one from the following:
EXSC 4700(Internship) ..... 3
STEC 4500(Undergraduate Research)
Other Required Courses (15-18 hours)
Select one from the following:
BIOL 3400K (Cell Biology) ..... 4
BIOL 2516K (Microbiology of Allied Health Professions) ..... 4
PSYC 1102 (Introduction to Psychology) (if not in Area E) ..... 3
MATH 2000 (Statistics) ..... 3
PHYS 1112K (Introduction to Physics II)4

3 elective courses must have an EXSC prefix
$11-15$ hours must be at $3000 / 4000$ level

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Exercise Science

Concentration - Wellness Promotion

Graduates who complete the Exercise Science Major (Wellness Promotion concentration) will demonstrate that they learned:

1) Demonstrate the principles of anatomy, physiology, kinesiology, chemistry, physics, and psychology as they relate to an understanding of exercise and wellness promotion.
2) Demonstrate mastery of entry level competence in assessing, planning, implementing, and evaluating exercise and wellness related programs and services.
3) Demonstrate mastery of theoretical foundations for public health education and wellness promotion.
4) Demonstrate and communicate the role of exercise and wellness promotion in society.
5) Apply an understanding of exercise and wellness promotion to effectively identify risk factors associated with physical activity, contraindications to exercise testing and physical activity, and identify proper referral protocols and resources for various populations of varied prior medical histories.
6) Apply an understanding of exercise and wellness promotion to assess, design, implement, and modify safe and effective behaviors to improve wellness in both healthy and diseased populations.
7) Analyze the epidemiological methods for determining causality and frequency of disease, as well as identifying and measuring health risk factors. These POGs map to the concepts and KSAs stressed for certification for a Physical Activity in Public Health Specialist.

Bachelor of Science (BS) Exercise Science 123 credits required for graduation

| Concentration: Wellness Promotion |  |
| :---: | :---: |
| General Education: ( 60 semester hours) |  |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) |  |
| ENGL 1102 (English Composition II) |  |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) (extra hour will count in Area F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |

## AREA D - Natural Sciences, Math, Technology (11 semester hours)

Select one of the following CHEM sequences:
CHEM 1211K (Principles of Chemistry I)
CHEM 1212K (Principles of Chemistry II) 4
Or
CHEM 1151K (Survey of Chemistry I) 4
CHEM 1152K (Survey of Chemistry II) 4
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media) 4
ITEC 2120 (Intro to Programming 4
AREA E-Social Science (12 semester hours)
POLS 1101 (American Government) 3
HIST 2111 or HIST 2112 (U.S. History I \& II) 3
Select one from the following:
HIST 2111 (if not used above) 3
HIST 2112 (if not used above) 3
HIST 1111 (World History I) 3
HIST 1112 (World History II) 3
HIST 1121 (Western Civilization I) 3
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction of Psychology) 3
Area F-Courses Related to the Program of Study
(18 hours)
BIOL 2451K (Human Anatomy and Physiology I) 4
BIOL 2452K (Human Anatomy and Physiology II) 4
PHYS 1111K ( Introduction to Phsics D)
BIOL 2516K (Microbiology for Health Sciences) 4
1 hour each from Area A and D
Additional Requirements (3 hours)Physical Education RequirementPHED 1101 (Choices for Life)Additional Physical Education1
Program of Study ( 60 semester hours)Required Exercise Science Courses ( 30 hours)
A grade of " $C$ " or better is required in all courses
EXSC 3000 (Intro to Exercise Science \& Wellness Promotion) ..... 3
EXSC 3101K (Exercise Physiology)
EXSC 3200 (Psychosocial Aspects of Health and Wellness) EXSC 3500K (Biomechanics)
EXSC 3350 (Community Wellness) ..... 3
EXSC 3800 (Nutrition in Health \& Exercise) ..... 3
EXSC 4200 (Epidemiology and Physical Activity) ..... 3
3
EXSC 4400 (Wellness Promotion Program Planning) ..... 4
EXSC 4700(Internship) ..... 3
STEC 4500(Undergraduate Research) ..... 3
Other Required Courses (3-6hours)
PSYC 1102 (Introduction to Psychology) (if not in Area E) ..... 3
MATH 2000 Statistics3
Additional Electives (24-27hours)9 hours must have an EXSC prefix at 3000/4000 level
**Course numbers have not been assigned

## BACHELOR OF SCIENCE - MATHEMATICS DEGREE

The School of Science and Technology offers a Bachelor of Science (BS) degree with a major in Mathematics. The Mathematics Major includes concentrations in Pure Mathematics, Applied Mathematics, and Teacher Certification.

## LABORATORY COURSES

Many courses in the School of Science and Technology include both a class and a laboratory component. The laboratory and class components complement each other as integrated elements of a course that facilitate the accomplishment of the Course Outcome Goals. As such they cannot be separated. Students must pass both the lab and class. If a student fails either the class or the laboratory component, they will receive a fail grade and must repeat the class.

## CURRICULUM

## General Education Requirements

(60 hours)
The primary objective of the general education requirements is to guarantee that all students seeking a degree will be exposed to a common set of learning experiences that draw from a broad spectrum of subject areas. These common learning experiences are designed so that a student who completes the Core Curriculum will achieve the general education program goals as well as take introductory courses in the mathematics major that are prerequisite to courses in the program of study curriculum.

## Additional Requirements

(3 hours)
The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements

(60 hours)
The courses in the Mathematics Major consist of both required and elective courses. The required courses are designed to ensure that all students receiving the BS Mathematics degree will share a common set of learning experiences toward achievement of the Program Outcome Goals. In addition, students will apply these learning experiences in the accomplishment of a capstone experience. Elective courses allow students to delve further into area of specialization that provide breadth and/or depth of learning.

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Mathematics

Concentration: Applied Math
Graduates who complete the Mathematics Major (Applied Math Concentration) will demonstrate that they have learned:

1) Demonstrate an ability to clearly and precisely present mathematical ideas and proofs to others in oral and written form.
2) Show proficiency with a broad range of concepts from modern mathematics and an in-depth knowledge of at least one major area.
3) Use mathematical methods to analyze real-world problems and to make informed decisions based on interpretations of the results.
4) Demonstrate scholarship and independent learning to make broad contributions to the discipline.
5) Effectively apply appropriate technological tools toward solving mathematical problems.
6) Demonstrate an appreciation for mathematics as a rich theoretical and applied discipline through an involvement in the mathematics community and through local outreach efforts.
7) Demonstrate competence in applying mathematics to at least one other field.
8) Work as individuals and as members of collaborative teams to apply analytical and quantitative tools to a variety of applications.
9) Satisfy selected Outcome Goals related to the student's chosen area for Applied Mathematics (Biology, Chemistry, Physics, ITEC, etc.)

## Bachelor of Science (BS) Mathematics

| Concentration Applied Math |  |
| :---: | :---: |
| General Education: (60 semester hours) |  |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) |  |
| ENGL 1102 (English Composition II) |  |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) (extra hour will count in Area F) |  |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese |  |

## AREA D - Natural Sciences, Math, Technology (11 semester hours)

CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media)

ITEC 2120 (Intro to Programming 4

| AREA $\boldsymbol{E}$ - Social Science (12 semester hours) |  |
| :--- | :--- |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |

## AREA F - Courses Related to the Progtam of

 Study (18 semester hours)MATH2200 (Calculus I) if not taken in Area A 4
MATH2210 (Calculus II)
MATH2220 (Calculus III)
MATH 2450 (Linear Algebra I
MATH 2500 (Foundations of Mathematics
Select one: if MATH2200 is in Area A
MATH2000 (Statistics
3
MATH2300 (Discrete Math
MATH2600 (Math Modeling) 3
One hour each from Area A and D
PROGRAM OUTCOME GOALS
Bachelor of Science - Mathematics
Georgia Gwinnett College 2015-16 Catalog

## 123 credits required for graduation

Additional Requirements (3 hours)
Physical Education Requirement
PHED 1101 (Choices for Life)Additional Physical Education1
Program of Study ( 60 hours)
Required Mathematics Courses (27 hours)
MATH 3100 (Differential Equations I) ..... 3
MATH 3300 (Mathematical Statistics I)MATH 3350 (Applied Mathematics)MATH 3450 (Numerical Methods I)MATH 3500 (Abstract Algebra I)MATH 3700 (Real Analysis I)MATH 4100 (Differential Equations II)MATH 4600 (Adv. Mathematical Modeling)MATH 4900 (Capstone Course)2
Math/Applied Elective Courses (9 hours)*
Any combination of 3000/4000 level MATH courses (exceptMATH 3008, 3011, 3111,3311 or 3600 ) or approved $3000 / 4000$courses from the applied field*9
Required Courses in Applied Field (12 hrs)* Applied* Field Any level ..... 8
Applied* Field 3000/4000 level ..... 4

* Applied Field and Applied Elective Courses must be approved in writing by adesignated Applied Math faculty advisor using the Applied Mathematics
Advising Form
Other Required Courses (0-7 hours)ITEC 2120 Introduction to Programming (if not taken in Area D) 4MATH 2600 Mathematical Modeling (if not taken in Area F) 3


## Concentration: Pure Math

Graduates who complete the Mathematics Major (Pure Math Concentration) will demonstrate that they have learned:

1) Demonstrate an ability to clearly and precisely present mathematical ideas and proofs to others in oral and written form.
2) Show proficiency with a broad range of concepts from modern mathematics and an in-depth knowledge of at least one major area.
3) Use mathematical methods to analyze real-world problems and to make informed decisions based on interpretations of the results.
4) Demonstrate scholarship and independent learning to make broad contributions to the discipline.
5) Effectively apply appropriate technological tools toward solving mathematical problems.
6) Demonstrate an appreciation for mathematics as a rich theoretical and applied discipline through an involvement in the Mathematics community and through local outreach efforts.
7) Demonstrate competence in applying mathematics to at least one other field.
8) Work as individuals and as members of collaborative teams to apply analytical and quantitative tools to a variety of applications.

## Bachelor of Science (BS) Mathematics

| Concentration Pure Math |  |
| :---: | :---: |
| General Education: (60 semester hours) |  |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) (extra hour will count inArea F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese | 3 |

## AREA D - Natural Sciences, Math, Technology (11 semester hours)

CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming

| AREA $\boldsymbol{E}$ - Social Science (12 semester hours) |  |
| :--- | :--- |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |

## AREA F - Courses Related to the Program of

## Study (18 semester hours)

MATH 2200 (Calculus I) if not taken in Area A 4
MATH 2210 (Calculus II)
MATH 2220 (Calculus III)
MATH 2450 (Linear Algebra I)
MATH 2500 (Foundations of Mathematics
Select one: if MATH2200 is in Area A
MATH 2000 (Statistics)
3
MATH 2300 (Discrete Math) 3
MATH 2600 (Math Modeling) 3
One hour each from Area A and D 2
PROGRAM OUTCOME GOALS

## Bachelor of Science - Mathematics

Georgia Gwinnett College 2015-16 Catalog

123 credits required for graduation

| Additional Requirements (3 hours) |  |
| :---: | :---: |
| Physical Education Requirement |  |
| PHED 1101 (Choices for Life) | 1 |
| Additional Physical Education | 2 |
| PROGRAM OF STUDY |  |
| Required Mathematics Courses (24 hours) |  |
| MATH 3100 (Differential Equations I) | 3 |
| MATH 3300 (Mathematical Statistics I) | 3 |
| MATH 3500 (Abstract Algebra I) | 3 |
| MATH 3700 (Real Analysis I) | 3 |
| Select one of the following: |  |
| MATH 4150 (Complex Analysis) | 3 |
| MATH 4250 (Topology) | 3 |
| Select one of the following: |  |
| MATH 4700 (Real Analysis II) | 3 |
| MATH 4500 (Abstract Algebra II) | 3 |
| Select 6 bours from the following: |  |
| Additional 4000 level MATH course | 3 |
| MATH 4900 Capstone Course | 3 |
| STEC 4500 (May be repeated) | 3 |
| Math Elective Courses (9 hours) |  |
| Any 3000/4000 level MATH courses with the exception of: MATH 3008, 3011, 3111, 3311, or 3600 | 9 |
| Other Required Courses (8-12 hours) |  |
| PHYS 2211K Principles of Physics I | 4 |
| PHYS 2212K Principles of Physics II | 4 |
| ITEC 2120 Introduction to Programming (If not taken in Area D) | 4 |
| Additional Electives (15-19 hours) |  |
| At least 4 hours must be at 3000-4000 level |  |

## Concentration: Teacher Certification

Graduates who complete the Mathematics Major (Teacher Certification Concentration) will be able to:

1) Demonstrate an ability to clearly and precisely present mathematical ideas and proofs to others in oral and written form.
2) Show proficiency with a broad range of concepts from modern mathematics and an in-depth knowledge of at least one major area.
3) Use mathematical methods to analyze real-world problems and to make informed decisions based on interpretations of the results.
4) Demonstrate scholarship and independent learning by making appropriate contributions to the discipline;
5) Effectively apply appropriate technological tools toward solving mathematical problems.
6) Communicate the nature of mathematics as a rich theoretical and applied disciple to the mathematics community and the community-at-large.
7) Demonstrate competence in applying mathematics to a least one other field.
8) Work as individuals and as members of collaborative teams to apply analytical and quantitative tools to a variety of applications.
9) Satisfy the 12 Candidate Outcomes identified for the Teacher Education Unit.

## TEACHER EDUCATION OUTCOMES

The teacher education unit at Georgia Gwinnett College is designed to prepare teachers who are committed to enabling all students to reach high levels of achievement. Teacher preparation at Georgia Gwinnett College focuses on the development of five domains of teacher expertise that we believe are essential in fostering student success. These domains and their associated candidate learning outcomes are listed below:

Domain 1: Interpersonal Expertise
1.1 Candidates foster environments that reflect ethical behavior, respect, kindness, safety, and care.
1.2 Candidates create culturally inclusive learning environments that capitalize on the developmental characteristics and life experiences of learners.

Domain 2: Content and Pedagogical Expertise
2.1 Candidates know the content they are expected to teach.
2.2 Candidates utilize a variety of content appropriate instructional strategies that maximize learning for all students.
2.3 Candidates seamlessly integrate technology into the design, delivery, and assessment of learning environments and experiences.
2.4 Candidates manage learning environments to maximize student success.

Domain 3: Assessment and Analytical Expertise
3.1 Candidates assess student learning using appropriate assessment tools.
3.2 Candidates organize, analyze, and interpret assessment data from multiple sources.
3.3 Candidates' instructional decisions are data-driven.

Domain 4: Leadership Expertise
4.1 Candidates assume leadership roles in classrooms and other school/community environments.
4.2 Candidates collaborate effectively with peers, school personnel, families, and community members.

Domain 5: Adaptive Expertise
5.1 Candidates exhibit routine and adaptive expertise for teaching.

## ADMISSION TO TEACHER EDUCATION

Admission to Teacher Education is required for admission to junior- and senior-level courses in all majors leading to teacher certification. The following requirements must be met for admission into the Early Childhood Education and Special Education majors, as well as the Teacher Certification Tracks of the biology, English, history, mathematics, and political science majors.

1) The applicant must be a student in good standing at Georgia Gwinnett College. The applicant should not be on academic warning or academic probation.
2) The applicant must have completed 45 semester hours of college level credit by the end of the semester of application with an overall GPA of 2.5 or better.
3) The applicant must have completed either ENGL 1101 or ENGL 1102 at GGC with a grade of C or higher OR must satisfy the GGC Competency Test OR must have previously exempted/satisfied the Regents' Test requirement.
4) The applicant must have earned a grade of C or better in EDUC 2110, EDUC 2120, and EDUC 2130 (or have approved course substitutions) by the end of the semester of application.
5) The applicant must pass or exempt the GACE Basic Skills Assessment by the end of the semester of application.
6) The applicant must authorize a criminal background check and agree to have the results reviewed by the Teacher Education Advisory Council, if necessary.
7) The applicant must receive satisfactory ratings on the Pre-Professional Practices and Behavior in EDUC 2110, EDUC 2120, and EDUC 2130 OR submit a recommendation form from a professor at the non-GGC institution where the candidate took the EDUC courses.
8) The applicant must demonstrate satisfactory performance on an oral presentation in EDUC 2110, EDUC 2120 , or EDUC 2130 OR an oral interview with a faculty mentor at GGC.
9) The applicant must submit evidence of liability insurance. Liability insurance may be obtained through membership in a professional educators' organization.
10) The applicant must submit an Application for Admission to Teacher Education which includes all of the required documentation referenced in items \#1-\#9.

Prospective applicants to the Teacher Education Programs may obtain application information from their mentors or from the School of Education.

## Bachelor of Science (BS) Mathematics

| Concentration: Teacher Certification |  |
| :---: | :---: |
| General Education ( 60 semester hours) |  |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) | 3 |
| ENGL 1102 (English Composition II) | 3 |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) (extra hour will count in Area F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese |  |

## AREA D - Natural Sciences, Math, Technology (11 semester hours)

CHEM 1211K (Principles of Chemistry I)
CHEM 1212K (Principles of Chemistry II)
(extra hour will count in Area F)
Select one from the following:
ITEC 2110 (Digital Media)
ITEC 2120 (Intro to Programming
AREA E - Social Science ( 12 semester hours)
POLS 1101 (American Government)
HIST 2111 or HIST 2112 (U.S. History I \& II)

Select one from the following:
HIST 2111 (if not used above)
HIST 2112 (if not used above)
HIST 1111 (W 3
HIST 1112 (Worl Hisory II
3
HIST 1112 (World History II) 3
HIST 1121 (Western Civilization I)
HIST 1122 (Western Civilization II) 3
Select one from the following:
SOCI 1101 (Introduction to Sociology) 3
ANTH 1102 (Introduction to Anthropology) 3
ECON 2100 (Introduction to Economics) 3
PSYC 1102 (Introduction to Psychology) 3
AREA F - Courses Related to the Program of Study (18 semester hours)
MATH2200 ( Calculus I) if not taken in Area A 4
MATH2210 (Calculus II)
MATH2220 (Calculus III)
MATH 2450 (Linear Algebra I)
MATH 2500 (Foundations of Mathematics
Select one: if MATH2200 is in Area A
MATH2000 (Statistics)
3
MATH2300 (Discrete Math)
3
MATH2600 (Math Modeling)
3
One hour each from Area A and D 2

128 credits required for graduation

| Additional Requirements (3 hours) |  |
| :---: | :---: |
| Physical Education Requirement |  |
| PHED 1101 (Choices for Life) | 1 |
| Additional Physical Education | 2 |
| Program of Study (64 semester hours) |  |
| Required Mathematics Courses (24-27 hrs) |  |
| MATH 2300 (Discrete Mathematics) | 3 |
| MATH 3021 (Geometry) | 3 |
| MATH 3300 (Mathematical Statistics I) | 3 |
| MATH 3500 (Abstract Algebra I) | 3 |
| MATH 3550 (History of Mathematics) | 2 |
| MATH 3700 (Real Analysis I) | 3 |
| MATH 4900 (Capstone Course) | 3 |
| Select one from the following: |  |
| MATH 4500 (Abstract Algebra II) | 3 |
| MATH 4700 (Real Analysis II) | 3 |
| Mathematics Elective Courses (6-9 hours) |  |
| Any 3000/4000 level MATH courses except MATH $3008,3011,3111$, or 3311. |  |
| Required Education Courses (31 hours) |  |
| (Formal Admission to Teacher Education Required) |  |
| EDUC 2110 (Critical and Contemporary Issues in Education)* | 3 |
| EDUC 2120 (Exploring Socio-Cultural Perspectives on Diversity in Educational Contexts)\& | 3 |
| EDUC 2130 (Exploring Learning and Teaching)* | 3 |
| EDUC 3300 (Teaching Exceptional Learners) | 3 |
| EDUC 3350 (Models of Teaching and Learning) | 3 |
| MATH 3600 (Math Contents Methods) | 4 |
| EDUC 4060 (Opening of School Experience: Mathematics) | 0 |
| EDUC 4500 (Assessment) | 3 |
| EDUC 4550 (Instructional Adaptation) | 4 |
| EDUC 4800 (Leadership Seminar) | 1 |
| EDUC 4865A (Student Teaching: Professional Practices) | 4 |
| EDUC 4865B (Student Teaching: Planning and Assessment) | 4 |
| *required prior to Admission to Teacher Education |  |

## BACHELOR OF SCIENCE - INFORMATION TECHNOLOGY MAJOR

The School of Science and Technology offers a Bachelor of Science (B.S.) degree with a major in Information Technology. The Information Technology Major includes concentrations in Systems and Security, Software Development, Enterprise Systems and Digital Media.

## LABORATORY COURSES

Many courses in the School of Science and Technology include both a class and a laboratory component. The laboratory and class components complement each other as integrated elements of a course that facilitate the accomplishment of the Course Outcome Goals. As such they cannot be separated. Students must pass both the lab and class. If a student fails either the class or the laboratory component, they will receive a fail grade and must repeat the class.

## LAPTOP REQUIREMENT FOR I.T. MAJORS

All Information Technology students in their Junior and Senior years at GGC are required to purchase (or possess) a laptop computer and specific software bundle identified by the School of Science and Technology. Additional information regarding the IT Laptop Program's hardware, software, and networking requirements can be found at my.ggc.edu/group/guest/sst-itec. Additional requirements may be needed for some courses. In this event, GGC will provide the necessary computing environment on campus to support these initiatives.

Any non-IT major students who are taking ITEC 3000-4000 level courses are expected participate in this program and have the IT Laptop purchased. All IT Junior and Senior students are expected to purchase the specified laptop and the required software bundle by the start of classes.

## CURRICULUM

## General Education Requirements (60 hours)

The primary objective of the general education requirements is to guarantee that all students seeking a degree will be exposed to a common set of learning experiences that draw from a broad spectrum of subject areas. These common learning experiences are designed so that a student who completes the general education requirements will achieve the general education program goals as well as take introductory courses in the information technology major that are prerequisite to courses in the program of study curriculum.

## Additional Requirements (3 hours)

The physical education requirement is comprised of one credit hour of Wellness and two credit hours of additional Physical Education courses.

## Legislative Requirements

Georgia law requires that each candidate for a degree demonstrate knowledge of the history and constitution on the United States and Georgia. These requirements may be met by receiving a passing grade in certain courses, or by passing the appropriate examination. The courses and the requirement(s) each course satisfies are as follows:

1) HIST 2111 or HIST 2112 satisfies the Georgia and U.S. history requirement (if taken at a University System of Georgia institution).
2) POLS 1101 satisfies the Georgia and US Constitution requirement (if taken at a University System of Georgia institution).
3) Students with transfer credit (HIST 2111, HIST 2112 or POLS 1101) from outside the University System of Georgia will need to contact the Testing Center regarding the legislative exams requirement.

## Major Requirements (60 hours)

The courses in the Information Technology Major consist of both required and elective courses. The required courses are designed to ensure that all students receiving the BS Information Technology degree will share a common set of learning experiences toward achievement of the Program Outcome Goals. In addition, students will apply these learning experiences in the accomplishment of a research project or internship. Elective courses allow students to delve further into areas of specialization that provide breadth and/or depth of learning.

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Information Technology

Concentration: Systems and Security
Graduates who complete the Information Technology Major (Systems and Security Concentration) will be able to:

1) Demonstrate a strong foundation in mathematics and science, and apply this fundamental knowledge to solving IT problems
2) Work as individuals and as members of a collaborative team that solve IT problems
3) Demonstrate competence in effectively communicating technical information using oral, written, and digital presentation techniques
4) Demonstrate a desire and ability to continuously refine their computing knowledge and skills and learn to use new tools and processes
5) Demonstrate a working knowledge of multiple programming languages and system environments
6) Demonstrate knowledge in the design, implementation, and improvement of network and database systems
7) Identify information system requirements for a client and then develop information systems that meet those requirements
8) Demonstrate a working knowledge of security practices to optimize information assurance
9) Demonstrate knowledge of widely accepted information and systems security policies

## Bachelor of Science (BS) Information Technology 123 credits required for graduation

| Concentration Systems and Security <br> General Education ( 60 semester hours) |
| :--- |
| AREA A - Essential Skills: (9 semester hours) |
| ENGL 1101 (English Composition I) |
| ENGL 1102 (English Composition II) |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) |
| (extra hour will count in Area F) |

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing) 4

| AREA $\boldsymbol{C}$ - Humanities/Fine Arts (6 semester |  |
| :--- | :--- |
| hours) |  |
| Select one from the following: | 3 |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) |  |
| Select one from the following: | 3 |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |

AREA D - Natural Sciences, Math, Technology (11 semester hours)
CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
ITEC 2110 (Digital Media)
(extra hour will count in Area F)

| AREA $\boldsymbol{E}$ - Social Science (12 semester hours) |  |
| :--- | :--- |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |

## AREA F - Courses Related to the Program of

 Study (18 semester hours)MGMT 3000 (Principles of Management) 3
ITEC 2140 (Programming Fundamentals)
ITEC 2201 (Introduction to Information Systems)
MATH 2000 (Statistics)
MATH 2300 (Discrete Math)
Additional Requirements (3 hours)
Physical Education Requirement
PHED 1101 (Choices for Life)
Additional Physical Education
Program of Study ( 60 semester hours)
Required Information Technology Courses ( 35 semester hours)
ITEC 2150 (Intermediate Programming) 4
ITEC 3100 (Introduction to Networks) 3
ITEC 3150 (Advanced Programming)
ITEC 3200 (Introduction to Databases)
ITEC 3300 (Information Security)
ITEC 3600 (Operating Systems)
ITEC 3700 (Systems Analysis and Design)
ITEC 3900 (Professional Practice and Ethics)
ITEC 4330 (System Administration)
ITEC 4810 (Information Technology Project I)
ITEC 4320 (Internet Security)
Other Required Courses (7-16 semester hours)
MATH 2200 (Calculus I if not taken in Area A) 4
Select one basic science sequence:
PHYS 2211K (Principles of Physics I) 4
PHYS 2212K (Principles of Physics II) 4
MATH 2210 (Calculus II) 4
or
BIOL 1107K (Principles of Biology I) 4
BIOL 1108K (Principles of Biology II) 4
or
MATH 2210 (Calculus II) 4
MATH 2450 (Linear Algebra) 3

## Additional Electives (9-18 semester hours)

9 hours must be 3000/4000 level ITEC Prefix 6 hours only may be free electives at the 2000 level or above
Any remaining credit hours must be ITEC/STEC Prefix

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Information Technology

## Concentration: Software Development

Graduates who complete the Information Technology Major (Software Development Concentration) will be able to:

1) Demonstrate a strong foundation in mathematics and science, and apply this fundamental knowledge to solving IT problems
2) Work as individuals and as members of a collaborative team that solve IT problems
3) Demonstrate competence in effectively communicating technical information using oral, written, and digital presentation techniques
4) Demonstrate a desire and ability to continuously refine their computing knowledge and skills and learn to use new tools and processes
5) Demonstrate a working knowledge of multiple programming languages and system environments
6) Demonstrate knowledge in the design, implementation, and improvement of network and database systems
7) effectively apply software development practice over the entire lifecycle of a design project including the analysis, prototyping, design, implementation, and testing of the new design
8) Use software tools effectively in all phases of software development
9) Demonstrate knowledge of algorithms, operating systems, theory of computation, and computer architecture

## Bachelor of Science (BS) Information Technology 123 credits required for graduation

| Concentration Software Development |  |
| :---: | :---: |
| General Education ( 60 semester hours) |  |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) |  |
| ENGL 1102 (English Composition II) |  |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) (extra hour will count in Area F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) | 3 |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese |  |

## AREA D - Natural Sciences, Math, Technology

(11 semester hours)
CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
ITEC 2110 (Digital Media
(extra hour will count in Area F)

| AREA $\boldsymbol{E}$ - Social Science (12 semester hours) |  |
| :--- | :--- |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) |  |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |

[^2]| Additional Requirements (3 hours) |  |
| :---: | :---: |
| Physical Education Requirement |  |
| PHED 1101 (Choices for Life) | 1 |
| Additional Physical Education | 2 |
| Program of Study (60 semester hours) |  |
| Required Information Technology Courses |  |
| (33-37 semester hours) |  |
| ITEC 2110 (Digital Media)( If not taken in Area D) | 4 |
| ITEC 2150 (Intermediate Programming) | 4 |
| ITEC 3100 (Introduction to Networks) | 3 |
| ITEC 3150 (Advanced Programming) | 3 |
| ITEC 3200 (Introduction to Databases) | 3 |
| ITEC 3700 (System Analysis \& Design) | 3 |
| ITEC 3860 (Software Development I) | 4 |
| ITEC 3870 (Software Development II) | 4 |
| ITEC 3900 (Professional Practice and Ethics) | 3 |
| ITEC 4260 (Software Testing and QA) | 3 |
| ITEC 4860 (Software Development Project) | 3 |
| Required Sequence Courses (8-12 semester hours) |  |
| Please select either Information Technology or |  |
| Science/Math Sequence |  |
| Information Technology Sequence |  |
| ITEC 2130 (Web Technologies) | 4 |
| ITEC 4450 (Web Development) | 4 |
| or |  |
| Select two from the following: |  |
| ITEC 4550 (Mobile Application Development) | 4 |
| ITEC 3450 (Computer Graphics and Multimedia) | 3 |
| ITEC 4650 (Game Development) | 3 |
| Science/Math Sequence |  |
| PHYS 2211K (Principles of Physics I) | 4 |
| PHYS 2212K (Principles of Physics II) | 4 |
| or |  |
| BIOL 1107K (Principles of Biology I) | 4 |
| BIOL 1108K (Principles of Biology II) | 4 |
| or |  |
| MATH 2210 (Calculus II) | 4 |
| MATH 2450 (Linear Algebra) | 3 |
| MATH 2200 (Calculus I) (if not taken in Area A) | 4 |

## Additional Electives (11-19 semester hours)

7 hours at 3000/4000 level
Up to 6 hours can be open electives 2000/4000 level
Remaining hours must be ITEC courses
MUST include MATH 2210 if Physics Track is chosen above

## PROGRAM OUTCOME GOALS

Bachelor of Science - Information Technology
Concentration: Enterprise Systems
Graduates who complete the Information Technology Major (Enterprise Systems Concentration) will be able to:

1) Demonstrate a strong foundation in mathematics and science, and apply this fundamental knowledge to solving IT problems
2) Work as individuals and as members of a collaborative team that solve IT problems
3) Demonstrate competence in effectively communicating technical information using oral, written, and digital presentation techniques
4) Demonstrate a desire and ability to continuously refine their computing knowledge and skills and learn to use new tools and processes
5) Demonstrate a working knowledge of multiple programming languages and system environments
6) Demonstrate knowledge in the design, implementation, and improvement of network and database systems
7) Have a strong foundation in business and management theory and practices and be able to apply this foundational knowledge to solving IT problems
8) Evaluate, propose and implement plans for effective use of information technology within organizations
9) Demonstrate knowledge of enterprise management in a heterogeneous environment

## Bachelor of Science (BS) Information Technology

| Concentration Enterprise Systems |  |
| :---: | :---: |
| General Education ( 60 semester hours) |  |
| AREA A - Essential Skills: (9 semester hours) |  |
| ENGL 1101 (English Composition I) |  |
| ENGL 1102 (English Composition II) |  |
| MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I) (extra hour will count in Area F) | 3 |
| AREA B - Institutional Option (4 semester hours) |  |
| ITEC 1001 (Introduction to Computing) | 4 |
| AREA C-Humanities/Fine Arts (6 semester |  |
| hours) |  |
| Select one from the following: |  |
| MUSC 1100 (Music Appreciation) | 3 |
| ARTS 1100 (Arts Appreciation) | 3 |
| ENGL 2110 ((World Literature) | 3 |
| ENGL 2100 (Transatlantic English Literature) | 3 |
| FILM 1005 (Introduction to Film) | 3 |
| Select one from the following: |  |
| RELN 1100 (World Religions) |  |
| GEOG 1101(Human Geography) | 3 |
| Intermediate level or higher Spanish, French or Chinese |  |

## AREA D - Natural Sciences, Math, Technology

 (11 semester hours)CHEM 1211K (Principles of Chemistry I) 4
CHEM 1212K (Principles of Chemistry II) 4
ITEC 2110 (Digital Media)
(extra hour will count in Area F)

| AREA $\boldsymbol{E}$ - Social Science (12 semester hours) |  |
| :--- | :--- |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) |  |

[^3]Additional Requirements (3 hours)Physical Education RequirementPHED 1101 (Choices for Life)Additional Physical Education
Program of Study ( 60 semester hours)Required Information Technology Courses(37-38 semester hours)
ITEC 2130 (Web Technologies)4
ITEC 2150 (Intermediate Programming)ITEC 3100 (Introduction to Networks)ITEC 3200 (Introduction to Databases)ITEC 3350 (Digital Commerce)
ITEC 3700 (Systems Analysis \& Design)
ITEC 3900 (Professional Practice and Ethics)ITEC 4150 (Enterprise Process Integration)12ITEC 4750 (Enterprise Architecture Design)4
Select one of the following:
ITEC 4900 (Information Technology Internship) ..... 3
STEC 4500 (Undergraduate Research Project) ..... 3Select one of the following:4
ITEC 4200 (Advanced Databases)
ITEC 4210 (Info Analytics \&Data Mining) ..... 3
Other Required Courses (9-13 semester hours)MATH 2200 (Calculus I) (if not taken in Area A)4
MGMT 4220 (Project Management) ..... 3
ACCT 2101 (Intro to Financial Accounting) ..... 3
ACCT 2102 (Intro to Managerial Accounting) ..... 3
Additional Electives (9-14 semester hours)
$6-7$ hours at $3000 / 4000$ level with ITEC Prefix

## PROGRAM OUTCOME GOALS

## Bachelor of Science - Information Technology

Concentration: Digital Media
Graduates who complete the Information Technology Major (Digital Media Concentration) will be able to:

1) Demonstrate a strong foundation in mathematics and science and apply this fundamental knowledge to solving IT problems.
2) Work as individuals and as members of a collaborative team that solves IT problems.
3) Demonstrate competence in effectively communicating technical information using oral, written and digital presentation techniques.
4) Demonstrate a desire and ability to continuously refine their computing knowledge and skills and learn to use new tools and processes.
5) Demonstrate a working knowledge of multiple programming languages and system environments.
6) Demonstrate knowledge in the design, implementation and improvement of network and database systems.
7) Demonstrate knowledge of digital media artifacts as formal, aesthetic, creative works and points of cultural production and exchange.
8) Demonstrate a comprehension of the social, ethical and legal implications of ubiquity as well as the psychosocial components of human interface.
9) Demonstrate an appreciation of economic, entrepreneurial, and business aspects associated with the production and consumption of digital media.

## Bachelor of Science (BS) Information Technology

Concentration Digital Media<br>General Education ( 60 semester hours)<br>AREA A - Essential Skills: (9 semester hours)<br>ENGL 1101 (English Composition I)<br>ENGL 1102 (English Composition II)<br>MATH 1113 (Pre-Calculus) or MATH 2200 (Calculus I)<br>(extra hour will count in Area F)

3

AREA B - Institutional Option (4 semester hours)
ITEC 1001 (Introduction to Computing)
AREA C-Humanities/Fine Arts (6 semester

## hours)

Select one from the following:
MUSC 1100 (Music Appreciation) 3
ARTS 1100 (Arts Appreciation)
ENGL 2110 ((World Literature)
ENGL 2100 (Transatlantic English Literature)
FILM 1005 (Introduction to Film) 3
Select one from the following:
RELN 1100 (World Religions)
3
GEOG 1101(Human Geography)
Intermediate level or higher Spanish, French or Chinese

## AREA D - Natural Sciences, Math, Technology

 (11 semester hours)CHEM 1211K (Principles of Chemistry I)
CHEM 1212K (Principles of Chemistry II)
ITEC 2110 (Digital Media)
(extra hour will count in Area F)

| AREA $\boldsymbol{E}$ - Social Science (12 semester hours) |  |
| :--- | :--- |
| POLS 1101 (American Government) | 3 |
| HIST 2111 or HIST 2112 (U.S. History I \& II) | 3 |
| Select one from the following: |  |
| HIST 2111 (if not used above) | 3 |
| HIST 2112 (if not used above) | 3 |
| HIST 1111 (World History I) | 3 |
| HIST 1112 (World History II) | 3 |
| HIST 1121 (Western Civilization I) | 3 |
| HIST 1122 (Western Civilization II) | 3 |
| Select one from the following: | 3 |
| SOCI 1101 (Introduction to Sociology) | 3 |
| ANTH 1102 (Introduction to Anthropology) | 3 |
| ECON 2100 (Introduction to Economics) | 3 |
| PSYC 1102 (Introduction to Psychology) |  |

AREA F - Courses Related to the Program of Study (18 semester hours)

MGMT 3000 (Principles of Management)

ITEC 2140 (Programming Fundamentals)

ITEC 2201 (Introduction to Information Systems)

MATH 2000 (Statistics)

MATH 2300 (Discrete Math)

Additional Requirements (3 hours)
Physical Education Requirement

PHED 1101 (Choices for Life)

Additional Physical Education

Program of Study ( 60 semester hours)
Required Information Technology Courses (34-38semester hours)
ITEC 2110 (Digital Media) (If not taken in Area D) 4
ITEC 2150 (Intermediate Programming) 4
ITEC 2130 (Web Technologies)
ITEC 3100 (Introduction to Networks)
ITEC 3200 (Introduction to Databases)
IEC 3450 (Computer Graphics and Multimedia) 3
ITEC 3900 (Professional Practice and Ethics) 3
ITEC 4110 (Digital Media Capstone Project) 4
ITEC 4450 (Web Development) 4
Select two from the following:
ITEC 4130 (Human Computer Interaction) 3
ITEC 4550 (Mobile Application Development) 3
ITEC 4650 (Game Development) 3
Other Required Courses (9-16 semester hours)
ARTS 2010 (Drawing I)
ARTS 2020 (Two Dimensional Design) -
MATH 2200 (Calculus) If not taken in Area A 4
Select one or two from the following:
ENGL 3880 (Writing and Digital Media) 3
FILM 3010 (Digital Video Production I) 3
MUSC 3550 (Music Production \& Sound Design for Digital Media) 3
Additional Electives (6-17 semester hours)
Up to 6 hours open electives 2000-4000 level courses
Remaining courses must be ITEC courses
10 Hours of 3000/4000 courses must be contained in Other
Required Courses and Additional Electives

## Minor in Information Technology

As technology advances, many fields have become increasingly computational in nature. Computer hardware and software are the essential tools for not only science and engineering fields, but also business and liberal arts disciplines. We could easily find applications of IT in biology, chemistry, mathematics, marketing, accounting, psychology, history, etc.

The purpose of the IT minor program is to provide non-IT major students an opportunity to gain more computational skills and knowledge in IT. The IT curriculum includes programming, database, network, information system, as well as professional practice and ethics. The elective gives students' the option to enhance their knowledge in programming languages, security, e-commerce, computer graphics, system analysis and design.

## ITEC Minor Requirements

The ITEC Minor requires the completion of 5 ITEC courses with at least 9 credits at 3000/4000 level

## Required Courses

| ITEC 2140 Programming Fundamentals |  | 4 credits |
| :--- | :--- | :--- |
| ITEC 2201 Introduction to Information Systems | (See note 1) | 3 credits |
| ITEC 3100 Introduction to Networks |  | 3 credits |
| ITEC 3200 Introduction to Databases | 3 credits |  |
| ITEC 3900 Professional Practice and Ethics | (See note 1) |  |

Note 1: For all Business majors, BUSA 3100 (Management Information Systems) and MGMT 3400 (Ethics and Corporate Social Responsibility) are required. These courses are equivalent to ITEC 2201 and ITEC 3900 respectively, but cannot be counted towards the ITEC minor. Therefore, Business majors must select two other ITEC courses for which they meet the prerequisite and co-requisite requirements. One course must be at the 2000 level or above and the other at the 3000 level or above.

## GLOBAL STUDIES CERTIFICATION PROGRAM

The Global Studies Certification Program is an initiative designed by GGC faculty and staff to recognize student achievement in international competence. It is available to all students enrolled at Georgia Gwinnett College.

Students may declare their intent to complete this certification program at any time. However, applicants will only be considered before graduation. To do so, they should contact the Office of Internationalization to complete the approval process for making a certification declaration.

Participation in the Global Studies Certification Program demonstrates students' commitment to global learning. Taking courses with an international focus amplifies the global dimension of students' majors. In addition, by engaging in a credit-bearing education abroad experience, and enhancing their experience with a second language, students will expand their view of the world and their place in it, and their perspectives on their own societies at home.

## Admission Requirements:

1. Possess a 2.7 Cumulative GPA
2. Have completed 24 hours of academic credit (with at least 12 hours completed at GGC)
3. Complete/Sign Certification Agreement. (This process involves the student, faculty mentor and Certification Coordinator)

## Program Completion Requirements:

To complete the program, a student must:

1. Complete at least two (2) $i$-courses at the 3000-4000 level with a grade of " $C$ " or better. NOTE: Students who took a course in 2012-13 or 2013-14 that is subsequently identified as an $i$-course may submit a request for the course to fulfill this requirement. The Certification Coordinator will verify whether the course qualifies as an $i$-course and respond to the student's request.
2. Complete the Global Studies Certification Capstone Course with a grade of "C" or better. NOTE: Capstone Course Registration: Pre-registration for the Certification Capstone Course signals the completion of all other certification requirements.
3. Complete a credit bearing study abroad program, or a course offered in an international location; earning a grade of "C" or better and a minimum of 3 credit hours for the experience.
4. Satisfy the foreign language requirement by demonstrating proficiency in at least one language other than the student's native language. The foreign language requirement for the Global Studies Certification can be satisfied in any one of the following manners:

- Two Courses at GGC: Completes two GGC courses at any level (in the same language) in Chinese, French or Spanish with a grade of "C" of better.
- Transfer Courses in Foreign Language: Transfers into GGC with two courses at any level (in the same foreign language) in any USG recognized modern foreign language with a grade of "C" or better.
- AP or IB Credit: Completes Advanced Placement (AP) or IB examinations and scores at the recommended score/level, he/she will receive academic credit in those circumstances and subsequently satisfy the Certification's proficiency requirement.
- CLEP Testing: Complete CLEP testing for a foreign language and score at the recommended score/level to receive academic credit.


## GGC COURSE LISTING

## ACCOUNTING (ACCT)

ACCT 2101 - Introduction to Financial Accounting (3)
Prerequisite: MATH 1001 or MATH 1111; ITEC 1001, and Successful Completion of 30 Hours.
Introduction to the concepts, principles and procedures pertaining to the collection and summarization of accounting information and the preparation, analysis, and interpretation of external financial statements in the global environment.

## ACCT 2102 - Introduction to Managerial Accounting (3)

Prerequisites: MATH 1001 or MATH 1111; ITEC 1001, and Successful Completion of 30 Hours
An introductory study of the preparation, analysis, interpretation and use of internal accounting information for planning and control with emphasis on profit analysis, budgeting, performance measurement, and relevant costs for decision making.

## ACCT 3101 - Financial Accounting and Reporting I (3)

Prerequisites: ACCT 2101
Study of the theory and principles underlying the preparation of external financial statements in the global environment. Concise review of the basic principles and concepts relating to the collection and summarization of accounting information and the preparation of the financial statements. Study in-depth the theory and issues related to recognition and measurement of assets.

## ACCT 3102 - Financial Accounting and Reporting II (3)

Prerequisite: ACCT 3101
Study of the theory and principles underlying the preparation of external financial statements in the global environment. Study in depth the theory and issues related to measurement and recognition of liabilities and shareholders' equity.

## ACCT 3201 - Fundamentals of Income Taxation (3)

Prerequisites: ACCT 3101 or FINA 3000 or permission of Instructor
Study of the principles and concepts of federal income taxation of individuals.

## ACCT 3301 - International Accounting (3)

Prerequisites: ACCT 2101; ACCT 2102; BUSA 3200
This course examines the development of accounting standards and reliability of accounting information in a global environment. The current effort of convergence of U.S. GAAP with international accounting standards is examined as related to financial reporting and decision making. Also, comparative practices, foreign currency translation, transfer pricing, and international taxation will be discussed.

## ACCT 3401 - Accounting Analysis and Modeling (3)

Prerequisite: ACCT 2102, ACCT 3101
This course focuses on the analytic and modeling skills expected of students entering the accountancy profession. The emphasis of the course is on MS Excel, MS Access, and add-in tools used by accounting professionals in answering business questions. Students will learn primarily through completing a series of targeted exercises and projects using Excel and Access.

## ACCT 4103 - Auditing (3)

Prerequisites: ACCT 3102; BUSA 2000
Study of the objectives, standards and procedures involved in examining and reporting on financial statements of business organizations by independent auditors.

## ACCT 4104 - Governmental and Not-for-Profit Accounting (3)

Prerequisite: ACCT 3101
A study of the principles of accounting and reporting for governmental, non-governmental and not-for-profit organizations.

## ACCT 4105 - Financial Accounting and Reporting III (3)

Prerequisites: ACCT 3102
Study of the theory and principles of accounting for business combinations, preparation of consolidated financial statements, accounting for partnerships and selected advanced topics of importance in the profession in a global environment.

## ACCT 4201 - Taxation of Business Entities (3)

Prerequisites: ACCT 3201
Study of the rules and considerations involved in the taxation of different types of business organizations, including Ccorporations, S-corporations, and partnerships.

## ACCT 4202 - Controllership (3)

Prerequisites: ACCT 2101; ACCT 2102; MGMT 3000; and BUSA 2000
Study of accounting issues related to the planning and control of the organization. Focus on issues impacting the profession of accountancy such as the current regulatory and legal environment, management and cost accounting, performance measurement, internal accounting controls and accounting forensics.

## ACCT4300 - Regulation of Accounting Profession (3)

Prerequisites: BUSA 2106 and either ACCT 3101 or FINA 3000 with a grade of "C" or better
An overview of the areas of law relevant to business transactions, with a focus of the impact of the law on accounting professionals. Topics may include, but are not limited to, agency, contracts, the Uniform Commercial Code, debtor/creditor relationships, securities regulation, entity selection, trusts and estates, and other areas of law typically covered on the CPA exam. Professional responsibilities of accounting professionals will also be addressed.

ACCT4350 - IT Audit and Control Prerequisite: ACCT 2101, ACCT 2102, ITEC 1201/2201, or BUSA 3100 This course explores organizational and managerial issues relevant to planning and conducting Information Technology (IT) audit and control activities. The course covers the following conceptual areas: assessment and control of IT risk as a component of business risk, IT control objectives, design and evaluation of appropriate IT controls required to effectively mitigate IT risks and IT control implications associated with risks created by the use of the internet and wireless transmissions.

## ACCT 4700 - Special Topics in Accountancy (1-3)

Prerequisite: Permission of Instructor
Study of current topics of interest in the profession of accountancy. May be repeated for credit when topic varies.

## ACCT 4751- Internship in Accounting (3)

Prerequisite: ACCT 3101, ACCT 3102, ACCT 3201 and a 3.0 overall GPA
Individually designed learning opportunity in which the student is involved in the normal accounting related operations of an organization in the private or public sector.

## ANTHROPOLOGY (ANTH)

## ANTH 1102 - Introduction to Anthropology (3)

Prerequisite: ENGL 0989
This course is a survey of general anthropology, the comparative study of human kind as a whole, including its four major sub disciplines: cultural anthropology, archaeology, linguistics and physical anthropology. Through ethnographic descriptions, comparisons across time and cross-cultural analysis, emphasis is placed on the great variety of cultural adaptations which various peoples have developed to survive and to meet human needs.

## ANTH 3000 - People and Culture of Latin America (3)

Prerequisite: ENGL 1102
A survey of Latin America from the pre-Columbian era to the present.
ANTH 3010 - Cultural Anthropology (3)
Prerequisite: ENGL 1102 and ANTH 1102

As one of the social sciences, Cultural Anthropology studies the causes of human behavior. It studies human behavior from the perspective of the concept of culture and cultural systems. It studies different cultures and peoples of the world, with non-European small scale traditional societies as a contrast with our own culture. Topics include interactions between different areas of culture, social organization, ecology, technology, economics, political structure, are symbolic and religious systems, how these areas interact and affect each other, culture change, modernization and globalization.

## ANTH 4000 - World Prehistory and Archaeology (3)

Prerequisite: ANTH 1102 and ENGL 1102, each with a grade of C or better
This course introduces students to archaeology as a method of scientific investigation and a way of studying human and the causes of human behavior. Particular emphasis is placed on archaeological study of environment, technology and demography, and how those factors interact with social organization and worldview to produce distinctive cultures throughout the world. Examples include the prehistoric Paleolithic of Europe, Africa and Asia, the global Neolithic Revolution (including Georgia), and the rise of chiefdoms, states, cities, and civilizations worldwide.

## ANTH 4700 - Special Topics in Anthropology (3)

Prerequisite: ENGL 1102 with grade of C or better, and ANTH 1102
Current topics and themes in anthropology. May be repeated as different topic for credit.

## ART (ARTS)

## ARTS 1100 - Art Appreciation (3)

Survey and theory of art throughout the world and throughout history, focusing on the analysis of art forms, technical procedures, subject matter, composition, theory, art philosophy and cultural and social values and influences. Twodimensional and three-dimensional arts and the formal media theories of visual arts will be examined via lectures, projects, discussions and presentations.

## ARTS 1100H - Art Appreciation Honors (3)

Prerequisite: None please see co-requisite.
Co-requisite: Enrollment in the GGC First Year Honors Experience or Honors Program; or, permission of the Dean of Liberal Arts and the Director of the GGC Honors Programs.
Art Appreciation is a survey of art throughout the world and throughout history, focusing on the analysis of art forms, technical procedures, subject matter, composition, theory, art philosophy, and cultural and social values and influences. Two-dimensional and three-dimensional arts will be discussed. This course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that Arts 1100-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## ARTS 2010 - Drawing I (3)

Studio methods course; a practical introduction to the techniques, materials and principles of drawing.

## ARTS 2011 - Drawing II (3)

Techniques, materials and principles of drawing

## ARTS 2020 - Two Dimensional Design (3)

Studio and theory course; a practical method lab on the fundamentals of two-dimensional design introduced through projects in a variety of media.

ARTS 2030 - Three Dimensional Design (3)
An investigation of three dimensional forms and space using various materials and methods.

## ARTS 2100 - Survey of Western Art I (3)

Prerequisite: ENGL 1101 grade of "C" or higher
This course is an art history survey of the visual arts produced by Western civilizations from approximately 30,000
B.C.E. to 1600 C.E. The major artistic monuments and movements of each time period will be examined in context with the cultural, political and philosophical currents of each era.

## ARTS 2200 - Survey of Western Art II (3)

Prerequisites: Exemption from, or completion of all Student Success courses. Successful completion of ENGL 1101 This course is an art history survey of the visual arts produced by Western civilization from approximately the 17th century to the $21^{\text {st }}$ century. The major artistic monuments and movements of each time period will be examined in context with the cultural, political and philosophical currents of each era.

## ARTS 3511 - History of American Art (3)

Prerequisites: ENGL 1102 (grade of "C" or better); FILM 1005 or ARTS 1100 or MUSC 1100 or ENGL 2100 or 2110 (grade of "C" or better); or consent of instructor.
History of American Art is a focused upper level study of the history of American Art from pre-colonial and PreColumbian art to the present, with emphasis upon the theories, philosophies, events, styles, major works, and philosophical influences such as Manifest Destiny and Neo-Classical styles of the Academy and the Enlightenment and other trends. Readings, discussion, lecture, and focused individual research and writing will provide a greater depth and insight into the American experience.

## ARTS 3530 - History of Renaissance Art (3)

Prerequisites: ENGL 1102 (grade of "C" or better); FILM 1005 or ARTS 1100 or MUSC 1100 or ENGL 2100 or 2110 (grade of "C" or better); or consent of instructor.
A focused examination of the developments, styles and artists of the period from 1370 through the 16th Century in European Art. An examination of paintings, sculpture, prints and architecture of the early, high and late Renaissance in Italy, France, Flanders, England, the Netherlands and Spain and the Spanish possessions. A chronological and comparative study, emphasis is placed on the distinct contributions of specific artists and of different regions. The economic, philosophical, religious, political and cultural developments of the Renaissance are explored in detail. Outside readings are incorporated into class discussions.

## ARTS 3550 - History of Modern Art (3)

Prerequisite: ENGL 1102 (grade of "C: or better) FILM 1105 or ARTS 1100 or MUSC 1100 or ENGL 2100 or ENGL 2100 (grade of "C" or better); or consent of instructor.
A focused overview and examination of the developments, styles and artists of the period from 1870 through the late $20^{\text {th }}$ Century in European and American Art. The development and execution of formal theory, its evolution and impact, and the social and expressive influences will be covered. The flow of artistic influence from the school of Paris to the New York School will be reinforced with lectures, discussions, textbook and additional readings.

## BIOCHEMISTRY (BCHM)

## BCHM 3100K - Biochemistry with Laboratory (4)

Prerequisite: CHEM 2211 K and BIOL 3400 K ; or CHEM 2212K
A study of the structure and function of biological molecules, enzymology, metabolism and bioenergetics. Upon completion of this course, students will: (1) describe the three dimensional structural and functional relationship of proteins; (2) trace intermediary metabolism from macromolecules to carbon dioxide including both anabolic and catabolic reactions of glucose; (3) explain enzymatic catalysis with regard to mechanism and kinetics; (4) explain the structure and function of major classes of macromolecules; (5) use technological resources to investigate biochemical problems; (6) apply the scientific method to address hypothetical problems.

## BCHM 4100K - Advanced Biochemistry with Laboratory (4)

Prerequisite: BIOL 1107K and BCHM 3100K
Continued study of the structure and function of biological molecules, enzymology, metabolism and bioenergetics. Upon completion of this course students will: (1) describe nucleic acid processes at the molecular level; (2) trace metabolic pathways of lipids and amino acids; (3) explain energetic and mechanisms of photosynthesis; (4) describe integrated metabolism; (5) communicate clearly and effectively; (6) use technological resources at the appropriate level; (7) apply the scientific method to address hypothetical problems; (8) demonstrate competence in the use of biochemical techniques and laboratory analysis.

## BCHM 4450K - Enzymology with Laboratory (4) <br> Prerequisite: BCHM 3100K

An in-depth course examining the biochemistry of enzymes. Upon completion of this course, students will: (1) describe the three dimensional structure of enzymes and the various chemical mechanisms of catalysis; (2) explain steady state kinetics; (3) describe purification methods and purify proteins in the laboratory; (4) become proficient in analysis of kinetic data.

## BIOLOGY (BIOL)

## BIOL 1101K - Biological Sciences I and Laboratory (4)

Prerequisites: MATH 0099; ENGL 0989; ENGL 0099
Part of the two-semester study of basic biology for non-science majors including one semester of laboratory experience. Upon completion of this course, students will: (1) describe the organization of life from the cellular level to the organism; (2) demonstrate critical thinking skills and the scientific process; (3) effectively collect and analyze data and draw conclusions; (4) apply scientific concepts to global issues and perspectives and distinguish between welldocumented scientific studies and popular opinion; (5) communicate scientific topics effectively in oral and written form.

## BIOL 1102 - Biological Sciences II (3)

Prerequisites: MATH 0099; ENGL 0989; ENGL 0099
Part of the two-semester sequence of basic biology for non-science majors. Upon completion of this course, students will: (1) describe the organization of life from the organism to the biosphere; (2) demonstrate critical thinking skills and the scientific process; (3) effectively collect and analyze data and draw conclusions; (4) apply scientific concepts to global issues and perspectives and distinguish between well-documented scientific studies and popular opinion; (5) communicate scientific topics effectively in oral and written form.

## BIOL 1107K - Principles of Biology I and Laboratory (4)

Prerequisites: MATH 0099; ENGL 0989; ENGL 0099
Co-requisite: CHEM 1211K
A study of general biology for science and technology majors including laboratory experience. Upon completion of this course, students will: (1) Apply basic chemical concepts to the understanding of how water and the carbon atom contribute to the fitness and diversity of life. (2) Describe the structure of macromolecules and their functions in organisms (3) Describe the energy production and metabolic pathway (respiration and photosynthesis) of saccharides in plants and animals (4) Differentiate cell structure and function (5) Describe the eukaryotic cell cycle and differentiate between mitosis, meiosis, and binary fission (6) Describe the molecular mechanisms that regulate gene expression from DNA to RNA to protein (7) Apply biological knowledge to real world problems by critically assessing and utilizing scientific information and by understanding of the nature of science.

## BIOL 1108K - Principles of Biology II with Laboratory (4)

Prerequisites: MATH 0099; ENGL 0989; ENGL 0099
A study of general biology for science and technology majors including laboratory experience. Upon completion of this course, students will: (1) Describe and apply the basic principles of Mendelian genetics and population genetics; (2) Describe and apply the basic principles of evolution and natural selection; (3) Describe the basic characteristics of the major forms of life (Bacteria, Protists, Fungi, Plants, and Animals) on our planet; (4) Describe and apply the basic principles of ecology; and (5) Communicate effectively regarding biology topics in oral and written form using appropriate scientific terminology..

## BIOL 2451K - Human Anatomy and Physiology I with Laboratory (4)

Prerequisites: CHEM 1151K or CHEM 1211K or BIOL 1107K
Not available for credit for Biology Majors. A study of anatomy and physiology for students interested in pursuing careers in Allied Health Professions. Upon completion of this course, students will: (1) Demonstrate knowledge of biochemical components and structure of eukaryotic cells; (2) Demonstrate an understanding of homeostasis and its importance in the functioning of the human body systems; (3) Identify various tissue types and cell types; (4) Demonstrate knowledge of tissue type functions; (5) Identify various structures within each of the following organ systems: Integumentary, Skeletal, Muscular, and Nervous; (6) Apply concepts of cell and tissue structures as they relate to the functions of the Integumentary, Muscular, Skeletal, and Nervous systems; (7) Read, understand, critically evaluate and communicate information related to anatomy and physiology from case studies, medical journals, and health articles; (8) Collect data and analyze the results of physiological experiments, using the Scientific Method

## BIOL 2452K - Human Anatomy and Physiology II with Laboratory (4)

Prerequisite: BIOL 2451 K
Not available for credit for Biology Majors. A study of anatomy and physiology for students interested in pursuing careers in Allied Health Professions. Upon completion of this course, students will: (1) apply concepts and knowledge of general terminology, cell structure and function and gross anatomy, physiology, histology and terminology related to the circulatory, endocrine, lymphatic, immune, urinary, digestive and reproductive systems; (2) demonstrate an understanding of the endocrine system and its importance in maintaining homeostasis of the human body systems; (3) read, understand and critically evaluate information related to anatomy and physiology from medical journals, health articles and other information sources; (4) recognize various tissue types and cell types and make generalizations about their function; (5) collect data and analyze the results of physiological experiments, using the Scientific Method; (6) effectively communicate case studies in anatomy and physiology through verbal, written or multimedia means.

## BIOL 2516K - Microbiology with Laboratory for the Health Sciences (4)

Prerequisite: BIOL 2452 K or BIOL 2452 K with concurrency
Not available for credit for Biology Majors. A study of microbiology for students interested in pursuing careers in Allied Health Professions. Upon completion of this course, students will: (1) demonstrate knowledge of the fundamentals of the field of microbiology including its history, basic microscopy techniques and the role of microbes in both health and disease; (2) describe prokaryotic cellular structure and functions; (3) discuss the molecular basis of microbial metabolism, growth, genetics and pathogenesis; (4) discuss the diversity of microorganisms and viruses; (5) demonstrate knowledge of the techniques of microbial control including sterilization, disinfection and antimicrobial therapy; (5) discuss hostmicrobe interactions including epidemiology, nonspecific/specific host defense and immunology; (7) identify the major medically important organisms and relate them to the diseases they cause; (8) demonstrate competence in common staining and aseptic techniques used to study microorganisms in the laboratory.

## BIOL 3000 - Evolution (3)

Prerequisite: BIOL 3400K
An introduction to the theory of evolution from classical studies to recent discoveries. Upon completion of this course, students will: 1) describe Darwin's contribution to evolutionary theory; 2) explain how natural selection and other mechanisms, such as genetic drift and gene flow, cause evolutionary changes; 3) demonstrate the application of genetics to evolutionary theory; 4) distinguish "modern" developments in evolutionary theory, such as neutral theory, levels of selection, inclusive fitness, life history, etc.; 5) interpret date from and apply the scientific method to evolutionary theory; 6) describe how evolutionary processes contribute to speciation and observed patterns of biological diversity.

## BIOL 3010K - Human Anatomy (4)

Prerequisites: BIOL 1107K and BIOL 1108K
This course provides a comprehensive coverage of human anatomy. In the course, students will also compare and contrast the structures of vertebrate groups with a focus on evolutionary relationships. Upon completion of this course, students have: (1) Be able to describe the major components of the 12 major organ systems in the Human Body (Reproductive, Urinary, Nervous, Muscular, Respiratory, Skeletal, Lymphatic, Immune, Integumentary and Digestive, Endocrine, and Cardiovascular systems); (2) Demonstrate a general knowledge of basic anatomical terms and vocabulary; (3) Describe the role of evolution in producing anatomical structures in vertebrate organism; (4) Be able to communicate effectively regarding biology topics in oral and written form using appropriate scientific terminology. This course is intended for Biology Majors

## BIOL 3020K - Human Physiology (4)

Prerequisites: BIOL 3400K Recommended: BIOL 3010K
This course provides a broad coverage of vertebrate physiology. Physiology is the study of the function and activities of living things and their parts. In anatomy, you learn what the parts are; in physiology, you learn how they work. Upon completion of this course, students should have: (1) Be able to describe the major components of the 12 major organ systems in the Human Body (Reproductive, Urinary, Nervous, Muscular, Respiratory, Skeletal, Lymphatic, Immune, Integumentary and Digestive, Endocrine, and Cardiovascular systems); (2) Demonstrate a general knowledge of basic physiology terms and vocabulary; (3) Be able to multiple examples how the body's main organ systems maintain homeostasis; (4) Be able communicate effectively regarding biology topics in oral and written form using appropriate scientific terminology. This course is intended for Biology Majors.

## BIOL 3050 - Tropical Biology (3)

Prerequisite: BIOL 1102 or BIOL 1108K
Georgia Gwinnett College 2015-16 Catalog

This course introduces students to tropical ecosystems, plants and animals. The course includes: 45 hours of instruction at GGC plus a 9-day field experience in Ecuador and the Galapagos. Upon completion of this course, students will be able to: (1) describe the ecology of the rainforest and tropical ecosystems; (2) describe typical rainforest plants and animals and note their special adaptations; (3) identify and interact with plants and animals in the natural tropical habitats; (4) describe the historical significance of Darwin's voyage on the H.M.S. Beagle; (5) compare and contrast North American and South American cultures with a focus on environmental issues; (6) identify and interact with unfamiliar geographical features (e.g. volcanoes, coral reefs).

## BIOL 3055 - Natural History of Africa (3)

Prerequisite: Permission of the Instructor and either BIOL 1102 or BIOL 1108K. This course is open to all GGC students regardless of Major
This course introduces students to African ecosystems, plants, and animals. The course includes 45 hours of instruction at GGC (same as a traditional 3 credit college course) plus a 10-18 day field experience in Africa. Upon completion of this course, students will be able to: (1) Describe the ecology of the African ecosystems, (2) Describe the biology and behavior of major African Mammals, (3) Describe typical savanna plants and animals and note their special adaptations, (4) Identify and interact with plants and animals in the natural tropical habitats, (5) Compare and contrast North American and African cultures with a focus on environmental issues. All costs of the course and the trip, including tuition, are the responsibility of the student. Please contact the Office of Internationalization for the possibility potential and meaningful financial support.

## BIOL 3060 - Biology Content Methods (4)

Prerequisite: Admission to the Teacher Education Program and successful completion of the following courses: EDUC 3300, EDUC 3350, BIOL 3400K
This course will focus on methods for implementing student-centered instruction in biology. Special emphasis will be placed on the particular ways of knowing associated with biology and incorporating these ways of knowing into learning activities for secondary students. Candidates will design, implement and assess learning activities for secondary students. A field component accompanies this course.

## BIOL 3150 - Temperate Biology (4)

Prerequisite: BIOL 1108K or BIOL 1102, Student must have completed 24 hours of college courses and permission of the instructor.
A practical course that combines the use of lecture and field experiences to familiarize students with the ecological relationships present in the plant and animal communities of a particular ecophysiograhic region. Upon completion of the course, students will: 1) Describe the ecology of the focal region. 2) Describe and identify common organisms and the natural habitants of the focal region. 3) Understand common conservation issues and environmental threats to the focal region. 4) Use library and internet resources to gather, organize, and understand scientific information. 5) Collect, present, and analyze scientific data gathered in the field. 6) Effectively and clearly communicate scientific information in written and oral form. This course will require off campus travel.

## BIOL 3200K - Genetics (4)

Prerequisite: BIOL 3400K or BIOL 3400K with concurrency ; CHEM 2211 K or CHEM 2211 K with concurrency The study of inheritance from Mendel's classic studies to modern molecular genetics. Upon completion of this course, students will be able to: (1) Describe basic inheritance patterns and the chromosomal basis of heredity; (2) Describe gene organization and genome structure; (3) Demonstrate knowledge of the process of gene expression and regulation; (4) Explain mutation as a source of genetic variability; (5) Describe a historical perspective of genetics, identifying breakthroughs in discovery; and (6) Apply skills in analysis, problem-solving, communication and ethical perspective to genetics.

## BIOL 3300K - Microbiology with Laboratory (4)

Prerequisite: BIOL 3400K
Upon completion of this course, students will be able to: (1) Demonstrate knowledge of the fundamentals of microbiology including history, microscopy and staining techniques and characteristics and evolution of microorganisms; (2) Demonstrate knowledge of genetics including inheritance of information, causes, consequences and uses of mutations, exchange and acquisition of genetic information in prokaryotes; (3) Describe and discuss metabolism, growth, growth control and metabolic diversity in prokaryotes; (4) Describe the spectrum of chemotherapeutic antimicrobial activity selective toxicity and how it leads to antibiotic resistance; (5) Explain the interactions and impact of
microorganisms and hosts (to include pathology and epidemiology) and the role of microorganisms in the environment;
(6) Describe the general concepts of acellular microbes (prions, viroids, viruses) and their role in microbiology; and (7)

Demonstrate proficiency in basic lab skills and communicate the results of experiments effectively.

## BIOL 3310K - Botany with Laboratory (4)

Prerequisite: BIOL 1107K; BIOL 1108K
A survey of plant biology including laboratory experience. Upon completion of this course, students will: (1) diagram the anatomical structure of plants; (2) explain plant physiology and metabolism; (3) describe plant development; (4) discuss plant genetics; (5) explain plant ecology and its importance to society.

## BIOL 3350K - Mycology with Laboratory (4)

Prerequisite: BIOL 3400K
A study of fungi, emphasizing interrelationships with the plant and animal kingdom. Upon completion of this course, students will: (1) demonstrate knowledge of the important features of fungi including morphology, structure, physiology and metabolism; (2) demonstrate knowledge of the roles of fungi in various ecosystems; (3) explain the direct and indirect impacts of fungi upon humans; (4) gain experience isolating and identifying numerous macroscopic and microscopic fungal specimens.

## BIOL 3400K- Cell Biology with Laboratory (4)

Prerequisite: BIOL 1107K; BIOL 1108K; CHEM 1211K
A study of cell structure and function at the cellular, subcellular and molecular levels. Upon completion of this course students will: (1) Explain the structure and function of macromolecules and cellular components; (2) Describe cell cycle regulation and DNA replication and apply them to cell function; (3) Explain and classify various methods of membrane transport; (4) Describe and apply the processes of gene expression and protein trafficking; (5) Apply concepts of intercellular and intracellular signaling; (6) Describe the steps leading to the development of an embryo and explain their relationship to stem cells; (7) Apply cell biological concepts and techniques to scientific research and real world problems.

## BIOL 3450 - Conservation Biology (3)

Co-requisite: BIOL 3500K
A course dealing with topical issues that highlight the roles of ecology, economics, history, sociology, philosophy and politics in the conservation and management of wild living resources. Upon completion of this course, students will be able to: (1) explain the ecological principles upon which conservation is based; (2) describe the major approaches to conservation, including the differences and common threads; (3) demonstrate how ecological principles are currently applied to the conservation; (4) demonstrate an understanding of basic conservation biology issues.

BIOL 3500K - Ecology with Laboratory (4)
Prerequisite: BIOL 1108 K and (BIOL 3600K or BIOL 3310K or MATH 2000)
Upon completion of this course, students will be able to: (1) describe interactions within a population, community and ecosystem; (2) explain movement of energy and biogeochemical within and through individuals, populations, communities and ecosystems; (3) discuss current and future impacts on biodiversity from habitat loss, introduced invader species, overexploitation, habitat degradation and global climate change; (4) analyze data using statistical methods and communicate scientific information gathered in the lab.

## BIOL 3510K - Ichthyology (4)

Prerequisite: A grade of "C" or better in BIOL 1108K and BIOL 1107K
Ichthyology is an introductory biology of fishes course which will focus on the taxonomy, systematics, evolution, zoogeography, anatomy, physiology, behavior, ecology, and conservation of fishes and their habitats. Laboratory component will emphasize techniques for the collection and identification of fishes found in Georgia. Upon completion of this course students should: 1) Explain the origin and evolution of fishes; 2) Demonstrate knowledge of the taxonomy of fishes and identification of fish to families; 3) Describe the physiological, behavioral, and morphological adaptation of fishes; 4) Describe the ecological and economic roles that fishes play in freshwater and marine communities and ecosystems 5) Develop laboratory skills necessary for the collection., preservation and identification of fishes. This course may require off campus travel and is intended for Biology majors.

## BIOL 3550K - Limnology with Laboratory (4)

Georgia Gwinnett College 2015-16 Catalog

Prerequisite: BIOL 3400K
This course emphasizes the structure and function of inland water systems. Upon completion of this course, students will: (1) describe physical and chemical features of freshwater systems and their influence on biotic communities and biotic interactions; (2) describe how human activities influence physical, chemical and biotic features in freshwater systems; (3) apply limnological principles to the management of freshwater systems; (3) use common limnological techniques and equipment to collect and analyze samples of water and biota from freshwater systems; (4) analyze and communicate scientific information gathered in the lab.

## BIOL 3600K - Zoology with Laboratory (4)

Prerequisite: BIOL 1107K; BIOL 1108K
A survey of animal biology including laboratory experience. Upon completion of this course, students will be able to: (1) explain the classification, organization and diversity of the Animal Kingdom; (2) explain environmental issues and impact on animal species; (3) effectively use technology to research and present biological topics; (4) communicate effectively regarding biological subjects in oral and written form using appropriate scientific terminology; (5) use the scientific process of hypothesis testing through laboratory experiments.

## BIOL 3650K - Terrestrial Ecology and Laboratory (4)

Prerequisite: BIOL 3500K
Upon completion of this course, students will be able to: (1) explain the interactions within populations, communities and ecosystems in terrestrial environments; (2) describe the properties of soils and explain their influence on primary production; (3) describe the flux of energy and biogeochemical within and through individuals, populations, communities and ecosystems in terrestrial environments; (4) predict current and future impacts on biodiversity in terrestrial systems from habitat loss, introduced invader species, overexploitation, habitat degradation and global climate change; (5) design experiments and surveys for terrestrial systems that incorporate appropriate statistical methodology.

## BIOL 3750K - Field Biology Techniques (4)

Prerequisite: BIOL 1107K and BIOL 1108K
A practical course that familiarizes students with basic instruments and techniques used by biologists to sample, collect, observe, and experiment with organisms in the field. Upon completion of this course. Students will be able to: 1) demonstrate the use of standard field biology techniques in multiple settings, 2) effectively and clearly communicate scientific information in written and oral form, 3) use library and internet resources to gather, organize, and understand scientific information, 4) collect, present, and analyze scientific data gathered in the field, 5) understand the structurefunction relationships at levels of organization of living organisms from the organism to the ecosystem, and 6) understand the organization, diversity and interdependence of living organism.

## BIOL 3900 - Biotechnology (3)

Prerequisite: BIOL 3200K; BIOL 3400K
A study of current topics and issues in biotechnology. Upon completion of this course, students will be able to: (1) explain commonly used biotechnology techniques and their application; (2) explain the major types of biotechnology including forensic, medical, microbial, agricultural and animal biotechnology; (3) discuss the ethical issues related to applications of biotechnology.

## BIOL 4000K - Parasitology (4)

Prerequisites: BIOL 3600 K with a grade of C or better or permission of instructor A study of the taxonomy, morphology, ecology, evolution and life history of the major protozoan and metazoan parasites of animals. Laboratory component will emphasize techniques for the collection and identification of parasite of vertebrates. Upon completion of this course student should: (1) Explain the origin and evolution of parasitism and complex life-cycles; (2) Demonstrate knowledge of major groups of parasitic protozoans and metazoan that infect animals; (3) Describe the major anatomical and physiological characteristics and life-history strategies of these parasites;
(4) Explain impact of parasites on animal and human welfare and (5) Develop laboratory skills necessary for the collection, preservation and identification of metazoan parasites of vertebrates. This course is intended for Biology majors.

## BIOL 4150 - Neurobiology (3)

Prerequisite: BIOL 3020K
A study of the biology of the nervous system and its relationship to behavior and disease. The course covers topics ranging from neuronal structure and function, communication at the synapse, membrane receptors and intra- and
intercellular signaling systems, the processing of sensory information, the programming of motor responses and higher functions such as learning, memory, cognition and speech.

## BIOL 4200 - Bioinformatics (3)

Prerequisite: BIOL 3200K; BIOL 3900
A study of computational resources for biology applications. Upon completion of this course, students will be able to: (1) review biological databases and to use them proficiently; (2) explain the complexities of the genome and the annotation process; (3) demonstrate computer skills for retrieving and organizing biological information.

## BIOL 4250 - Human Genetics (3)

Prerequisite: BIOL 3200K; BCHM 3100K;
Introduces fundamental concepts and technological advances in the study of human genetics. Each of the major subspecialties will be addressed: cytogenetics, molecular genetics, biochemical genetics, clinical genetics, genetic counseling and reproductive and perinatal genetics.

## BIOL 4270 - Virology (3)

Prerequisite: BIOL 3300K
A study of viral structure and replication cycles. Upon completion of this course, students will: (1) describe viral taxonomy; (2) compare and contrast different viral replication cycles; (3) discuss the dynamics of virus - host interactions; (4) describe basic epidemiological patterns of virus infection and transmission; (5) explain the host response to infecting virus; (6) apply an understanding of current aspects of medical virology.

## BIOL 4300 - Biotechnology Laboratory (2)

Prerequisite: BIOL 3900.
Co-requisite: BIOL 3300K
A stand-alone laboratory course that concentrates on the fundamental laboratory techniques used in biotechnology. Upon completion of this course, students will: (1) master biotechnology laboratory skills through participation in a multi-week project; (2) explain the theories and design of experiments for the project applying those technologies; (3) develop skills in associated computer technologies appropriate to the project; (4) establish a detailed and accurate laboratory notebook.

## BIOL 4310K - Developmental Biology with Laboratory (4)

Prerequisite: BIOL 3200K or BIOL 3010K and BIOL 3020K
Basic aspects of morphogenesis including cell movements and cell interactions in determination, differentiation and pattern formation are discussed with examples from vertebrates, invertebrates and plants. The impact of recent discoveries in the field of molecular biology, such as the role of homeotic and segmentation genes in development and segmentation of organisms are discussed.

## BIOL 4400K - Medical Entomology with Laboratory (4)

Prerequisite: BIOL 3300K
Upon completion of this course, students will: (1) understand the global health impact of insect transmitted diseases; (2) describe the diversity of human pathogens and their insect vectors; (3) identify the major types of insects that transmit diseases to people and animals; (4) describe the biology of specific vector-pathogen interactions and disease in humans; (5) describe the methods used to control the vectors and diseases and list the barriers to effective control of many insecttransmitted diseases.

## BIOL 4410K - Industrial Microbiology with Laboratory (4)

Prerequisite: BIOL 3300K
Upon completion of this course, students will: (1) demonstrate knowledge of cultivation and utilization in bioprocesses engineering including fermentation systems and downstream processing; (2) explain methods for the production and application of bioengineered enzymes; (3) describe the processes involved in bio manufacturing of fuels, industrial chemicals, pharmaceuticals, food additives and food products; (4) demonstrate knowledge of environmental biotechnology, including waste water treatment, bioremediation and bio mining.

BIOL 4540 - Immunology (3)
Prerequisite: BIOL 3300K

Basic concepts in immunology including development of the immune system, diseases and allergies. Upon completion of this course, students will: (1) discuss the cellular and molecular basis of disease resistance; (2) compare and contrast innate and acquired immunity; (3) describe the role of specific cells of the immune system; (4) discuss cell signaling and hematopoiesis; (5) discuss the immune response to specific pathogens; (6) describe disorders of the immune system.

## BIOL 4550 - Pharmacology (3)

Prerequisites: BIOL 3020K or (BIOL 2451K and BIOL 2452K); BCHM 3100K
Pharmacology is the science of drug action on biological systems. In its entirety, it embraces knowledge of the sources, chemical properties, biological effects and therapeutic uses of medicines/drugs. This course will focus on the impact of pharmaceutical drugs (medications) on the human body. Upon completion of this course, you will have demonstrated the ability to: 1) Identify the pharmacokinetic factors that determine the bioavaiability of a drug and the time course of a drug's effects. 2) Apply the principles of pharmacodynamics that describe drug-receptor/drug-target interactions including classical dose response curves. 3) Explain the effects of chronic drug exposure including tolerance, dependence and toxicity. 4) Describe the molecular mechanism of action, indications and therapeutics uses and contraindications of different classes of drugs that impact a variety of physiological systems in the human body. 5) Detail emerging pharmacological trends including new drug categories, drugs with improved efficacy and new technologies in drug design, discovery and delivery. 6) Analyze and organize relevant scientific information from library and internet resources. 7) Effectively and clearly communicate scientific information in written and/or oral format

## BIOL4560 - Research Methods in Biology (3)

Prerequisites: BIOL 3400, additional prerequisites will vary by the course theme.
This course provides a comprehensive development of skills necessary for students to become advanced science writers and researchers. To be taken as an alternative to BIOL 4800 Internship or STEC 4500 Research or BIOL 4570. By the end of this course. Students should be able to: Gather accurate information about a possible career path; Effectively use the steps of the scientific method; Communicate in-depth scientific information effectively in oral and written form using appropriate terminology and charts/graphs; Collect and analyze data and present results in appropriate formats including chart, graph and oral/written form.

## BIOL 4570 - Experimental Methods in Biology (3)

Prerequisites: BIOL 3400K and CHEM 1212K. Additional prerequisites may vary according to the course theme. Under supervision of the instructor, students will design and execute all components of a specific biological experimental inquiry. Students will analyze self-generated experimental data and prepare both written and oral presentations of the work. Where appropriate, students will be encouraged to present their data at regional professional meetings. To be taken as an alternative to BIOL4800 Internship or STEC4500 Research. By the end of this course, students will be able to (1) Gather accurate information about a possible career path; (2) Effectively use the steps of the scientific method; (3) Communicate in-depth scientific information effectively in oral and written form using appropriate terminology and charts/graphs; (4) Collect and analyze data and present results in appropriate formats including chart, graph and oral/written form.

## BIOL 4600 - Readings in Biology (1)

Prerequisite: Completion of at least 28 hours of biology courses; permission of faculty member who is to direct the reading.
Individual study or readings under the direction of a faculty member.

## BIOL 4700 - Interdisciplinary Applications of Biology (3)

Prerequisite: Completion of at least 28 hours of biology courses
Capstone problem-solving course required for all biology majors. Upon completion of this course, students will: (1) use library and internet resources to gather, organize and understand information; (2) apply biological principles and information to real world issues; (3) analyze real world issues from a scientific, political, economic and social perspective; (4) effectively and clearly communicate scientific information in written and oral form.

## BIOL 4750 - Environmental Toxicology (3)

Prerequisite: BCHM 3100K OR BIOL 3500K
The foundations of environmental pollutants and biological health. Upon completion of this course, students will: (1) describe dose-response relationships; (2) describe absorption, distribution, storage, biotransformation and elimination of
toxicants; (3) describe the chemo dynamics of contaminants in the environment including fate and transport; (4) perform risk assessment; (5) describe methods to test and regulate hazardous substances.

## BIOL 4800 - Internship (3)

Prerequisite: BIOL 3400K and CHEM 1212K and Permission of Instructor
An internship or research project is required of all biology majors. Internships need to be approved 3-6 months prior to registration in the course. Upon completion of this internship, students will: (1) gather accurate information about a possible career path; (2) effectively use methodology associated with the profession such as the scientific method, problem solving in the work environment, or assuming responsible tasks of the profession; (3) communicate in-depth scientific information effectively in oral and written form using appropriate terminology and media; (4) collect and analyze data and interpret results in chart/graph and oral/written form.

## BUSINESS ADMINISTRATION (BUSA)

BUSA 2000 - Statistical Analysis for Business (3)
Prerequisites: MATH 1001 or MATH 1111; ENGL 0989
An introduction to basic descriptive and inferential statistics. Includes measures of central tendency and variability, organizing and graphing data, probability, normal distribution, sampling, confidence intervals, hypothesis tests, significance tests, correlation and regression.

## BUSA 2105 - Communications in the Business Environment (3)

Prerequisites: ENGL 1101; ENGL 1102
Emphasis on interpersonal and organizational communication; includes written exercises and oral presentations appropriate to business practice.

## BUSA 2106 - Legal Environment of Business (3)

Prerequisites: ENGL 1101; ENGL 1102; Sophomore Standing.
An introduction to the legal, regulatory, political, social, ethical, cultural, environmental and technological issues which form the context of business; includes an overview of the impact of demographic diversity on organizations. The course will introduce students to legal institutions, constitutional law, common law, and various public laws impacting today's global business environment.

## BUSA 3000 - Quantitative Analysis for Business (3)

Prerequisites: ITEC 1001; BUSA 2000
This course covers key mathematical concepts and methods in a business context, including the theory and application of statistical methods used in business decision-making and forecasting and mathematical concepts that can be applied for quantitative analysis in various business decision-making areas.

## BUSA 3100 - Management Information Systems (3)

Prerequisites: ITEC 1001; MGMT 3000
A basic introduction of Information Systems and Technology in order to determine requirements, make necessary decisions, execute strategy and evaluate results. Emphasis on aligning information strategies with business strategies and using information technologies for business processes.

## BUSA 3200 - Global Business (3)

Prerequisites: (BUSA 2105 or COMM 1100 or COMM 1110) and BUSA 2106 or permission of instructor
An introduction to the various dimensions of the international business environment. The cultural, social, legal, political and economic institutions which influence and are influenced by, international firms are examined.

## BUSA 3600 - Telecommunications/Network Design and Integration (3)

Prerequisites: ITEC 1001; BUSA 3100
This course will provide an understanding of the elements of network and telecommunication systems design and the integration of these elements into a unified system. The course will examine system parameters, wireless capabilities, security aspects and benefit/cost analyses (including future expandability and system life) of the design, maintenance and operation of integrated systems.

## BUSA 3900 - Directed Research and Reading (1-3)

Prerequisite: Junior or senior standing and consent of Instructor
A research-oriented course focusing on an important topic in business not otherwise covered in the School's offerings. The course features student research, independent study and discussions.

## BUSA 4500 - Studies Abroad (3 or 6)

## Cross-listed with MKTG 4500

Prerequisite: Consent of Instructor
Analysis of the role and impact of cultural, economic, social, political and legal factors on business through travel to a foreign country or countries. Includes lectures, discussions and facilities tours. Direct costs such as airfare, hotels, etc., are added to normal tuition charges.

## BUSA 4700 - Selected Topics in Business (1-3)

Prerequisite: Consent of Instructor
Study of current topics in Business and/or related disciplines. May be repeated for credit when topic varies.

## BUSA 4751 - Business Internship/Experiential Learning (3)

Prerequisite: FINA 3000, MKTG 3000, MGMT 3000, BUSA 3200, BUSA3100 and a 3.0 overall GPA
Individually designed learning opportunity in which the student is involved in the normal operations of an organization in the private or public sector.

## CHEMISTRY (CHEM)

## CHEM 1151K - Survey of Chemistry I with Lab (4)

Prerequisites: MATH 0987 or MATH 0989 and ENGL 0989
This is the first of a two-semester sequence covering the fundamental terminology, principles and applications of chemistry and is designed for students pursuing allied health careers. Course cannot be taken for credit by students in any major in the School of Science and Technology. Upon completion of this course, students will: 1) apply the scientific method to investigate chemical questions within the field of allied health; 2) apply dimensional analysis to solve quantitative problems; 3) clearly communicate orally and in writing using chemical terminology and symbology and through graphs, charts and tables; 4) utilize the fundamental principles of chemical structure and reactivity to describe the behavior of solutions of biochemical interest; 5) relate the chemical concepts of equilibrium, kinetics and reactions to processes of biochemical interest, apply standard laboratory policies, procedures and safety practices when performing experiments.

## CHEM 1152K - Survey of Chemistry II with Lab (4)

## Prerequisites: CHEM 1151K

This is the second of a two-semester sequence covering the fundamental terminology, principles and applications of chemistry and is designed for students pursuing allied health careers. While the focus of CHEM 1151 K is general chemistry, the focus of CHEM 1152 K is organic chemistry and biochemistry. Upon completion of this course, students will: (1) apply the concepts of bonding, stereochemistry and 3-dimensional arrangement of atoms in molecules and their resulting influence on molecular properties; (2) apply the fundamental language and nomenclature of organic chemistry and biochemistry; (3) describe, predict, and apply fundamental organic chemistry and biochemistry mechanisms, reactions, and processes; (4) describe and apply fundamental concepts or organic chemistry to the structure and function of biologically relevant molecules and processes; (5) effectively and clearly communicate scientific information in written and oral form; (6) collect, present, and analyze scientific data gathered through experiment.

## CHEM 1211K - Principles of Chemistry I with Laboratory (4)

Prerequisite(s): ENGL 0989, ENGL 0099, MATH 1111 or concurrent enrollment in MATH 1111 or MATH equivalent This course introduces the student to chemical concepts, laboratory skills and problem-solving strategies that are fundamental for further studies in 21 st century science and that also increase science literacy. Topics covered include composition of matter, stoichiometry, periodic relationships of chemical elements and nomenclature. In the laboratory, students apply the scientific method using standard techniques and technology to perform qualitative and quantitative analyses of real-world problems. Upon completion of the course, the student will: 1) apply the language and symbology of chemistry, which includes units of measurement; 2) use the essential principles of atomic and molecular structure, properties, reactivity and energetics to describe chemical, biochemical, and/or environmental systems; 3 ) characterize
and categorize different types of chemical reactions; 4) distinguish different states of matter, properties of matter and bonding theories of matter and explain the behavior of chemical and biochemical systems; 5) demonstrate understanding of general lab concepts such as unit measurement and evidence of chemical reactivity and (6) apply constructed lecture and laboratory knowledge to an on-going, campus-wide experimental research project.

## CHEM 1211K-H Principles of Chemistry I with Laboratory Honors (4)

Prerequisite: Students must have successfully completed, have received official transcript credit for, or exempted READ 0098 and ENGL 0099. They must have successfully completed, have received official transcript credit for, or have exempted MATH 0099 and be concurrently enrolled in MATH 1111 (College Algebra) or MATH 1113 (Pre-calculus) to take CHEM 1211K. Students can only continue to CHEM 1212K if they complete both the class and lab portions of CHEM 1211K with grades of C or better.
Co-requisite: Enrollment in the GGC First Year Honors Program; or permission of the Dean of the School of Science and Technology and the Director of the GGC Honors Programs
This four-credit course (lecture \& laboratory) introduces the student to chemical concepts, laboratory skills and problem-solving strategies that are fundamental for further studies in 21 st century science and that also increase science literacy. Topics covered include composition of matter, stoichiometry, periodic relationships of chemical elements and nomenclature. In the laboratory, students apply the scientific method using standard techniques and technology to perform qualitative and quantitative analyses of real-world problems. The instructor will develop an Honors theme for the course. Upon completion of the course, the student will: (1) apply the language and symbology of chemistry, which includes units of measurement, (2) use the essential principles of atomic and molecular structure, properties, reactivity, and energetics to describe chemical, biochemical and/or environmental systems, (3) characterize and categorize different types of chemical reactions, (4) distinguish different states of matter, properties of matter, and bonding theories of matter and explain the behavior of chemical and biochemical systems, (5) demonstrate understanding of general lab concepts such as unit measurement and evidence of chemical reactivity, and (6) apply constructed lecture and laboratory knowledge to an on-going, campus-wide experimental research project.

## CHEM 1212K - Principles of Chemistry II with Laboratory (4)

Prerequisite(s): CHEM 1211K and MATH 1111
This course follows CHEM 1211 K and continues building student chemical knowledge, skill and ability through further exploration of chemical and biochemical systems using qualitative and quantitative methodologies. Topics covered include solution chemistry, kinetics, acid/base chemistry, chemical equilibrium, reduction and oxidation (redox), chemical thermodynamics and electrochemistry. These topics are revisited in the laboratory, where students further expand their instrumentation and technical knowledge as they collect and analyze scientific data, gathered with modern instrumentation, for real-world questions. Upon completion of the course, the student will: 1) relate the properties of solutions to chemical, biochemical and environmental systems; 2) account for factors that affect the kinetics and dynamics of chemical transformations; 3) analyze chemical equilibria conceptually and computationally; 4) describe and apply the consequences of the fundamental laws of thermodynamics to a variety of systems; 5) identify the role and the importance of acid-base reactions, redox reactions and electrochemistry in chemical contexts; 6) apply constructed lecture and laboratory knowledge to an on-going, campus-wide experimental research project.

## CHEM 1212K-H Principles of Chemistry II with Laboratory Honors (4)

Prerequisite: Students must have successfully completed, have received official transcript credit for (CHEM 1211K and MATH 1111 with a grade of C or better.
Co-requisite: Enrollment in the GGC First Year Honors Experience or Honors Program; or, permission of the Dean of the School of Science and Technology and the Director of the GGC Honors Programs.
This course follows CHEM 1211K and continues building student chemical knowledge, skill and ability through further exploration of chemical and biochemical systems using qualitative and quantitative methodologies. Topics covered include solution chemistry, kinetics, acid/base chemistry, chemical equilibrium, reduction and oxidation (redox), chemical thermodynamics and electrochemistry. These topics are revisited in the laboratory, where students further expand their instrumentation and technical knowledge as they collect and analyze scientific data, gathered with modern instrumentation, for real-world questions. Upon completion of the course, the student will: 1) relate the properties of solutions to chemical, biochemical and environmental systems; 2) account for factors that affect the kinetics and dynamics of chemical transformations; 3) analyze chemical equilibria conceptually and computationally; 4) describe and apply the consequences of the fundamental laws of thermodynamics to a variety of systems; 5) identify the role and the importance of acid-base reactions, redox reactions and electrochemistry in chemical contexts; 6) apply constructed lecture and laboratory knowledge to an on-going, campus-wide experimental research project. This honors course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and
Georgia Gwinnett College 2015-16 Catalog
develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that CHEM 1212K-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## CHEM 2211K - Organic Chemistry I with Laboratory (4)

Prerequisite: CHEM 1212K
The first semester of a two semester course of an introduction to the relationship between chemical structure and the physical and chemical properties of organic molecules. Upon completion of this course students will: (1) effectively and clearly communicate principles of organic chemistry in written and oral form, (2) identify which of the four fundamental kinds of organic reactions: addition, elimination, substitution or rearrangement is responsible for a given reaction and describe its mechanism, (3) describe bonding, stereochemistry and 3-dimensional arrangement of atoms in organic molecules and apply them to nomenclature and molecular function (4) design preparative synthesis of organic molecules by applying reaction mechanisms, (5) evaluate library and Internet resources to gather, organize, and supply scientific information, (6) apply spectroscopic analysis and techniques to elucidate chemical structure, (7) collect, present and analyze scientific data from a series of organic chemistry techniques and laboratory experiments.

## CHEM 2212K - Organic Chemistry II with Laboratory (4)

Prerequisite: CHEM 2211K
The second semester in a two semester course of an introduction to the relationship between chemical structure and the physical and chemical properties of organic molecules. Upon completion of this course. students will: (1) effectively and clearly communicate principles of organic chemistry in written and oral form, (2) detail reaction mechanisms not addressed in Organic Chemistry I,(3) describe bonding, stereochemistry and 3-dimensional arrangement of atoms in organic molecules not described in Organic Chemistry I and apply them to nomenclature and molecular function, (4) design multi-step preparative synthesis of organic molecules by applying reaction mechanisms, (5) evaluate and extrapolate information from reference literature for application in organic synthesis, (6) apply spectroscopic analysis techniques to elucidate chemical structure, and (7) collect, present and analyze scientific data from a series of organic chemistry techniques and laboratory experiments.

## CHEM 3000K - Analytical Chemistry with Laboratory (4)

Prerequisite: CHEM 1212K
This course provides practical, hands-on experience in the design and application of analytical techniques to obtain detailed, quantitative information about chemical systems. Upon completion of this course, students will: 1) integrate conceptual models of concentration, solubility, and activity to solve problems in various chemical equilibrium systems, 2) develop and apply appropriate sampling and sample preparation techniques, 3) analyze chemical compounds quantitatively using appropriate methodologies, 4) develop and implement data validation plans, 5) perform scientific literature review to guide problem solving, and 6) effectively and clearly communicate scientific information following the accepted standards of the scientific community.

## CHEM 3100K - Inorganic Chemistry with Laboratory (4)

Prerequisite: CHEM 2212K
Upon completion of this course, students will: 1) apply the theories of inorganic chemistry to investigate and explain chemical properties at the molecular level and macroscopic level, 2) perform experiments and interpret data that demonstrate the concepts of inorganic chemistry, 3) illustrate and interpret data that lead to the modern structure of the periodic table and periodic trends, 4) apply the principles of inorganic chemistry to describe, predict and critically analyze the physical properties and/or reactivity of main group, transition metal, and lanthanide elements, and 5) illustrate and apply knowledge of the connection between inorganic chemistry and questions that are of interest to science and humanity.

## CHEM 3200 - Environmental Chemistry (3)

Prerequisite: CHEM 2212 K and CHEM 3000K
Upon completion of this course, students will: 1) communicate effectively and clearly environmental information in written and oral form, 2) illustrate and interpret environmental data using graphs, tables, charts, and text, 3) apply environmental chemistry using $21^{\text {st }}$ century technology to investigate environmental topics, 4) apply fundamental chemistry concepts to explain environmental chemistry in modern day society, 5) integrate, describe and apply the application of chemistry and its effects on personal and community health and environmental quality through the study of issues related to toxic chemical pollution, 6) apply concepts of environmental chemistry to describe the environmental impact of pollution (soil, air and water), waste management and disposal, alternative fuels and green chemistry, 7) discuss
and relate the applications of chemical technologies implemented through environmental practices to business and industry.

## CHEM 3300 - Bioinorganic Chemistry (3)

Prerequisite: BCHM 3100K
Bioinorganic chemistry examines the role of inorganic chemical species, particularly metal ions, in biological systems. Principles of biochemistry, inorganic and coordination chemistry are used to explore the role and mechanism of essential and non-essential metals in the function and behavior of biomolecules, especially metalloproteinase. Upon completion of this course, the student will: 1) describe connections between inorganic chemistry and the life processes in written and oral form, 2) apply the principles of coordination chemistry and electron count of transition metals to the properties and processes of metalloproteinase, 3) describe the properties, stability, reactivity and bonding theories of coordination compounds in relationship to living systems, 4) identify and describe the experimental methods used in bioinorganic chemistry and employ the principles of inorganic chemistry to predict and critically analyze spectroscopic data of metalloproteinase, and 5) illustrate and interpret scientific data in one or more advanced topics involving the role of metalloproteinase in catalysis, respiration, metabolism, medicine, and ion transport.

## CHEM 3500 - Industrial Chemistry (3)

Prerequisite: CHEM 3000K
Upon completion of this course, the student will: 1) effectively and clearly communicate orally and in writing meeting the standards of an industrial chemistry environment in formats including technical reports, standard operating procedures posters and oral presentations, 2 ) illustrate and interpret scientific data using graphs, tables, charts and standard reports in formats commonly used in the chemical industry, 3) locate and employ current technical literature and patents to investigate, effectively examine and evaluate the information obtained in a chemical industry, 4) describe good manufacturing practices, good laboratory practices and quality management systems and their application to ensuring safe operations and environmentally sound practices in chemical industry, and 5) apply chemical principles to describe production, formulation and manufacture of raw materials and consumer products.

## CHEM 3600 - Chemistry Content Methods (4)

Prerequisite: BCHM 3100K and PHYS 1112K
This course will focus on methods for implementing student-centered instruction in Chemistry. Special emphasis will be placed on the particular ways of knowing associated with chemistry and incorporating these ways of knowing into learning activities for secondary students. Candidates will design, implement, and assess learning activities for secondary students. A field component accompanies this course. Upon completion of this course, the student will: 1) learn to make decisions about content educational reform efforts 2) develop critical views of content specific curriculum, textbooks, and other instructional materials, 3) demonstrate proficiency with a range of content specific concepts from secondary and/or middle school curriculum, 4) develop specific content-based lesson plans guided by relevant documents such as state and national standards, local curriculum, and textbooks, 5) design and implement content appropriate learning activities for secondary and/or middle school students, 6) develop understanding of and use a variety of materials and methods for instruction, 7) incorporate technology into student learning experiences, 8) design content specific learner experiences that accommodate learner differences, 9) utilize a variety of content appropriate strategies that maximize learning for all students in a well-managed environment, 10) demonstrate knowledge of laboratory preparation, management and safety as needed for classroom demonstrations or experiments, and 11) demonstrate an understanding of and an ability to communicate concepts on green chemistry.

## CHEM 4100K - Instrumental Chemistry with Laboratory (4)

Prerequisite: CHEM 3000K with grade of C or better
This course is an introduction to modern instrumental methods of chemical analysis. The course will provide practical, hands-on experience in the theory, design, operation, and application of instrumental techniques. Electrochemical, spectroscopic, and chromatographic methods will be used to qualitatively and quantitatively assess chemically and biologically significant molecules. Upon successful completion of this course, the student will: 1) accurately and precisely describe and apply the theory and operational principles of analytical instruments, including their electrical components, in the determination of the chemical composition of samples, 2 ) identify the advantages, disadvantages, and limitations of different analytical instruments, 3) select the appropriate methods for elemental and molecular analyses, including qualitative and quantitative spectroscopic and chromatographic techniques, 4) identify and assess sources of error in chemical and instrumental analysis, 5) recognize interferences in chemical analysis, 6) apply appropriate sampling methods in instrumental chemical analysis, 7) apply data validation techniques, and 8) effectively and clearly
communicate scientific information in written and oral form, including interpreting instrument manuals and writing standard operation procedures.

## CHEM 4201K - Physical Chemistry I with Laboratory (4)

Prerequisite: (CHEM 1212K and (MATH 2600 or PHYS 3000)) or ((CHEM 3000K, MATH 2200) and (PHYS 1112K or PHYS 2212 K )) all with grades of "C" or better
This course integrates the theory and practice of chemistry and physics with biology, information technology, and mathematics to investigate molecular level phenomena. Upon completion of the course, students will: (1) employ the conceptual and mathematical aspects of thermodynamics to predict and describe the behavior of ideal thermodynamic systems including chemical and physical equilibria of pure substances, mixtures and their colligative properties, (2) apply the exactly solvable systems in quantum mechanics to predict and describe the behavior of model systems, (3) examine molecular structure and properties of matter at the level of simple molecular orbital theory, (4) describe and calculate the kinetic behavior of a variety of chemical and biochemical systems, (5) interpret spectroscopic data using appropriate quantum formulations, (6) describe the historical contributions of a variety of individuals to the development of physical chemistry and (7) apply the scientific method through a series of experiments, mathematical and molecular modeling and computational chemistry on ideal systems to explore fundamentals of physical chemistry.

## CHEM 4202K - Physical Chemistry II with Laboratory (4)

Prerequisite: MATH 2210, PHYS 2212K, CHEM 4201K
Upon completion of this course, the student will: (1) apply the fundamentals of thermodynamics, quantum mechanics, kinetics/dynamics and spectroscopy to investigate non-ideal systems, (2) use techniques from linear algebra, calculus and differential equations to solve problems of chemical interest, (3) define the variational principle and perturbation theory and apply them to solve problems in chemical systems for which analytical solutions do not exist, (4) Integrate the fundamentals of physical chemistry to the description of chemical systems introduced in organic and analytical chemistry, and (5) apply mathematical, molecular and computational modeling to a series of experiments following the scientific method to explore systems of chemical interest.

## CHEM 4400 - Computational Chemistry (3)

Prerequisite: CHEM 4201K
This is an introductory course in methods of computational chemistry. The course will be an overview and hands-on introduction to a variety of computational tools. The list of topics will vary by semester, but will include electronic structure theory, molecular mechanics, and chemical dynamics. Upon completion of this course, students will: 1) apply chemical simulations employing a variety of theoretical models to problems of scientific interest, 2) explain the fundamental principles underlying the mathematical, molecular modeling and computational methods investigated and apply them to real world problems, and 3) evaluate which theoretical models are appropriate to apply to different chemical systems.

## CHEM 4500 - Chemistry of Energy (3)

Prerequisite: CHEM 4201K
This course introduces various forms of energy that power modern society. The history, scientific basis, and practical considerations of both traditional and alternative fuels will be investigated within the context of chemistry. Upon completion of this course, students will be able to: 1) knowledgeably discuss the world's changing energy sources and demands, 2) demonstrate knowledge of the various forms of renewable energy and traditional fuels in written and oral form, 3) Employ 21 st century technology to investigate and to describe energy within a global context, 4) illustrate and interpret scientific data to communicate the energy needs and resources of the United States at various regional levels, 5) discuss proposed sustainable methodologies and determine how they address society's need for development and resource allocation, and 6 ) demonstrate knowledge of ethical issues related to energy use.

## CHEM 4550 - Polymer Chemistry (3)

Prerequisite: CHEM 2212K, CHEM 4201K
This course introduces an overview of the chemistry of polymers. Polymers form the basis for synthetic plastics to natural biopolymers (such as nucleic acids and proteins) that are essential for life. The physical structures and properties as well as synthetic mechanisms of some commercial polymers will be discussed. Theories of physical properties of polymers in solution and in the solid state will be addressed. Characterization topics may include molecular weight averages, thermal transitions, and mechanical properties. Upon completion of this course, the student will: 1) define and compute molecular weight averages from the molecular weight distributions in synthetic polymers, 2) define the major classes of polymerization mechanisms, and specify reaction conditions to control the average molecular weights, the

Georgia Gwinnett College 2015-16 Catalog
distribution of molecular weights, and chain architecture for each class, 3) recognize polymeric microstructures based on theory and understand experimental methods that characterize polymers, 4) use organic chemistry to describe synthetic mechanisms of select commercial polymers in their manufacturing process, 5) use the principles of thermodynamics to describe and calculate the physical properties of polymers and polymer solutions, 6) describe the factors affecting the stability of polymers, the mechanisms of degradation, strategies for stabilization and the advantages and disadvantages of bio-degradable formulations, and 7) apply computational methods to answer questions of interest about polymer dynamics, polymerization kinetics and polymer thermodynamic properties.

## CHEM 4701 - Integrated Lab I (2)

## Prerequisite: CHEM 3000K. BCHM 3100K

Research-oriented course, which applies quantitative and qualitative methods to determine green chemistry and biochemically significant molecules and systems. Emphasis will be placed on isolation and analysis techniques and may include Ultraviolet-Visible, Infrared and Nuclear Magnetic Resonance spectroscopy, Gas chromatography, Mass spectrometry, High Performance Liquid Chromatography and fast reaction (stopped-flow) kinetics. Upon completion of this course, students will: 1) use instrumentation at an appropriate level of sophistication to analyze and answer substance life-cycle questions of green chemical and biochemical interest, 2) effectively retrieve and critically evaluate articles from peer-reviewed technical journals, 3 ) write well-organized, concise laboratory reports in a scientifically appropriate style; communicate written details of reports to peers in a clear and concise manner, 4) understand and apply the aspects of modern chemical safety in each of the following: general safety awareness, correct disposal techniques, minimizing hazards in the laboratory, use of materials safety data sheets (MSDS), 5) apply critical thinking skills and their understanding of all chemistry sub disciplines to design and execute experiments that incorporate the principles of green chemistry; analyze data and draw appropriate conclusions, 6) demonstrate sound ethical principles when conducting laboratory work, and 7) interact productively with their peers and work effectively as part of a team pursuing a common goal.

## CHEM 4702 - Integrated Lab II (2)

Prerequisite: CHEM 4701, CHEM 4201 K with concurrency
This laboratory course emphasizes the theory, structure, synthesis and characterization of organic, inorganic or organometallic compounds through application of a number of advanced techniques. Advanced synthetic methods may include photochemical, high temperature and inert-atmosphere reactions. Advanced analytical methods include Ultraviolet-Visible, Infrared and Nuclear Magnetic Resonance spectroscopy, Gas chromatography, Mass spectrometry and fast reaction (stopped-flow) kinetics. Computational chemistry will be employed to determine stability of reactants, intermediates and products as well as elucidate likely transition structures along the reaction pathway. Upon completion of this course, students will: 1) use spectroscopic instrumentation, inert atmosphere reaction apparatus and computational methods at an appropriate level of sophistication to analyze and answer questions of chemical interest, 2) effectively retrieve and critically evaluate articles from peer-reviewed technical journals, 3) write well-organized, concise laboratory reports in a variety of scientific styles; communicate oral and written details of reports to peers in a clear and concise manner, 4) demonstrate knowledge of modern chemical safety in each of the following areas: general safety awareness, correct disposal techniques, minimization of hazards in the laboratory, use of material safety data sheets (MSDS), 5) apply critical thinking skills and knowledge of fundamental chemistry to design and execute experiments which may require oxygen and/or moisture-free environments; analyze data and draw appropriate conclusions, 6) demonstrate sound ethical principles when conducting laboratory work, and 7) interact productively with peers and work effectively as part of a team pursuing chemical inquiries.

## CHEM 4800 - Chemistry Internship (3)

Prerequisite: Completion of Area F and Approval of the Chemistry Internship Committee
Upon completion of this course, the student will: 1) gather information about a possible career path, 2) effectively use methodology associated with the profession such as the scientific method, problem solving in the work environment, or assuming responsible tasks of the profession, 3) communicate in-depth scientific information effectively in oral and written form using appropriate terminology and charts/graphs, and 4) collect and analyze data and interpret results in chart/graph and oral/written form.

## CHINESE (CHIN)

## CHIN 1001 - Elementary Chinese I (3)

Introduction to listening, speaking, reading and writing in Chinese and to the culture of Chinese speaking regions.

## CHIN 1002 - Elementary Chinese II (3)

Prerequisite: CHIN 1001
Continued listening, speaking, reading and writing in Chinese with further study of the culture of Chinese-speaking regions.

## CHIN 2001 - Intermediate Chinese I (3)

Prerequisite: CHIN 1002
Course continues performance based training in higher levels of Chinese grammar, pronunciation, composition and conversation. Students acquire greater proficiency speaking, listening, reading and writing in Chinese.

## CHIN 2002 - Intermediate Chinese II (3)

Prerequisite: CHIN 2001
Continued teaching on how to express more sophisticated and complex ideas, including opinions, intentions and desires; to comprehend the language in conversational and editorial contexts; and to read authentic texts and respond to the orally and in writing.

## COMMUNICATIONS (COMM)

COMM 1100 - Human Communications (3)
Prerequisite: ENGL 0989
A broad approach to oral communications skills including intrapersonal, interpersonal, small group and public speaking.

## COMM 1110 - Public Speaking (3)

Prerequisite: ENGL 0989
The organization of materials and the vocal and physical aspects of delivery in various speaking situations.

## COMM 2100 - Media and Society (3)

Prerequisite: ENGL 1102 and COMM 1110 or BUSA 2105
As a foundational course of a communication program, this course will examine the history, structure, organization, and cultural role of the major forms of mass media in the United States and globally. They include all the major media industries: books; journalism; public relations, advertising, and marketing; radio; television; film; music; the Internet; and video games. Specifically, the focus of the course will be on the content of media messages, social and political consequences of private and public ownership of the media, relationship between the media and the public, and the development of communication technologies.

## CRIMINAL JUSTICE/CRIMINOLOGY (CJCR)

CJCR 1100 - Introduction to Criminal Justice/Criminology (3)
Prerequisite: ENGL 0989
This course will examine the inter-relationship of criminal justice and criminology, analyze theories and data related to the prediction of crime and review the process involved in the administration of justice in America.

CJCR 2000 - Administration of Justice (3)
Prerequisite: CJCR 1100 and ENGL 1102
This course will examine the contemporary criminal justice system, major systems of social control and their policies and practices, victimology, juvenile justice, and comparative criminal justice.

## CJCR 2400 - Ethics in Criminal Justice (3)

Prerequisite: CJCR 1100
Exploration of the complexities of moral decisions and dilemmas facing Criminal Justice practitioners. Topics include determining appropriate behavior as well as examining the various strategies used to promote ethical behavior among criminal justice practitioners.

CJCR 3100 - Research Methods (3)
Prerequisite: CJCR 1100 and CJCR 2000 with a grade of "C" or better

This foundation course introduces students to the research methodologies commonly used within the social/behavioral sciences and the field of criminal justice. Students will not receive credit for both CJCR 2100 and CJCR 3100.

## CJCR 3200 - Criminology (3)

Prerequisite: CJCR 1100
Through the analysis of a variety of causational theories, students will explore the origins, nature and extent of crime within contemporary society. Course emphasis will be on the types of crime and the classification of offenders.

## CJCR 3210 - Organized Crime (3)

Prerequisite: ENGL 1102, CJCR1100 and CJCR 3200 with a "C" or better
This course will examine the nature, extent and social awareness of organized crime. It will emphasize the theoretical explanations of organized crime, the business of organized crime, the perceived ethnic components of organized crime and will explore the means being taken to combat organized crime in the United States and abroad.

CJCR 3220 - Juvenile Delinquency (3)
Prerequisite: ENGL 1102, CJCR1100 and CJCR 3200 with a "C" or better
This course involves the study and examination of juvenile delinquency and how it relates to society through theory, practices and related laws. The course will review the evolution of delinquency and the effects on society, families and individuals.

CJCR 3230 - Gangs (3)
Prerequisite: ENGL 1102, CJCR 1100 and CJCR 3200 with a "C" or better
This course examines the formation, continuance and expansion of gangs in the United States. Included will be a review of street and prison gangs, as well as the public policies related to prevention and intervention.

## CJCR 3300 - The Judicial System (3)

Prerequisite: CJCR 1100
In this course students are exposed to a detailed examination of the role of the judiciary in the Criminal Justice system. This course will examine the structure of the courts and criminal procedure from charging through sentencing and appeal.

## CJCR 3400 - American Police Systems (3)

Prerequisite: CJCR 1100
An introductory overview of the social and historical settings of the police and of the police role and function is provided in this course. Topics include an examination of the structure of American policing, the use of police discretionary powers, police values, police culture and the organization and control of police.

## CJCR 3500 - Corrections (3)

Prerequisite: CJCR 1100
This survey course will examine both the traditional and evolving aspects of contemporary corrections. Students will examine the operations of various jails and prisons and will review classification, security, safety and programming issues facing contemporary American corrections.

CJCR 3510 - Institutional Correction (3) with a "C" or better
Prerequisite: ENGL 1102; CJCR 1100 and CJCR 3200
In this course the history and development of prisons, jails and other correctional institutions will be studied. Included will be an analysis and evaluation of contemporary imprisonment including the structure, function and effectiveness of correctional institutions.

CJCR 3600 - Statistics for the Social Sciences (3)
Prerequisite: CJCR 3100 with a grade of "C" or better
Students will learn to make inferences from statistical evidence and to analyze relations among variables. Descriptive and inferential statistical analysis based upon probability theory will integrate the use of the software packages as a tool for data management and hypothesis testing.

CJCR 3700-Criminal Procedures (3)

Prerequisite: ENGL 1102, CJCR 1100 or permission of the instructor.
This course is an in-depth look at the application of the procedural requirements of the US Criminal Justice System as mandated by the US Constitution, State Constitutions and the Federal Rules of Criminal Procedure. The Fourth, Fifth and Sixth Amendment safeguards of the US Constitution are emphasized, with a particular focus upon the purposes of Arrest Laws, the Regulation of Warrants, Search and Seizure, the Exclusionary Rule, Trial Procedures and other legal process remedies.

## CJCR 3800 - Criminal Justice Management (3)

Prerequisite: ENGL 1102, CJCR1100 or permission of the instructor.
This course provides an introduction to management theory, practice and policy. Included is an overview of traditional schools of organizational theory, scientific management, human relations and the behavioral approach with particular emphasis on how each theoretical perspective applies to criminal justice agencies. This course is the same as the previous course entitled "Criminal Justice Administration." Credit will be awarded for only one CJCR 3800 course.

## CJCR 3810 - Juvenile Justice (3)

Prerequisite: ENGL 1102, CJCR1100 and CJCR 3200 with a "C" or better
This course will explore the evolution of the juvenile justice system in the United States and identify significant policy issues that have shaped current day practices.

## CJCR 4000 - Special Topics (3)

Prerequisite: CJCR 1100, CJCR 3200 and ENGL 1102 with a C or better
This course provides an examination of topics that are of current interest I the field of criminal justice. The class may be repeated for credit when content changes

CJCR 4120 - Race, Ethnicity and Crime (3)
Prerequisite: CJCR 3200 with a "C" or better
This course explores racial and ethnic relations in society, racial differences in crime and violence, and racial and ethnic disparities in the justice system. Students will not receive credit for more than one instance of CJCR 4120.

## CJCR 4130 - Gender, Crime and Justice (3)

Prerequisite: CJCR 3200 with a grade of "C" or better, or permission of instructor
This course explores gender and sexuality in society, gendered differences in crime and victimization, and the experiences of women and sexual minorities with the criminal justice system.

## CJCR 4210 - Criminal and Deviant Behavior (3)

Prerequisite: ENGL 1102, CJCR 1100 and CJCR 3200 with a "C" or better
In this course students will be exposed to an advanced study of the logic of causation and its application to the scientific study of the etiology of criminal and deviant behaviors.

## CJCR 4220 - White Collar and Cybercrime (3)

Prerequisite: ENGL 1102, CJCR 1100, and CJCR 3200 with a "C" or better
White-collar crime primarily refers to forms of illegal business activity. This course will explore
various types of crime, including fraud, perjury, obstruction, bribery and corruption, embezzlement, tax evasion, conspiracy, RICO and the expanding evolution and expansion of white collar crime through computers and cyberspace

CJCR 4230 - Criminal Violence (3)
Prerequisite: ENGL 1102, CJCR 1100 and CJCR 3200 with a "C" or better
In this course, issues surrounding violence in today's society and their impact on offenders and their victims. Homicide, child and domestic abuse and other forms of violence will be examined. Georgia Gwinnett College 2011-2012 Catalog, p. 188

CJCR 4240 - Victimology (3)
Prerequisite: ENGL 1102, CJCR 1100, and CJCR 3200 with a "C" or better
This course provides an in-depth analysis of victims of crime; their characteristics, vulnerabilities and possible culpabilities as well as their experiences with the criminal justice system.

CJCR 4250 - Crime Prevention (3)

Prerequisite: ENGL 1102, CJCR 1100, and CJCR 3200 with a "C" or better
This course will examine the historical developments of crime prevention methodologies, including community involvement, education and awareness programs, governmental intervention, target hardening and environmental design. In addition, students will be introduced to contemporary crime prevention strategies and the techniques for evaluating prevention programs.

CJCR 4340 - Homeland Security and Terrorism (3)
Prerequisite: ENGL 1102, CJCR 1100, and CJCR 3200 with a "C" or better This course is designed to provide students with the opportunity to explore the phenomenon of terrorism. The political nature and theoretical underpinnings of terror will be examined. Particular emphasis will be placed on the responses to terroristic violence by federal, state and local agencies.

## CJCR 4350 - Criminal Law (3)

Prerequisite: CJCR 1100, ENGL 1102, CJCR 3200 with a "C" or better
Cross-Listed: POLS 4350
An examination of the substantive criminal law, its origin and sources, the elements of crime, and modifying circumstances and defenses. Also discussed are offenses against the person and property, those offenses involving specific intent, and public welfare offenses.

## CJCR 4410 - Police and the Community (3)

Prerequisite: ENGL 1102, CJCR 1100, and CJCR 3200 with a "C" or better
This course covers the historical, philosophical and practical dimensions of police community relations. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships.

## CJCR 4420 - Comparative Criminal Justice Systems (3)

Prerequisite: ENGL 1102, CJCR 1100, and CJCR 3200 with a "C" or better
An analysis of the criminal justice systems (police, courts and corrections) in various nations around the globe is offered in this course. Special attention will be given to historical and cultural influences on the administration of justice.

## CJCR 4510 - Community Based Corrections (3)

Prerequisite: ENGL 1102, CJCR 1100 and CJCR 3200 with a "C" or better
This course provides an examination of the history and current status of alternatives to institutional correctional programs for adults including diversion, fines, community service, house arrest, probation, electronic monitoring, halfway houses, temporary release and various treatment programs.

## CJCR 4720 - Constitutional Law: Civil Liberties and Civil Rights (3)

Prerequisites: CJCR 1100, CJCR 3200 and ENGL 1102 with a "C" or better
Cross Listed: POLS 4720
This course focuses on constitutional protections of liberty and equality, including protections that stem from principles of substantive and procedural due process. Subjects typically covered in the course include equal protection, freedom of expression, rights to privacy, the right to free exercise of religion and the prohibition of laws respecting an establishment of religion.

## CJCR 4930 - Internship in Criminal Justice/Criminology (3)

Prerequisites: ENGL 1102, CJCR 1100, CJCR 2100, CJCR 2400, CJCR 3200, Senior status and permission of the instructor
This course ensures students have practical exposure to the criminal justice field through supervised work experience in a discipline-related agency. Criminal Justice internship include but are not limited to federal, state, and local agencies. For example, student may intern with the DEA (Drug Enforcement Agency), FBI (Federal Bureau of Investigation), ATF (Bureau of Alcohol, Tobacco, and Firearms0, or with a local district attorney's office, sheriff's department or probation office. Students may also elect to do an internship at a private agency that is related to criminal justice such as a halfway house. The students will identify an internship with a Criminal Justice agency. The student must then informally notify the professor of his or her selection. The professor will then informally approve the request pending receipt of a formal application after the student has registered for the course. The professor will write a memorandum of understanding for both the agency's approval and GGC's endorsement. All course materials are available on desire2learn (D2L), including the formal application and progress reports, mid-semester evaluations, and instructions for the portfolio.

CJCR 4940 Senior Seminar in Criminal Justice/Criminology (3)
Prerequisites: ENGL 1102, CJCR 1100, CJCR 2100, CJCR 2400, all courses within the CJCR core curriculum, senior status and permission of the instructor.
This course ensures that students have practical exposure to the criminal justice system. It is designed to provide students with the opportunity to integrate theory and practice, utilize knowledge and confront contradictions between the conceptual and the real world. Application deadlines: For Criminal Justice majors only.

## EARLY CHILDHOOD EDUCATION (ECED)

## ECED 3100 - Characteristics of the Learner (4)

Prerequisite: Admission to Teacher Education
Co-requisite: ECED 3300.
This course presents a comprehensive examination of the cognitive, physical, socio-emotional, socio-economic, cultural, racial, linguistic and gender characteristics of students from developmental and ecological perspectives. Candidates will explore familial and socio-cultural systems and their impact on human growth and development. Physical and mental health, safety, other risk factors and the role of caring, supportive relationships in the development of resiliency will be explored. The course will provide a comprehensive overview of the historical, social, political, economic, cultural and legal foundations of special education and services to students with special needs, including the labeling, terminology, identification and categorization of these students. The course will also provide a comprehensive overview of the characteristics and educational needs of English Language Learners. Field experiences will focus on students in the context of the classroom and will include focused observations and case studies of individual students with and without disabilities.

## ECED 3300 - Instructional Foundations (4)

Prerequisite: Admission to Teacher Education
Co-requisite ECED 3100
This course is designed to build a comprehensive understanding of the interaction among the school, the curriculum and the student. Candidates will learn about current educational trends, issues, policies and practices and their relationships to program planning, curriculum, instruction and assessment of students. Candidates will examine national, state and local content standards for P-5 students to gain an overview of learning expectations for these students and will trace the expectations for development of concepts across grade levels in language arts, reading, mathematics, science and social studies. Candidates will study existing federal laws impacting these core academic curricula for early childhood students, including the provisions of the No Child Left Behind Act for students with disabilities. The concept of interdisciplinary units will be introduced and candidates will develop an interdisciplinary unit for a particular grade level that addresses content standards for that grade level in the five core academic areas and incorporates appropriate instructional technology. In the field, candidates will observe the process of curriculum and unit development and the use of educational frameworks, such as the Universal Design for Learning (UDL), that promote multiple approaches to meeting the needs of diverse students. Candidates will interview and shadow teachers and students to gain insight into their respective roles in the context of the school environment. Candidates will develop an ecological study of a school highlighting the connected relationships that build safe and healthy school communities.

## ECED 3500 - Instructional Design and Delivery (8)

Prerequisite: Admission to Teacher Education and ECED 3300
Largely field-based, this course focuses on the design and delivery of developmentally appropriate instruction in language arts, mathematics, science, social studies, the arts, health and physical education in grades $\mathrm{P}-5$ for a wide range of students, including second-language learners and students with identified special needs. Emphasis will be placed on the particular ways of knowing associated with each content area and on incorporating and integrating these ways of knowing into learning activities for elementary students. Candidates will explore selected general models of teaching and their application in the elementary school setting, as well as specific pedagogies for the content areas, including appropriate educational technology applications. This course will also focus on the identification, selection and use of appropriate classroom management strategies to support instruction. Under the supervision of a qualified classroom teacher, candidates will learn to plan and implement developmentally appropriate and culturally inclusive instruction based on knowledge of individual students, the community and the curriculum goals and to differentiate instruction appropriately for all students, including students with cognitive, physical, social and emotional differences. Candidates will learn to incorporate developmentally appropriate practices such as play, small group projects, open-ended questioning, group discussion, problem solving, cooperative learning and inquiry experiences to encourage physical, social, emotional, aesthetic and cognitive development. Through the design, delivery and evaluation of lessons,

Georgia Gwinnett College 2015-16 Catalog
candidates will demonstrate an understanding of the fundamental concepts of each discipline as well as a developing ability to translate this knowledge into meaningful learning experiences for diverse students. This course will also explore the roles and responsibilities of paraprofessionals in classroom instruction and prepare candidates to plan and direct collaborative instruction.

## ECED 4100 - Instructional Assessment and Adaptation (8)

Prerequisite: Admission to Teacher Education and ECED 3500
This course focuses on adapting instruction to meet individual student needs. Adaptation of instruction includes addressing student variations in achievement, developmental level, intelligences, learning styles, cultures, social/emotional characteristics and interests. It also addresses the varying needs of first- and second-language learners and students with special needs. The course will also focus on the use of assessment data to guide the adaptation of instruction to address students' learning needs and to document their achievement. Candidates will learn to interpret student records and assessment data (including data for students with Individualized Education Programs) and develop appropriate adaptations of instruction and assessment that will allow all students, including students with disabilities, to demonstrate progress toward the achievement of instructional goals. In addition to surveying the principles and methods of educational measurement and test construction, candidates will examine current educational assessment trends, issues, policies and practices and explore the relationships among assessment and design, delivery and adaptation of instruction. Candidates will construct, administer and analyze formative classroom assessments aligned with learning objectives as well as examine and analyze student permanent records. The embedded field experience for this course will include development and evaluation of plans for adapting instruction to meet individual students' identified needs.

## ECONOMICS (ECON)

## ECON 2100 - Introduction to Economics (3)

Prerequisite: ENGL 0989
Not available for business majors; may be used as a non-major elective depending on degree.
This course provides an understanding of the issues surrounding a multitude of economic and financial decisions and presents practical advice on how to make decisions on these issues. The economic principles of demand, supply, market structure and the economic issues of inflation, unemployment and economic policies will be among the topics covered.

## ECON 2105 - Principles of Macroeconomics (3)

Prerequisite: MATH 1001 or MATH 1111, ENGL 0989
The study and analysis of national income accounting, income determination theory, monetary policy, fiscal policy, international trade and the theory of economic growth. Attention will be given to current economic conditions and trends.

## ECON 2106 -Principles of Microeconomics (3)

Prerequisite: MATH 1001 or MATH 1111; ENGL 0989
Introduction to the basic tools of economic analysis, business behavior, consumer behavior, supply and demand, marginal analysis and the theory of the firm.

## ECON 3101 - Money and Banking (3)

Prerequisite: ECON 2105
Cross listed with FINA 3100
A study of the nature and evolution of money as it arises spontaneously from barter to its contemporary form and the social and economic consequences that arise as central banks attempt to control and manipulate its supply to achieve macroeconomic goals.

## ECON 3102 - Intermediate Microeconomics (3)

Prerequisites: ECON 2105; ECON 2106
An in-depth study of price theory relevant to households, firms and industries in both perfect and imperfect competition. Theories of factor prices and general equilibrium are also examined.

## ECON 3103 - Intermediate Macroeconomics (3)

Prerequisites: ECON 2105; ECON 2106

An in-depth study of macroeconomic theories and public policies. Topics include income determination, employment, inflation, economic fluctuations, fiscal and monetary policies and economic growth and development.

## ECON 3400 - Public Sector Economics (3)

Prerequisites: ECON 2100 or ECON 2106 or Permission of instructor
Cross-Listed with FINA 3400
This course investigates how government spending and taxation impacts individuals, markets and the economy in general. It covers the different methods used to evaluate these government policies and aims to increase students' awareness of the impacts of current policies. The spending policies covered include education, social security and health insurance with revenue policies include income, property and corporate taxes.

## ECON 4101 - International Economics (3)

Prerequisites: ECON 2105; ECON 2106
An introduction to foreign trade theory and commercial policies. Topics may include the theory of international trade, commercial policies, balance of payments and domestic stability, offer curves and the terms of trade and international trade strategy.

## ECON 4102 - Labor Economics (3)

Prerequisites: ECON 2105; ECON 2106
In this course, students will gain an understanding of the markets for labor. Topics include the supply and demand for labor, labor market policy, the wage structure, and human capital theory. Also discussed are the current issues facing American labor markets, including discrimination, trends in unionization, sub-optimal incentive structures, unemployment, and international labor concerns.

## ECON 4103 - Environmental Economics (3)

Prerequisites: ECON 3102
An economic analysis of issues involving environmental problems, management, and policies. Topics include resource scarcity and allocation, externalities, public goods, the tragedy of the commons and property rights. Regulatory versus market approaches as solutions to environmental problems will be examined and applied to current environmental policy issues.

## ECON 4120 - Introduction to Econometrics (3)

Prerequisites: ECON 2105, ECON 2106 and BUSA 3000
Cross-Listed FINA 4120
This course provides an introduction to the foundation for understanding and applying the basic techniques of regression models in economic analyses. The course will cover the types of data used in economic modeling, modeling techniques such as simple regression model, multiple regression model, and other models, and issues of variable selections. The focus of the course will be on how to apply these techniques to data and generate empirical results and how to interpret these results in a meaningful common sense language.

## ECON 4700 - Selected Topics in Economics (3)

Prerequisites: ECON 2105; ECON 2106, or Permission of Instructor
Study of current topics in Economics. May be repeated for credit when topic varies.

## EDUCATION (EDUC)

## EDUC 2110 Critical and Contemporary Issues in Education (3)

Prerequisites: Successful completion of Area A
Students will explore key aspects of learning and teaching through examining their own learning processes and those of others, with the goal of applying the knowledge to enhance the learning of all students in a variety of educational settings and contexts. This course includes a field experience component in an educational setting. All placements are made by the School of Education.

EDUC 2120 Exploring Socio-Cultural Perspectives on Diversity in Educational Contexts (3)
Prerequisites: Successful completion of Area A

Given the rapidly changing demographics in our state and country this course is designed to equip future teachers with the fundamental knowledge of understanding culture and teaching children from diverse backgrounds. Specifically, this course is designed to examine 1) the nature and function of culture; 2) the development of individual and group cultural identity; 3: definitions and implications of diversity and 4) the influences of culture on learning development and pedagogy.

## EDUC 2130 Exploring Teaching and Learning (3)

Prerequisites: Successful completion of Area A
Students will explore key aspects of learning and teaching through examining their own learning processes and those of others, with the goal of applying knowledge to enhance the learning of all students in a variety of educational settings and contexts. This course includes a field experience component in an educational setting. All placements are made by the School of Education.

## EDUC 3300 - Characteristics of Learners (3)

Prerequisite: Admission to the Teacher Education Program
Co-requisite: EDUC3350
This course presents a comprehensive examination of the cognitive, physical, socio-emotional, socioeconomic, cultural, racial, linguistic and gender characteristics of middle and high school students with special needs. Candidates will explore familial and socio-cultural systems and their impact on typical and atypical human growth and development. The course will also provide an overview of the historical, social, political, economic, cultural and legal foundations of special education and services to students with special needs. Candidates will reflect on their beliefs and practices regarding middle and high school learners with exceptionalities. Field experiences will focus on students in the context of the classroom and will include observations of students with disabilities.

## EDUC 3350 - Models of Teaching and Learning (3)

Prerequisite: Admission to the Teacher Education Program
Co-requisite: EDUC3300
This course provides an overview of teaching and learning in the context of the contemporary American secondary school. Using an inquiry approach, candidates will build a comprehensive understanding of the interaction among the school, the curriculum and the student in an effective secondary school. Candidates will explore national, state and local content standards as well as other educational trends and policies that impact teaching in their respective content areas. Particular emphasis will be placed on four philosophical approaches to teaching (social, information-processing, personal and behavioral), each of which has a strong history of research and development. Through classroom activities and fieldbased inquiry, candidates will explore selected teaching models that are representative of these four approaches, including the curricular orientations behind these models and their application in secondary content areas. Candidates will observe a variety of classroom management approaches and will begin to develop a philosophy of classroom management based on knowledge about motivation and learning.

## EDUC 4010 - Opening of School Experience: ECE (0)

Prerequisite: Admission to the Teacher Education Program and satisfactory completion of the following courses: ECED 3100, ECED 3300, ECED 3500, ELAN 3000, READ 3200, READ 3600
The opening of school experience is designed to provide practical hands-on experiences in the school and classroom setting during the initial days of the school year. This course is a five-day, full-time experience in an elementary school that occurs during two days of pre-planning and the first three days of school. Candidates will assist a teacher in preparing for the opening of school and will observe and reflect on how the teacher establishes the classroom climate and routines during the early days of school.

## EDUC 4020 - Opening of School Experience: SPED (0)

Prerequisite: Admission to the Teacher Education Program and satisfactory completion of the following courses: ECED 3100, ECED 3300, ECED 3500, ELAN 3000, READ 3200, READ 3600
The opening of school experience is designed to provide practical hands-on experiences in the school and classroom setting during the initial days of the school year. This course is a five-day, full-time experience in an elementary school or high school that occurs during two days of pre-planning and the first three days of school. Candidates will assist a teacher in preparing for the opening of school and will observe and reflect on how the teacher establishes the classroom climate and routines during the early days of school.

## EDUC 4030 - Opening of School Experience: Biology (0)

Georgia Gwinnett College 2015-16 Catalog

Prerequisite: Admission to the Teacher Education Program and satisfactory completion of the following courses: EDUC 3300, EDUC 3350, BIOL 3060
The opening of school experience is designed to provide practical hands-on experiences in the school and classroom setting during the initial days of the school year. This course is a five-day, full-time experience in a secondary school that occurs during two days of pre-planning and the first three days of school. Candidates will assist a teacher in preparing for the opening of school and will observe and reflect on how the teacher establishes the classroom climate and routines during the early days of school.

## EDUC 4040 - Opening of School Experience: English (0)

Prerequisite: Admission to the Teacher Education Program and satisfactory completion of the following courses: EDUC 3300, EDUC 3350, ENGL 3000
The opening of school experience is designed to provide practical hands-on experiences in the school and classroom setting during the initial days of the school year. This course is a five-day, full-time experience in a secondary school that occurs during two days of pre-planning and the first three days of school. Candidates will assist a teacher in preparing for the opening of school and will observe and reflect on how the teacher establishes the classroom climate and routines during the early days of school.

## EDUC 4050 - Opening of School Experience: History (0)

Prerequisite: Admission to the Teacher Education Program and satisfactory completion of the following courses: EDUC 3300, EDUC 3350, HIST 3050
The opening of school experience is designed to provide practical hands-on experiences in the school and classroom setting during the initial days of the school year. This course is a five-day, full-time experience in a secondary school that occurs during two days of pre-planning and the first three days of school. Candidates will assist a teacher in preparing for the opening of school and will observe and reflect on how the teacher establishes the classroom climate and routines during the early days of school.

## EDUC 4060 - Opening of School Experience: Mathematics(0)

Prerequisite: Admission to the Teacher Education Program and satisfactory completion of the following courses: EDUC 3300, EDUC 3350, MATH 3600
The opening of school experience is designed to provide practical hands-on experiences in the school and classroom setting during the initial days of the school year. This course is a five-day, full-time experience in a secondary school that occurs during two days of pre-planning and the first three days of school. Candidates will assist a teacher in preparing for the opening of school and will observe and reflect on how the teacher establishes the classroom climate and routines during the early days of school.

## EDUC 4070 - Opening of School Experience: Political Science(0)

Prerequisite: Admission to the Teacher Education Program and satisfactory completion of the following courses: EDUC 3300, EDUC 3350, POLS 3600
The opening of school experience is designed to provide practical hands-on experiences in the school and classroom setting during the initial days of the school year. This course is a five-day, full-time experience in a secondary school that occurs during two days of pre-planning and the first three days of school. Candidates will assist a teacher in preparing for the opening of school and will observe and reflect on how the teacher establishes the classroom climate and routines during the early days of school.

## EDUC 4500 - Assessment (3)

Prerequisite: Admission to the Teacher Education Program; Content Methods Course
Co-requisite: EDUC 4550
This course is a survey of the principles and methods of educational measurement and test construction with an emphasis on evaluation, interpretation and diagnosis in school settings, including standardized (group and individual) and teacher designed instruments. Coordination of learning objectives, item development and analysis and utilizing assessment to improvement instruction and improve achievement outcomes is included. Candidates will examine student permanent records and live data systems during the field component accompanying this course.

## EDUC 4550 - Instructional Adaptation (4)

Prerequisite: Admission to the Teacher Education Program; Content Methods Course
Co-requisite: EDUC 4500

This course is an advanced teaching methods course focusing on using formal and informal classroom assessment data to differentiate instruction to meet the individual needs of students. Special methods for teaching exceptional children and English language learners will be a focus as candidates select instructional approaches that adapt to learners' needs. Candidates will develop, implement and assess the effectiveness of teaching plans for specific students, in conjunction with cooperating teachers at field experience sites.

## EDUC 4800 - Leadership Seminar (1)

Co-requisite: EDUC 4810, 4820, 4830, 4840, 4850, 4860, or 4870
This course provides an opportunity for candidates to demonstrate and apply leadership qualities and skills in the context of the P-5 school environment. The course will explore contemporary problems and issues in schools and the roles of teachers as advocates for children and for the improvement of public education. Candidates will complete a group capstone project.

## EDUC 4815A - Student Teaching: Professional Practices (4)

Prerequisite: Admission to Student Teaching,, *Opening of School is taken concurrently if student teaching in the fall Co-requisite: EDUC 4800 and EDUC 4815B
This is one of 2 linked capstone courses for students pursuing a degree in teacher education. It is designed to be taken along with EDUC 4815B, Student Teaching: Planning and Assessment. This course is a semester-long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate professionalism, and effective use of instructional strategies, as well as provision of a positive and academically challenging learning environment for all students.

## EDUC 4815B - Student Teaching: Planning and Assessment (4)

Prerequisite: Admission to Student Teaching,, *Opening of School is taken concurrently if student teaching in the fall Co-requisite: EDUC 4800 and EDUC 4815A
This is one of 2 linked capstone courses for students pursuing a degree in teacher education. It is designed to be taken along with EDUC 4815A, Student Teaching: Professional Practices. This course is a semester-long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate effective instructional planning for student mastery of rigorous content and differentiation as needed, as well as utilization of assessment strategies to maximize student achievement and inform instructional decisions.

## EDUC 4825A - Student Teaching: Professional Practices (4)

Prerequisite: Admission to Student Teaching,, *Opening of School is taken concurrently if student teaching in the fall Co-requisite: EDUC 4800 and EDUC 4825B
This is one of 2 linked capstone courses for students pursuing a degree in teacher education. It is designed to be taken along with EDUC 4825B, Student Teaching: Planning and Assessment. This course is a semester-long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate professionalism, and effective use of instructional strategies, as well as provision of a positive and academically challenging learning environment for all students.

## EDUC 4825B - Student Teaching: Planning and Assessment (4)

Prerequisite: Admission to Student Teaching, *Opening of School is taken concurrently if student teaching in the fall Co-requisite: EDUC 4800 and EDUC 4825A
This is one of 2 linked capstone courses for students pursuing a degree in teacher education. It is designed to be taken along with EDUC 4825A Student Teaching: Professional Practices. This course is a semester-long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate effective instructional planning for student mastery of rigorous content and differentiation
as needed, as well as utilization of assessment strategies to maximize student achievement and inform instructional decisions.

## EDUC 4835A - Student Teaching: Professional Practices (4)

Prerequisite: Admission to Student Teaching, * Opening of School is taken concurrently if student teaching in the fall Co-requisite: EDUC 4800 and EDUC 4835B
This is one of 2 linked capstone courses for students pursuing a degree in teacher education. It is designed to be taken along with EDUC 4835B, Student Teaching: Planning and Assessment. This course is a semester-long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate professionalism, and effective use of instructional strategies, as well as provision of a positive and academically challenging learning environment for all students.

## EDUC 4835B - Student Teaching: Planning \& Assessment (4)

Prerequisite: Admission to Student Teaching, * Opening of School is taken concurrently if student teaching in the fall Co-requisite: EDUC 4800 and EDUC 4835A
This is one of 2 linked capstone courses for student pursuing a degree in teacher education. It is designed to be taken along with EDUC4835A, Student Teaching: Professional Practices. This course is a semester long full-time experience in a school under the supervision of a qualified classroom teacher and college faculty. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate effective instructional planning for student mastery of rigorous content and differentiation as needed, as well as utilization of assessment strategies to maximize student achievement and inform instructional decisions.

## EDUC 4845A - Student Teaching: Professional Practices (4)

Prerequisite: Admission to Student Teaching, * Opening of School is taken concurrently if student teaching in the fall Co-requisite: EDUC 4800 and EDUC 4845B
This is one of 2 linked capstone courses for students pursuing a degree in teacher education. It is designed to be taken along with EDUC 4845B, Student Teaching: Planning and Assessment. This course is a semester long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate professionalism, and effective use of instructional strategies, as well as provision of a positive and academically challenging learning environment for all students.

## EDUC 4845B - Student Teaching: Planning and Assessment (4)

Prerequisite: Admission to Student Teaching, *Opening of School is taken concurrently if student teaching in the fall Co-requisite: EDUC 4800 and EDUC 4845A
This is one of 2 linked capstone courses for student pursuing a degree in teacher education. It is designed to be taken along with EDUC4845A, Student Teaching: Professional Practices. This course is a semester long full-time experience in a school under the supervision of a qualified classroom teacher and college faculty. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate effective instructional planning for student mastery of rigorous content and differentiation as needed, as well as utilization of assessment strategies to maximize student achievement and inform instructional decisions

## EDUC 4855A - Student Teaching: Professional Practices (4)

Prerequisites: Admission to Student Teaching *Opening of School is taken concurrently if student teaching in the fall. Co-requisites: EDUC 4800 and EDUC 4755B
This is one of 2 linked capstone courses for student pursuing a degree in teacher education. It is designed to be taken along with EDUC 4855B Student Teaching: Planning and Assessment. This course is a semester long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate professionalism, and effective use of instructional strategies, as well as provision of a positive and academically challenging learning environment for all students.
Georgia Gwinnett College 2015-16 Catalog

## EDUC 4855B - Student Teaching: Planning and Assessment (4)

Prerequisites: Admission to Student Teaching *Opening of School is taken concurrently if student teaching in the fall. Co-requisites: EDUC 4800 and EDUC 4755A
This is one of 2 linked capstone courses for student pursuing a degree in teacher education. It is designed to be taken along with EDUC4855A, Student Teaching: Professional Practices. This course is a semester long full-time experience in a school under the supervision of a qualified classroom teacher and college faculty. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate effective instructional planning for student mastery of rigorous content and differentiation as needed, as well as utilization of assessment strategies to maximize student achievement and inform instructional decisions

## EDUC 4865A - Student Teaching: Professional Practices (4)

Prerequisites: Admission to Student Teaching *Opening of School is taken concurrently if student teaching in the fall. Co-requisites: EDUC 4800 and EDUC 4765B
This is one of 2 linked capstone courses for student pursuing a degree in teacher education. It is designed to be taken along with EDUC 4865B Student Teaching: Planning and Assessment. This course is a semester long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate professionalism, and effective use of instructional strategies, as well as provision of a positive and academically challenging learning environment for all students.

## EDUC 4865B - Student Teaching: Planning and Assessment (4)

Prerequisites: Admission to Student Teaching *Opening of School is taken concurrently if student teaching in fall. Co-requisite: EDUC 4800 and EDUC 4865A
This is one of 2 linked capstone courses for student pursuing a degree in teacher education. It is designed to be taken along with EDUC4865A, Student Teaching: Professional Practices. This course is a semester long full-time experience in a school under the supervision of a qualified classroom teacher and college faculty. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate effective instructional planning for student mastery of rigorous content and differentiation as needed, as well as utilization of assessment strategies to maximize student achievement and inform instructional decisions

## EDUC 4875A - Student Teaching: Professional Practices (4)

Prerequisite: Admission to Student Teaching * Opening of School is taken concurrently if student teaching in the fall Co-requisites: EDUC 4800 and EDUC 4875B
This is one of 2 linked capstone courses for students pursuing a degree in teacher education. It is designed to be taken along with EDUC 4875B, Student Teaching: Planning and Assessment. This course is a semester long full-time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will transition from collaborative planning and teaching to full-time teaching responsibility. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate professionalism, and effective use of instructional strategies, as well as provision of a positive and academically challenging learning environment for all students.

## EDUC 4875B - Student Teaching: Planning \& Assessment (4)

Prerequisite: Admission to Student Teaching * Opening of School is taken concurrently if student teaching in the fall Co-requisites: EDUC 4800 and EDUC 4875A
This is one of 2 linked capstone courses for students pursuing a degree in teacher education. It is designed to be taken along with EDUC 4875A, Student Teaching: Professional Practices. This course is a semester long full time teaching experience in a school setting, under the supervision of a qualified classroom teacher and college faculty. Candidates will be expected to assume all of the classroom responsibilities of the supervising teacher, as well as extra duty assignments. Candidates will be expected to demonstrate effective instructional planning for student mastery of rigorous content and differentiation as needed, as well as utilization of assessment strategies to maximize student achievement and inform instructional decisions.

## ENGLISH (ENGL)

## ENGL 0989 - Foundations for English Composition (3)

Foundations for English Composition prepares students for college-level reading and writing. Using paired reading and writing assignments that help students work with concepts in context, students will build competency in recognizing, comprehending and using appropriate grammar, vocabulary, punctuation, and structure in sentences, paragraphs and essays.

## ENGL 0099 - Student Success Pre-College Composition (3)

Prerequisite: ENGL 0989
A course in the writing of essays, focusing on expanding the paragraph into an essay, ordering ideas and using transitional devices. Grammar and usage within the composition is emphasized. *Institutional load credit only.

## ENGL 1101 - English Composition I (3)

Prerequisite: ENGL 0099
A composition course focusing on skills required for effective writing in a variety of contexts, with emphasis on exposition, analysis and argumentation and also including introductory use of a variety of research skills.

## ENGL 1101H - English Composition I Honors (3)

Prerequisite: Successful completion of ENGL 0099 with a grade of C or higher AND a passing score on the COMPASS English Exam; OR a scores of 60-79 on the COMAPSS English Exam AND a score of 8-12 on the GGC Writing samples; OR a score of 80 or higher on the COMPASS English Exam; OR satisfactory completion of the University System of Georgia College Preparatory Curriculum (CPC) in English AND a minimum score of 480 SAT Verbal or a minimum score of 21 ACT English.
Co-requisites: Enrollment in the GGC First Year Honors Experience or Honors Program; or permission of the Dean of Liberal Arts and the Director of the GGC Honors Program.
English 1101-H is a composition course focusing on the skills required for effective oral and written communication in a variety of contexts with emphasis on exposition, analysis, and argument, and including introductory research skills. This course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that English 1101-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## ENGL 1102 - English Composition II (3)

Prerequisite: ENGL 1101
A composition course that develops writing skills beyond the levels of proficiency required by ENGL 1101 that emphasizes interpretation and evaluation and that incorporates a variety of more advanced research methods.

## ENGL 1102H - English Composition II Honors (3)

Prerequisite: Successful completion of ENGL 1101 with a grade of C or higher; or the equivalent in AP or CLEP credit awarded.
Co-requisites: Enrollment in the GGC Honors Programs; or, permission of the Dean of Liberal Arts and the Director of the GGC Honors Programs.
English 1102 Honors is a composition course that develops writing skills beyond the levels of proficiency required by ENGL 1101, that emphasizes interpretation and evaluation, and that incorporates a variety of more advanced research methods. This course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that English 1102-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## ENGL 2100 - Transatlantic English Literature (3)

Prerequisite: ENGL 1102
A survey of literature of the Americas and British Isles

## ENGL 2110 - World Literature (3)

Prerequisite: ENGL 1102
A survey of important works of world literature.

## ENGL 2111 - World Literature I (3)

Prerequisite: ENGL 1102
A survey of important works of world literature from ancient times through the mid-seventeenth century.
ENGL 2112 - World Literature II (3)
Prerequisite: ENGL 1102
A survey of important works of world literature from the mid-seventeenth century to the present.
ENGL 2120 - British Literature (3)
Prerequisite: ENGL 1102
A survey of important works of British literature.

## ENGL 2121 - British Literature I (3)

Prerequisite: ENGL 1102
A survey of important works of British literature from the Old English period through the neoclassical age.
ENGL 2122 - British Literature II (3)
Prerequisite: ENGL 1102
A survey of important works of British literature from the Romantic era to the present.

ENGL 2130 - American Literature (3)
Prerequisite: ENGL 1102
A survey of important works of American literature.
ENGL 2131 - American Literature I (3)
Prerequisite: ENGL 1102
A survey of American literature from the pre-colonial age to the mid-nineteenth century.
ENGL 2132 - American Literature II (3)
Prerequisite: ENGL 1102
A survey of American literature from the mid-nineteenth century to the present.

## ENGL 2801 - Introduction to Rhetorical Studies (3)

Prerequisite: ENGL 1102 with a grade of "C" or higher
This course introduces Writing and Rhetoric majors to the major terms, issues, and approaches in the theory and practice of rhetoric. This course will help student define rhetoric in both historical and contemporary contexts understand frameworks useful for the analysis of texts, develop a keen awareness of the rhetorical situation, and articulate the relationships among rhetoric, democracy and power.

## ENGL 3000- English Content Methods (4)

Prerequisite: Admission to Teacher Education and successful completion of EDUC 3300 and EDUC 3350. Students must also have successfully completed ENGL 1102 and at least one 2000 level ENGL literature survey with a grade of C or higher. This course will focus on methods for implementing student-centered instruction in English. Special Emphasis will be placed on the particular ways of knowing associated with the study of English and incorporating these ways of knowing into learning activities for secondary students. Candidates will design, implement and assess learning activities for secondary students. A field component accompanies this course.

ENGL 3001 - Introduction to English Studies (3)
Prerequisite: ENGL 1102 with a grade of "C" or better
This course introduces students to the reading, writing, critical thinking, and research skills required for advanced study in English and for the enhanced appreciation of literature. Topics include literary history, theory, and criticism, literary genres, literary and rhetorical analysis, social context, and aesthetic experience. In addition to reading primary literary
texts, students will read secondary texts dealing with a range of critical and theoretical approaches to literature: textual, historical, biographical, moral, philosophical, formalist, feminist, psychoanalytical, archetypal, Marxist, New Historical, post-colonial, rhetorical, cultural, structural, and post-structural.

## ENGL 3040 - Introduction to Language and Linguistics (3)

Prerequisite: ENGL 1102 and sophomore status
This course examines language characteristics, development, variation and change, attitudes and uses. Topics will include but not be limited to phonology, morphology, syntax, semantics, onomastics, orthography, language acquisition, dialects and the history of the English language. This course has application to literature, rhetoric and language arts.

## ENGL 3050 - Modern English Grammar (3)

Prerequisite: ENGL 1102 with a grade of "C" of better
This course exposes students to the rhetorical study of modern English grammar with an emphasis on how purpose, context, and style influence writers' grammatical choices. Through a systematic study of sentence structure, language use and function, and the principles that organize the English language, students will refine their skills at analyzing written texts, as well as improving their overall composing processes by recognizing how their grammatical choices affect their readers.

## ENGL 3070 - Principles of Technical and Professional Editing (3)

Prerequisite: Successful completion of ENGL 1102 with a "C" or better.
This course is designed to introduce students to principles and practical applications of technical and professional editing in business/industry, non-profit, technical, scientific and government settings. It will focus on the crucial role editors play in the communication of information as they develop objectives for editing, work with and substantially improve texts and visuals in both print and electronic contexts, and establish and maintain relationships with authors and other involved in the production of documents. Because editors must often be responsible for a document from planning through production, layout and document design are also considered, as well as contemporary production processes. It will include copy marking, copyediting, and comprehensive editing. Legal issues of copyright are also included. Students will read scholarly and popular work related to workplace practices of editors.

## ENGL 3150 - Introduction to Poetry (3)

Prerequisite: ENGL 1102 with a grade of "C" or better.
This courses will help students learn to appreciate, understand, analyze, discuss, interpret, and above all enjoy poetryhistorically the primary mode of literary (and even pre-literary) endeavor across all cultures and very much alive in such genres as slam poetry and hip-hop. Students will study the elements of poetry-diction, tone, speaker, situation and setting, figurative language, symbol, sound, structure, and form -reading works from a variety of poetic periods, forms, and styles, both in English and in translation. In so doing, students will develop valuable skills as close readers, careful evaluators, and creative interpreters of complex texts. By exploring the variety and intricacy of poems from diverse cultures and periods, students will learn to understand and to command the power of language. While students' individual writing will represent an important aspect of the course, work in class will often be collaborative and will focus on reading, interpreting, performing, and discussing poetry.

## ENGL 3222 - Literature and Science (3)

Prerequisite: Completion of ENGL 1102 and one 2000-level English with a grade of "C" or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status
This course will is premised on the concept that in our increasingly interconnected world, literary and scientific texts contain multiple points of intersection, engagement and investment. The course implements a key feature of the liberal arts paradigm: the insistence that these seemingly dichotomous fields are not only related but part of a multi-directional, multicultural, multisectoral conversation. Course readings will expose students to scientific motifs, discoveries and innovations as they are represented in literature as well as literary tropes and figures as they are deployed by science writers. Course material will incorporate poetry, fiction, and prose within a scope that crosses historical periods and national boundaries. Topics may include Models of Scientific Inquiry, Medical Writing and the Representation of Disease, Science Fiction, Computers/Computing in Literature, Cybernetics, Feminist Critiques of Science, Social and Domestic Science, and Ecocriticism. Some writers may include Isaac Newton, Lord Kelvin, Charles Darwin, Charles Lyell, Mary Shelley, Alfred Tennyson, Daniel Farraday, John Stuart Mill, William Gibson, Arthur Conan Doyle, Edgar Allen Poe, Isabella Beeton, Matthew Arnold, Michel Foucault and Donna Haraway.

ENGL 3250 - Studies in Women's Literature (3)
Georgia Gwinnett College 2015-16 Catalog

Prerequisite: Completion of English 1102 and one 2000-level English with a grade of C or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status.
This course will acquaint students with the vast richness of women's literature. Students will read, interpret and write about a variety of prose, poetry and drama written by women. Students will gain deeper insights into women's issues and experiences and the cultures that have influenced them-through engagement with women's literature, questioning and understanding the complexities of identity and text formations. Students will not only consider the element of gender and its implications, but also examine other pertinent issues including class, ethnicity and sexuality and their roles in shaping the texts and our understanding of them.

ENGL 3330 - Studies in the American Renaissance (3)
Prerequisite: Completion of English 1102 and one 2000-level English with a grade of C or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status.
An exploration of American writing from the Early Republic through 1880: this course will study writers across a range of genres, origins and regions who first gave the United States its literary voice. Students will consider the historical, political, aesthetic and cultural aspects of works that may come from social and political movements, popular fiction, religious history and literary history.

## ENGL 3331 - Major Movements in American Literature I (3)

Prerequisite: ENGL 2130 or 2131 or 2132
This course will explore key texts, authors, and literary movements in America before WW1. The coverage will include colonial and early national works by writers such as Edwards, Wheatley, and Franklin; major figures from the midnineteenth century including the Transcendentalists, Douglass, Hawthorne, Melville, Poe, and Dickinson; and include important works from Realism and Naturalism, such as Twain, Howells, DuBois, Norris and Wharton.

## ENGL 3332 - Major Movements in American Literature II (3)

Prerequisite: ENGL 2130 or 2131 or 2132
This course will provide a study of key texts, authors, and literary movements in America after WW1. The coverage will include the Lost Generation and the Harlem Renaissance, including, but not limited to, writers such as Hemingway, Fitzgerald, Cullen, Hurston and Hughes; major poets from the twentieth century like Stevens, Williams, Plath, Frost, Lowell, Ginsberg, Moore, Brooks, and Rich; and conclude with important works from Modernism and Postmodernism such as Faulkner, O’Neill, Albee, Miller, Morrison, Vonnegut and Pynchon.

## ENGL 3343 - Studies in African American Literature (3)

Prerequisite: Completion of English 1102 and one 2000-level English with a grade of C or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status.
This course examines texts that reflect varied African-American life experiences and considers their engagement with the rest of the American/World literary tradition. Students will study fictional and non-fictional works to explore the racial, gender, social, cultural and political constructions that have historically figured into African Americans' literary imagination and informed their material conditions. Students will also learn the conventions, terms and movements that will enable them to engage critically with African American literary expression

## ENGL 3350 - Ancient and Medieval Literature (3)

Prerequisite: Completion of ENGL 1102 and one 2000-level English with a grade of "C" or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status
This course surveys a wide range of Western and Eastern Literatures written between the time period extending from the Ancient Middle East through Ancient Greece and Rome, China's Early and Middle Periods, India's Golden Age, Islam's Golden Age and Medieval India and Europe. Representative works from these periods may include Gilgamesh, the Old and New Testaments, The Iliad and the Odyssey, the Confucian Analects, the Bhagavad-Gita, The Aeneid, the Koran, The Divine Comedy, The Decameron, Beowulf, The Canterbury Tales.

## ENGL 3435 Movements in $19^{\text {th }}$-Century British Literature (3)

Prerequisite: Successful completion of ENGL 2122 or 2122 with a C or better and sophomore status
In this course, students will learn about key movements and genres in nineteenth-century British literature and culture: Romanticism, the gothic, industrialization, sensation fiction, realism, "the woman question," decadence, empire, crime fiction, and naturalism. Considering texts chronologically, we will explore ways in which these movements and genres are not separate but overlap, influence, and comment upon each other. Reading poems, essays, short stories, a play, and novels, we will examine various aspects of social and literary change in Britain across the span of Queen Victoria's reign.

Georgia Gwinnett College 2015-16 Catalog

ENGL 3436 - Victorian Literature (3)
Prerequisite: Completion of English 1102 and one 2000-level English with a grade of C or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status.
This course will cover major texts, authors and themes of the British Victorian Period. Students will engage with authors such as Charles Dickens, Alfred Tennyson, the Bronte sisters and Oscar Wilde. Genres may include novels in a range of modes (e.g. realist, detective and gothic fiction), poetry, short stories, nonfiction and drama. In addition to examining major cultural influences, for example Romanticism, the Industrial Revolution and British Imperialism, students will consider the legacies of the Victorian era.

## ENGL 3437 - Twentieth-Century British Literature (3)

Prerequisite: Completion of ENGL 1102 and one 2000-level English with a grade of "C" or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status
This course is designed to expose students to the literature produced in England throughout the 20th century. Students will encounter writing from pre- to High- to post-modernism, from the height to the fall of the British Empire, and from before, during, and after World Wars I and II. Course readings will expose students to the dominant themes, literary techniques, and historical realities that influenced British writing throughout the century. Furthermore, the course will contextual the British experience through the larger lens of the cultural and political climates within and around England. Course material will be comprised of poetry, fiction, and drama that span the time period and the various perspectives, forces, and movements that shaped it. In so doing, the course will enable students to think about literary texts as both artistic productions and historical artifacts, capable of illuminating the broad history of humanistic inquiry and the specific realities that inform that inquiry. Authors may include Virginia Woolf, James Joyce, T.S. Eliot, E.M. Forster, George Orwell, W.B. Yeats, H.D., Zadie Smith, Salman Rushdie, Hanif Kureshi, Samuel Beckett, Stevie Smith, Seamus Heaney, Julian Barnes, Ian McEwan, and Pat Barker.

## ENGL 3450 - Renaissance Literature (3)

Prerequisite: Completion of ENGL 1102 and one 2000-level English with a grade of "C" or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status
This course explores the major authors of the Western world and the genres, themes and movements reflected in their works during the period from approximately the 15 th to the 17 th centuries. We will explore the literature of the period in the contexts of intellectual, historical, scientific and cultural developments such as the rise of humanism, the Reformation, metaphysics and scientific empiricism. Authors studied may include Ficino, Picco della Mirandola, Erasmus. Machiavelli, More, Bacon, Cervantes, Rabelais, Shakespeare, Spenser, Marlowe, Jonson, Descartes, Donne, Marlowe, Webster and Milton.

ENGL 3561 - Studies in the Literature of the Americas (3)
Prerequisite: Completion of English 1102 and one 2000-level English with a grade of C or higher (ENGL 2100, 2110, $2111,2112,2120,2121,2122,2130,2131$, or 2132) and sophomore status.
In this course students will discuss the Literature of the Americas from pre-Columbian times to the present. Students will investigate how discourses of race, religion, nation, gender and ethnicity shaped the region's myths of origin and its historical memory. The course will pay particular attention to the ways in which conquest, colonization, migration and immigration defined the cultural hybridity of writers of European and non-European descent. Students will study various writing genres including but not limited to autobiography, poetry, fiction, short stories, travel and historical writings and diverse oral traditions such as slave narratives, the testimonio and corridos.

## ENGL 3600 - Advanced Composition (3)

Prerequisite: ENGL 1102 and Sophomore Status
This course builds upon writing skills acquired in English 1101 and 1102 and enables students to engage in advanced techniques central to effective and sophisticated writing. It includes workshops and in depth study of writing as a process, with an emphasis on the conventions of discourse situations, invention, revision, editorial skills and document formatting.

## ENGL 3800 - Introduction to Creative Writing (3)

Prerequisite: ENGL 1102 and sophomore status
Introductory study and practice writing original poetry and fiction via selected readings in poetry, fiction and creative nonfiction that model methods and genres. Students will engage in workshops in which they plan, write, critique and revise their own and others' writing in these genres.

## ENGL 3822-Creative Writing Workshop: Fiction (3)

Prerequisite: Successful completion of English 1102 and English 3800 with a grade of C or higher This course expands on the techniques of fiction writing, focusing on various narrative elements such as story structure, characterization, point of view, narrative distance, theme and revision. By reading and discussing published fiction, students will learn some of the elements and decisions that make up literary fiction and work at applying this learning to their own writing. Students will also learn to critique each other's work in workshops and revise their work. Prerequisite: Successful completion of English 1102 and English 3800 with a grade of C or higher

## ENGL 3825 - Theories and Practice in Peer Tutoring (3)

Prerequisite: Completion of ENGL 1102 with a grade of B or higher and faculty recommendation
This course is designed to provide English majors with a theoretical background in and practical strategies for assisting student writers in one-to-one conferencing. Students will explore texts on writing pedagogies and theory in order to gain insight into writing processes and the practices of effective writing instruction. This course has two parts: reading and writing formally about writing center discourse and completing an experiential learning component in which students engage in tutoring. At the conclusion of this course, students will develop an original research project tailored to their individual interests, utilizing primary and secondary research skills. In consultation with a faculty mentor, this course may count toward the internship requirement in English.

## ENGL 3832 - Creative Writing Workshop: Poetry (3)

Prerequisite: Successful completion with a "C" or better of ENGL 3800 (Intro to Creative Writing)
This course teaches students to analyze and apply basic creative writing techniques-such as form, meter, rhyme, imagery, theme, and symbolism-to their own works of poetry as well to the critique of others' writing I workshops. The course will include discussion on the craft of poetry writing, close reading of published authors, and workshop sessions in which class participants will read, analyze, evaluate and discuss classmates' work. Special emphasis is placed on the idea of writing as process and revision.

## ENGL 3850 - History of Rhetoric (3)

Prerequisite: Successful completion of ENGL 1102 and ENGL 2801 with a grade of "C" or higher and sophomore status. This course will introduce students to the history of rhetorical principles from the ancient Greeks and Romans through the present with a focus on a changing and dynamic definition of rhetoric. Students will have an opportunity to read primary works, conduct research on some aspect of rhetoric, and apply persuasive techniques they learn.

## ENGL 3857 - Technical Writing and Communication Practices (3)

Prerequisites: Successful completion of ENGL 1101 \& 1102 with grades of C or higher This course teaches the major concepts and basic forms of workplace communication, document design and professional etiquette necessary for students to succeed as professionals in their chosen fields. This course strives to make students better competitors in the workplace by teaching them to be better communicators in efficiency-driven environments.

## ENGL 3866 - Introduction to Professions in Writing (3)

Prerequisite: ENGL 1101 and 1102 with grades of "C" or higher and sophomore status
This course provides an overview of a range of the possible professions in writing, supported by in-class presentations by invited speakers who will provide insight into their work and workplace through talk, examples, and class discussion. Assignments for the course will involve reflective and exploratory writing in and about the various genres presented, and emphasis will be placed on rhetorical variation. The writing professions explored in class may include activist writing, college teaching in rhetoric and composition, community writing, computers and writing, editing, environmental writing, free-lance writing, grant writing, literary journalism, magazine writing, new media writing, nonfiction writing, professional writing, marketing and advertising, publicity, publishing, medical writing, science writing, teaching English as a second language, screenwriting, teaching writing in public schools, technical writing, writing about technology, writing for nonprofits, and/or others.

## ENGL 3870 - Basic News Writing and Reporting (3)

Prerequisite: Completion of English 1102 with a grade of C or higher and sophomore status.
Basic news writing in a variety of media; the principles of journalistic writing and the fundamentals and techniques of news reporting and ethics. Practical assignments with laboratory exercises. Emphasis on news gathering and reporting techniques, utilization of news databases and the writing of various types of stories developed from beats and sources.

## ENGL 3880 - Writing and Digital Media (3)

Prerequisites: Successful completion of ENGL 1101 \& 1102 with grades of C or higher
This course focuses on how to adapt writing strategies and processes to the needs and demands of online readership. Students will consider the roles played by linking and intertextuality in online discourse, engage in multiple writing modalities including video \& image, perform rhetorical analyses of digital texts, consider rhetorical \& ethical issues relevant to online writing and learn strategies for developing usable and readable online texts.

## ENGL3890 - Rhetorical Criticism (3)

Prerequisites: Successful completion of ENGL 1102 and ENGL 2801 with a C or higher.
Rhetorical Criticism concentrates on the rhetorical analysis, interpretation and evaluation of written texts with emphasis on major developments in rhetorical criticism in the twentieth century. The course will provide students with intensive practice in writing rhetorical analyses.

## ENGL 4000 - English Experiential/Service Learning (3)

Prerequisites: Submission of required materials prior to semester of enrollment (see English 4000 manual); approval of the student mentor in the major and the ENGL 4000 coordinator/instructor; and minimum 60 hours of college-level credit completed.
English 4000 provides students with learning experiences tailored to their interests and affords them opportunities to learn about careers and gain practical experience through the completion of applied internships and experiential/service learning projects. Students will be placed in internship or service/experiential learning positions where they apply knowledge and skills from the field of English related to the concentrations they are pursuing in real-world contexts. Prior to semester of enrollment students must submit required materials (see English 4000 manual); receive approval of the student mentor in the major and the ENGL 4000 coordinator/instructor; and complete a minimum of 60 hours of college-level credit.

## ENGL 4200 - Special Topics, English (3)

Prerequisite: Completion of English 1102 with a grade of C or higher; additional prerequisites to be announced based on topic of study.
Topics and prerequisites to be announced. Focused study of a problem, question, issue, or specialized subject. A variety of courses is offered every semester; courses may focus on widely varying topics. May be repeated for credit if topic varies.

## ENGL 4410 - Studies in Restoration and Neoclassical Literature (3)

Prerequisite: ENGL 1102 and completion of one 2000 level literature survey
The Restoration and Neo-Classical periods were marked by dramatic shifts in the intellectual landscape of Western Europe. Political systems, religious traditions and cultural conventions were giving way before revolutions in theology, philosophy and science, the rise of literacy and the expansion of national power across a transatlantic sphere of influence. Against this backdrop this course examines the works reflective of (and in some cases responsible for) these transformations from authors such as Milton, Bunyan, Dryden, Behn, Swift, Locke, Pope, Defoe, Samuel Johnson, Descartes, Moliere, de Sade, Edwards, Paine and Franklin.

## ENGL 4412 - Studies in Shakespeare (3)

Prerequisite: ENGL 1102 with a grade of "C" or higher and any 2000 level English survey course with a grade of "C" or higher
A study of selected comedies, histories, tragedies, and/or romances representative of Shakespeare's dramatic work. May include one or more critical or theoretical frameworks as determined by the instructor.

## ENGL 4520 - Literature and the Law (3)

Prerequisite: Successful completion of ENGL 1102 with a grade of "C" or better and successful completion with a grade of "C" or better of one 3000-4000 level ENGL course OR 3000 level CJCR course, OR 3000 level POLS course It is often in art that we find reality and often in reality that we find art. In this course, students will explore the fascinating and compelling connection between literature and the law. By examining the role and function of narrative within the law and the way it is administered and the role and function of law in works of literature, students will come to a better understanding and appreciation for both the law and the way in which literature expresses and affects societal forces. Issues such as crime and punishment, outlawry, justice, heroism and villainy, power and authority, race and gender, revenge and social order will be considered, among others.,

## ENGL 4620 - Studies in Modern Poetry and Poetics (3)

Prerequisite: ENGL 1102 and completion of one 2000 level literature survey
Studies in Modern Poetry and Poetics considers creative and critical work by such major authors as Gerard Manley Hopkins, William Butler Yeats, Ezra Pound, T.S. Eliot, Edna St. Vincent Millay, H.D. (Hilda Doolittle), William Carlos Williams, Marianne Moore, Wallace Stevens, Robert Frost, Louis Zukofsky, Langston Hughes, Countee Cullen, W. H. Auden, Rabindranath Tagore, and others.

## ENGL 4630 - Studies in Modern Fiction (3)

Prerequisite: ENGL 1102 and completion of one 2000 level literature survey
This course introduces the key elements of modern fiction (history, authorial techniques, major/minor authors and theories) that provide students with the necessary tools to read, think and write critically about the genre.

## ENGL 4720 - American Realism and Naturalism (3)

Prerequisite: ENGL 1102 and completion of one 2000 level literature survey
Popularly, aesthetically and philosophically considered, realism and naturalism dominated American literature of the late 19th and early $20_{\text {th }}$ centuries. Yet these hugely influential literary modes were notable as much for their popularity and indebtedness to American consumer culture as for their ambivalence towards American popular culture, consumerism and the very act of literary representation itself. This course traces these aesthetic and social ambivalences in works from authors such as Stowe, Howells, Twain, Henry James, Wharton, Jewett, Chesnutt, Dreiser and Norris.

## ENGL 4728 - Organizational Rhetoric (3)

Prerequisite: ENGL 1102 with a grade of C or higher and ENGL 2801
This course introduces students to the theories and practices of organizational rhetoric. Because all organizations (nonprofit, academic institutions, corporations) use rhetoric to create cohesive identities, establish a public image, and effect organizational change, the premise of this course is that all organizations are rhetorical constructs. By examining the rhetorical composition of organizations, as well as the rhetorical strategies employed by organizations, students will develop a rich theoretical framework for studying organizations as rhetorical texts. We will focus on defining key terms of study-organizations, institutions, identity-and interrogating the major trends in organizational rhetoric including narrative theory, interpretive theory, constructivist theory, and discourse analysis. Throughout the term, students will develop a case study about an organization of their choice, applying course principles to their investigations.

## ENGL 4850, Senior Seminar (3)

Prerequisites: Completion of the GGC General Education Core Areas A-F and successful completion of no fewer than 18 credits hours of upper-level
The senior seminar is a forum where rising seniors can confer with one another about their English experiences, develop their own and collaborate upon one another's major capstone projects and receive faculty guidance and feedback on their work, as well as on their post-graduate vocational, professional, or academic goals.

## ENGL4860 - Visual Rhetoric (3)

Prerequisites: Successful completion of ENGL 1102 and ENGL 2801 with grades of C or higher A course in how images affect the values, attitudes, beliefs and actions of audiences. Through the development of literacy in visual rhetoric, it builds on the deep tradition in rhetoric of supporting the role of a well-educated citizenry in maintaining a vital democracy.

## ENGL 4875 - Applied Journalism (3)

Prerequisite: Successful completion of ENGL 3870 or special permission from the instructor This course applies basic news writing and reporting skills to the specific "beats" common to many journalists by asking students to produce new content in a format that simulates the high-paced, deadline-oriented work associated with daily or weekly publications. Depending on the instructor, these beats could include local news reporting-the courts, the police, the planning board, local politics, school board, and high school sports-or more feature-bases reporting like food, music, theatre, and the arts and entertainment. In a classroom environment that emphasized experiential learning, students will work in small teams to source stories, write copy, and copy edit. The course will work toward publication of student reporting in real news and media outlets in the second half of the semester.

## ENGL 4880 - Digital Rhetoric (3)

Prerequisite: Successful completion of ENGL 1102 and ENGL 2801 with a grade of "C" or better
This course is a study of the relationship between digital technologies and rhetoric. Working from a survey of the history of human-computer interaction and a survey of classical and modern rhetoric, the course considers the myriad ways that

Georgia Gwinnett College 2015-16 Catalog
textuality, community, and identity are shaped by digital technologies. Course topics may include social media, digital identities, the impact of multiple modalities on discourse, the impact of digital media on our understandings of social and political issues, virtual and augmented reality, genres like internet memes and games, and theories of copyright and remix. Students will be expected to compose expository and research driven texts in digital environments, and to consider the political, economic, social, and cultural impacts of digital technologies.

## ENGLISH FOR ACADEMIC PURPOSES (EAP)

## EAP 0080 - EAP for Success Reading I (4*)

This course is designed for non-native English speaking students. Students use pre-college level and college level materials to develop academic reading skills necessary for success in college level coursework. Students will demonstrate understanding of academic written material and respond critically to readings in class discussions and in writing.
*Institutional load credit only.

## EAP 0081 - EAP for Success Structure and Composition I (4*)

This course is designed for non-native English speaking students. Students use pre-college and college level materials to develop academic writing skills necessary for success in college level coursework. The focus of this course is on writing paragraphs and short essays using correct grammatical structures of English.
*Institutional load credit only.

## EAP 0082 - EAP for Success Academic Listening/Speaking Skills (3*)

This course is designed for non-native English speaking students who need to improve their speaking and listening skills to ensure accuracy and confidence in communication for academic success. The course will focus on the pronunciation of distinct sounds, intonation, rhythm and stress patterns in the English language as well as on developing listening and presentation skills. Placement in the course is contingent upon COMPASS Listening score.
*Institutional load credit only.

## EAP 0090 - EAP for Success Reading II (4*)

This course is designed for non-native English speaking students. Students use college level materials to develop academic reading skills necessary for success in college level coursework. Students will demonstrate understanding of written material and respond critically to college level reading in writing and class discussions. An Exit Reading Exam is required to exit the EAP Program.
*Institutional load credit only.

## EAP 0091 - EAP for Success Structure and Composition II (4*)

This course is designed for non-native English speaking students. Students use college level materials to develop academic writing skills necessary for success in college level coursework. The focus of this course is on writing essays in various genres (e.g., narrative, expository) and responding to academic texts in writing using correct grammatical structures of English. Exit Writing Test is required to exit the EAP Program.
*Institutional load credit only.

## EAP 0092 - EAP for Success Academic Communication Skills (3*)

This course develops oral communication skills at the advanced level. Focus is on listening comprehension, note taking, appropriate language usage in various registers and oral presentations. Placement in the course is contingent upon COMPASS Listening score or successful completion of EAP for Success Listening/Speaking Skills.
*Institutional load credit only.

## ENGLISH LITERATURE AND LANGUAGE COURSES (ELAN)

## ELAN 3000 - Language, Literacy and Culture (3)

Prerequisite: Admission to the Teacher Education Program
This course introduces social and cultural theories of language, language acquisition, literacy teaching and learning as they relate to the education of culturally and linguistically diverse students. The course will include pedagogies and practices that effectively support all students in the development of language, literacy and content while affirming students' cultural identities and validating their personal histories. Candidates will explore oral language development, with special emphasis on linguistic variation and cultural diversity and the literacy development of multilingual/multi-
dialectical students. Candidates will also examine classroom instruction, environments and discourse practices informed by linguistic and cultural theories.

## ENVIRONMENTAL SCIENCE (ESNS)

ESNS 1101K - Introduction to Environmental Science: Natural Science (4)
Prerequisite: MATH 0099; READ 0098, ENGL 0099
This course is an introduction to the science of the natural environment. Upon completion of this course, students will be able to 1 . Describe and apply the basic principles of biology and physical science, including chemistry and earth science, as they relate to environmental science; 2 . Describe the physical, chemical, and biological processes of the atmosphere, lithosphere, hydrosphere and biosphere; 3. Describe the scientific understanding of global environmental change, including global climate change, and discuss the implications and possible remediation of those changes; 4. Discuss environmental problems and their solutions in a natural science context; and 5. Communicate effectively regarding environmental science topics in oral and written form using appropriate scientific terminology.

## ENVIRONMENTAL SCIENCE (ESSS)

## ESSS 1102 - Introduction to Environmental Science: Social Science (3)

Prerequisite: ENGL 0099 and MATH 0099 or equivalent
This course is an introduction to the ways that people interact with their environment. Various social, cultural, legal and political perspectives on the environment are considered. Upon completion of this course, students will have demonstrated ability to: 1 . Communicate environmental science issues to various audiences in both written and oral form. 2. Apply social scientific research methods and techniques to address environmental issues. 3. Demonstrate critical thinking and analytical problem solving skills related to political or social environmental issues. 4. Communicate the sociocultural and ethical issues connected to environmental matters. 5. Demonstrate knowledge of the legal, economic, and political frameworks involving environmental policymaking.

## EXERCISE SCIENCE (EXSC)

## EXSC 3000 - Introduction to Exercise Science \& Wellness Promotion (3)

Co-requisite: BIOL 2451 K or BIOL 3010K
An introduction to the field of exercise science and wellness promotion. Emphasis is placed upon learning about the various sub-disciplines related to exercise science and wellness promotion as well as study the basic physiological concepts and principles that relate to exercise and physical activity in the general population. Course outcomes are: 1) Demonstrate knowledge of the philosophical and historical foundations of the field of exercise science and wellness promotion. 2) Develop an understanding of basic exercise science and wellness concepts and how these concepts can be applied to promote health, fitness, and wellness in the general population. 3) Recognize and define the various exercise science and wellness promotion sub-disciplines and how they relate to career options. 4) Demonstrate knowledge of current issues and future directions of exercise science and wellness promotion.

## EXSC 3101K Exercise Physiology (4)

Prerequisites: BIOL 2452 K or BIOL 3010 K and BIOL 3020 K ; and BIOL 2516 K or BIOL 3400 K
Focuses on alterations in body systems and organs during physical activity with emphasis on metabolic, cardiorespiratory and body composition parameters. Laboratory experiences employing physiological principles during active participation in exercise are also included. Upon completion of this course, students will: (1) Describe the role of bioenergetics as it relates to exercise. (2) Describe the production of energy during exercise and the changing factors that govern its control. (3) Explain the role of the endocrine, cardiovascular, respiratory, muscular and nervous systems in exercise. (4) Explain the adaptations that take place within the body as a result of chronic physical training and detraining. (5) Explain the influence of the environment on exercise and performance. (6) Apply the principles of exercise physiology to training for specific outcomes such as fitness or performance. (7) Demonstrate proficiency with laboratory equipment and tests

EXSC 3200 - Psychosocial Aspects of Health and Wellness (3)
Prerequisites: PHED 1101, PSYC 1102, MATH 2000
An introduction to theory and research of psychological processes that influence human performance in numerous movement settings including sport, exercise and rehabilitation.

Georgia Gwinnett College 2015-16 Catalog

## EXSC 3350 - Community Wellness (3)

Prerequisite: EXSC 3200
EXSC 3350 serves as an overview of community wellness programs. Students will be exposed to various health issues within community subgroups and the analysis of the interrelationship of the political, social, and economic dimensions of community wellness, as well as cultural diversity issues within domestic and global contexts will be discussed. Upon completion of this course, students should be able to: 1) Explain characteristics of community health agencies and organizations including roles of different types of agencies (e.g., federal, state, local governments, for-profit, non-profit) in wellness promotion. 2) Explain the role of various key community figures including the community wellness educator as part of the solution to community wellness problems. 3) Identify current trends in preventive wellness. 4) Examine key multicultural health issues and identify factors that contribute and resources that address these issues. 5) Identify barriers faced by different communities attempting to achieve healthy lifestyles. 6) Identify and describe various resources that can be utilized in the design, development and implementation of community wellness education efforts taking into account cultural and social diversity. 7) Describe and evaluate examples of community wellness programs 8) Develop a community needs assessment for a cultural group including relevant community resources, cultural impact, and sustainability to meet the identified needs.

## EXSC 3500 K - Biomechanics (4)

Prerequisite: BIOL 2451 K or BIOL 3010 K , PHYS 1111 K or PHYS 2211 K
Application of mechanical principles to anatomical concepts relevant to human movement analysis, muscular control of movement, and injury mechanism across the lifespan and human movement situations (e.g., performance, training, rehabilitation, injury prevention, etc.). Application of functional anatomy and tissue biomechanics occurring during various movements through laboratory activities. Upon completion of this course, students should be able to: 1 . Describe the structure and function of the human musculoskeletal systems as they relate to human movement 2. Describe the anatomical structure and mechanical properties of biological tissues as they relate to risk of injury and healing 3. Evaluate movement technique using a movement analysis model 4. Apply biomechanical principles (kinematics and kinetics) to human movements (e.g. performance, training, rehabilitation, injury prevention, etc.) 5. Evaluate the mechanics of exercises and activities as they affect the human tissues. 6. Apply mechanical principles related to internal tissue loading to improving tissue structure and function and to injury prevention in various populations.

## EXSC 3700 Human Motor Learning and Control (3)

Prerequisites: EXSC 3000; MATH 2000
An examination of the motor control and learning area, including neural and mechanical systems underlying motor behavior and application of theoretical concepts to instructional and clinical settings. Upon completion of this course, students will: (1) Describe the strengths and weaknesses of the prominent theories of motor control and learning in describing important characteristics of human action (2) Describe the cognitive and neuromotor processes involved in the planning and execution of goal-directed actions (3) Identify the variables that do and those that do not influence the learning of movement skills (4) Describe a number of practice, or training methods that a practitioner can use to promote better transfer of learning, long-term retention and recall of movement skills (5) Describe the various types of and frequency with which augmented feedback can be used to facilitate the learning of movement skills (6) Demonstrate how different types of underlying pathologies within the human system influence how movements are controlled, coordinated and learned.

## EXSC 3800 - Nutrition in Health and Exercise (3)

Prerequisite: BIOL 2451 K and 2452 K or BIOL 3010 K and BIOL 3020 K
EXSC 3800 is an in depth look at the dietary and metabolic factors which may lead to enhanced human performance. Special attention will be devoted to the role macronutrients (carbohydrates, fats, protein and water) have on meeting the energy and nutrient needs for improved health and exercise outcomes. Additional attention will be invested in examining the role in which micronutrients and ergogenic aids may contribute to performance, as well as the effect of eating disorders, the female athlete triad, and additional special populations (e.g., individuals with diabetes, cardiovascular disease, etc.) have on human health and human performance. Upon completion of this course, students should be able to: 1. Describe the role of bioenergetics as it relates to exercise and/or physical activity. 2. Apply the energy requirements for specific exercise and/or physical activity. 3. Understand the governing principles concerning nutritional needs for special populations. 4. Understand the dietary and hydration requirements needed for peak human performance. 5. Recognize the link between nutritional intake and optimal performance. 6. Describe and discuss relevant theories regarding weight loss and weight gain. 7. Prepare diets for various types of athletes, athletic teams, and nonathletes. 8. Comprehend the role of ergogenics in human performance.

## EXSC4000 - Physical Dimensions of Aging (3)

Prerequisites: BIOL 2452 K and EXSC 3000 or permission of instructor
This course will examine the scientific evidence concerning the relationship between level of physical activity and physical, mental and psychosocial well-being during aging. Specifically, the course will address "usual" changes that occur during aging, changes related to inactive lifestyle (especially functional mobility and health declines), the positive effects of an active lifestyle on successful again and the prevention of disease and disability and the use of functional assessments and exercise prescription for healthy and frail older adults. Upon completion of this course, students will be able to: describe current demographic trends, health, disability and disease status of older adults; demonstrate knowledge of the physiological, biological and psychosocial theories of aging for development and implementation of physical activity programs for healthy and frail older adults; describe individual differences in physical aging; premature. Usual and successful; explain "usual" age-related changes to the body composition, cardiorespiratory, musculoskeletal, nervous system and sensory system; describe physiological, psychosocial and functional changes related to inactivity; describe the role of physical activity in increased health span, general well-being and decreased diseases/disability; demonstrate use of functional performance assessment and exercise prescription for healthy and frail older adults.

## EXSC 4100 K - Testing and Prescription of Exercise (4)

Prerequisites: EXSC 3101
This course serves as a capstone class providing students with the opportunity to demonstrate accumulated knowledge from core Exercise Science courses in the practical application of clinical Exercise Science. Students will learn how to appropriately utilize the American College of Sports Medicine's (ACSM) guidelines to test and interpret cardiovascular, metabolic, hemodynamics and musculoskeletal capabilities with the intention of accurately assessing and prescribing proper physical activity for the maintenance of health, rehabilitation and/or fitness outcomes.
Upon completion of this course, students should be able to: 1) Demonstrate competence in understanding the principles of exercise physiology (i.e., bioenergetics, exercise and cardiovascular physiology, resting and exercise metabolism and endocrine function); 2) Demonstrate an understanding of the program standards for the American College of Sports Medicine; 3) Demonstrate competence in performing and interpreting standardized field and clinical evaluations of the following health and physical fitness components: body composition, aerobic and anaerobic capacity, flexibility, hemodynamics and metabolism; 4)Demonstrate competence in prescribing safe and appropriate exercise for the maintenance and control of cardiovascular function, as well as prevention and rehabilitation of cardiovascular disease using various methods (i.e., metabolic equations, anthropomorphic measurements and graded exercise testing); 5) Demonstrate competence in interpreting general health and medical information and clinical and field assessments of cardiovascular and musculoskeletal health, so as to prescribe safe and appropriate exercises for rehabilitation and maintenance of health; and 6) Demonstrate competence in writing scientific summaries of pertinent peer reviewed materials and collected data utilizing the American Psychological Association (APA) format.

## EXSC 4150 - Principles of Strength and Conditioning (3)

Prerequisite: BIOL 2451 K and BIOL 2452 K
Co-Requisite: EXSC 3101K
This course examines the scientific principles of athletic conditioning and explores advanced methods and techniques associated with general and sport specific athletic skills. Major topics will include athletic conditioning of both aerobic and anaerobic systems, performance testing procedures, and sport-specific program design. The course is also designed as a preparatory course for the NSCA Certified Strength and Conditioning Specialist exam. Upon completion of this course, students will be able to: 1) demonstrate an in-depth knowledge of exercise physiology as it related to training athletes, with emphasis on neuromuscular and bioenergetics adaptations, 2) demonstrate and apply athletic testing procedures in order to evaluate physiological parameters associated with athletic performance, 3) apply the principles of exercise specificity to the planning of training regimens that are appropriate for specific sports, 4) design sport-specific training regimens including appropriate use of periodization strategies, and 5) relate special considerations (such as nutrition, weight management, environmental parameters, and ergogenic aids) in the training of athletes to performance outcome. Students who previously took Advanced Methods of Strength and Conditioning will not receive credit for this course.

## EXSC 4200 - Epidemiology and Physical Activity (3)

Prerequisite: BIOL 2451K and 2452K, EXSC 3000
This course examines the methods of epidemiology and the relationship between physical activity (PA) and disease, especially chronic disease. Upon completion of this course, students should be able to: 1) Describe contemporary trends in the prevalence rates of leading risk factors of morbidity and mortality in the U.S. 2) Identify behavioral correlates of the major causes of morbidity and mortality in developed nations (e.g., USA) as opposed to underdeveloped nations

Georgia Gwinnett College 2015-16 Catalog
(e.g., Afghanistan), and explain how behaviors such as physical activity interact with other known health risk factors to promote health and prevent disease. 3) Describe the methods of epidemiology and the criteria for establishing causality for health risk factors. 4) Describe and discuss major epidemiological evidence that shows an association between habitual behaviors, especially physical activity, with morbidity and mortality. 5) Identify and discuss the disease-specific benefits and risks of physical activity with cardiovascular disease, hypertension, hyperlipidemia, obesity, diabetes, osteoporosis, cancer and immunity, anxiety and depression. 6) Designate and discuss biologically plausible mechanisms whereby physiological adaptations to physical activity might reduce risks for disease or improve quality of life.

## EXSC 4300 Worksite Health Promotion (3)

Prerequisites: EXSC 3000, EXSC 3200
This course will examine the rationale, philosophy and justification for developing health promotion programs in the workplace. Essential program components including design, planning, marketing, implementation and evaluation will be analyzed. Employee health risks will be identified, along with behavior change concepts and related program intervention strategies. Further, ergonomic issues will be explored to determine how they contribute to worksite musculoskeletal injuries. Strategies that can minimize human error, injuries, discomfort and dissatisfaction will also be discussed. In addition, career preparation and opportunities will be addressed. Upon completion of this course, students should be able to: (1) Describe the potential benefits of worksite health promotion programs for employers and employees. (2)Describe the relationship between lifestyle behaviors and various health risks. (3) Describe common musculoskeletal worksite injuries and the anatomical \& physiological factors which either prevent or contribute to those injuries. (4) Demonstrate ergonomic testing of a worksite and make appropriate recommendations to reduce risk of injury (5) Describe how health promotion programs are designed, implemented and evaluated in the workplace.

## EXSC 4400 - Wellness Promotion Program Planning (4)

Prerequisite: EXSC 3350
EXSC 4400 serves as a capstone class providing students with the opportunity to demonstrate accumulated knowledge from core Exercise Science/Wellness courses in the practical application of Wellness Promotion. Students will learn appropriate skills necessary for planning, implementing, and evaluating health promotion program for a specific priority population. Upon completion of this course, students should be able to 1) apply theories and models commonly used in wellness promotion program planning 2) demonstrate ability to retrieve and analyze data to conduct a needs assessment 3) demonstrate the ability to create a wellness program based on a needs assessment including rationale, goals, objectives, intervention, and appropriate evaluation methods 4) advocate for a wellness issue through various means.

## EXSC 4410 - General Medical Conditions in the Active Population (3)

Prerequisite: BIOL 2452 K or BIOL 3020K
This is an upper level undergraduate course in various techniques and skills of athletic training. This includes the application of anatomy knowledge in your development of evaluation techniques of injuries and illness common to athletes and other individuals. Skills include interviewing clients as well as inspection, auscultation, and palpation. Each student will demonstrate appropriate moral and ethical standards as related to examining another individual. In order to meet the standard set forth in the $5^{\text {th }}$ edition of the Athletic Training Education Competencies and align with future accreditation by The Commission of Accreditation of Athletic Training Education the following objectives must be met to successfully complete this course. Upon completion of this course, students should be able to: 1) Identify components of a health and family history; 2) Demonstrate ability to obtain vitals such as upper/lower extremity pulses, blood pressure, respirations, and temperature; 3) Demonstrate appropriate use of the otoscope; 4) Demonstrate appropriate auscultation of the heart; 5) Demonstrate appropriate auscultation of the lungs; 6) Demonstrate appropriate auscultation of the bowels; 7) Identify components of the self-breast exam; 8) Identify components of the self-testicular exam; 9) Identify components of the Tanner's Stages of Development; 10) Demonstrate the ability to complete a neurological examination; 11) Demonstrate the ability to complete a cranial nerve examination.

## EXSC 4420 - Rehabilitation Techniques in Sports Medicine (3)

Prerequisite: BIOL 2452 K or BIOL 3020 K
This course is an investigation and analysis of current trends in rehabilitation, muscle testing, and evaluation. Upon completion of this course students will be able to: Plan and implement a comprehensive rehabilitation and reconditioning program for injuries/illness sustained by athletes.

## EXSC4700 - Exercise Science Internship (3-6)

Prerequisites: Four EXSC Courses ( 3000 or higher) and permission of Internship Committee.

EXSC 4700 is field experience and its analysis using appropriate theory, skills and techniques taught within the major of Exercise Science. Students are required to work 135 to a maximum of 275 contact hours on site (for 3 credit hours) or 300 to a maximum of 400 contact hours on site for ( 6 credit hours) across the semester. Alternatively, students may take this course on two separate occasions for 3 credit hours each to optimize their practical experience in the field of EXSC. This is an experienced based learning course under the direct supervision of an internship supervisor on site and overseen by an EXSC faculty coordinator. Students who wish to enroll in tis course must have completed 4 EXSC courses at the 3000 level or above, apply for acceptance into the internship by the application date, and receive approval from their major adviser and the internship committee for both 3 and 6 hour options. Furthermore, the location and experience goals of the internship must be approved by the EXSC internship committee. Upon completion of this course, student should be able to: 1) Participate in an internship relevant to the field of Exercise Science for 100-120 hours during the semester. 2) Communicate theoretical knowledge in Exercise Science effectively in oral and written form within a practical setting. 3) Communicate with internship and faculty supervisor effectively in oral and written form regarding expectations and responsibilities. 4) Critically analyze integration of academic theory and practical experience. 5) Problem solve practical issues using theoretical knowledge.

## FILM (FILM)

## FILM 1005 - Introduction to Film (3)

Introduces students to the serious study of cinema, focusing on various categories of film, including classical Hollywood films, international art films, the documentary and experimental film. Examines the stylistic and rhetorical dimensions of film language, including such aspects as narrative structure, cinematography, staging, editing and sound.

## FILM 2700 Film History (3)

Prerequisite: ENGL 0099; ENGL 0989
This course provides students with an understanding of the historical links between film technologies, narratives, styles, spectatorship, and subjects, by examining the major developments and movements in the history of motion pictures. The course will consider major historical trends in cinema that have shaped peoples' experiences and influenced the ways in which they have engaged with the world through the medium of film.

## FILM 3010 -Video Production I (3)

Prerequisite: FILM 1005 (grade C or higher) and ITEC 2110 (grade of C or higher; or permission of instructor This course introduces students to fundamental digital video production techniques, principles of narrative construction, and an overview of film and video and video theory and criticism. The course combines theory with hands-on exercises and experience, enabling students to develop the technical and analytical foundations necessary in the video production, production, and postproduction phases. Students will acquire the conceptual abilities needed to plan and execute a variety of short video projects. Basic skills in camera operation, scripting and planning, and post-production are emphasized.

## FILM 3180 International Cinemas (3)

Prerequisites: ENGL 1102 and consent of the instructor or ENGL 1102 and completion of one of the following: FILM 1005, ARTS 1100, MUSC 1100, ENGL 2100, ENGL 2110.
An examination of major films and directors from a specific country, continent, or international movement. Films will be studied in their cultural, critical and industry contexts and in terms of historical background, literary sources, narrative conventions and plot structures. May be repeated once if the topic varies. Topics may include (but are not limited to) such areas as Latin-American Cinemas, Japanese Cinema, the French New Wave.

## FILM 3280 - Film Genres (3)

Prerequisites: FILM 1005 (grade of "C" or better), ENGL 1102 (grade of "C' or better, sophomore status; or consent of instructor.
This course offers a focused study of genre theory as applied to specific genres such as horror, the musical, comedy, and melodrama. May be repeated for credit if the topic varies.

## FILM 3380 - Film Authorship (3)

Prerequisite: FILM 1005 (grade of "C" or better) or consent of instructor; and ENGL (grade of "C" or better); and sophomore status.

Film Authorship teaches the study of authorship in cinema and other forms of moving-image media. The course focuses on the concept of authorship throughout the history of film studies by looking at the career of one or more film directors in varying historical, cultural, ideological, theoretical, and aesthetic contexts. Possible topics might be (but are not limited to) the career of a single director (such as Alfred Hitchcock or Spike Lee), "group authorship" in national cinemas (Italy, France, U.S.); or particular groups of film authors (i.e., African-American film authorship.

## FILM4000K - Special Topics in Film (3)

Prerequisites: FILM 1005 or consent of instructor; and ENGL 1102 and sophomore status.
This course offers a focused study of a particular area of Film Studies such as Film Genres, ,Major Filmmakers, Gender and Film, Film and Crime, Film and History, or Psychology and Film. May be repeated for credit if the topic varies; May be offered during any semester, as needed.

## FILM 4080 - Gender and Film (3)

Prerequisite: FILM 1005 (grade of "C" or better) or consent of instructor; and ENGL 1102 (grade of "C" or better); and sophomore status (at least 30 credits of coursework complete).
This course offers a focused study of the representation of gender in film from a variety of film traditions, and historical and analytical perspectives. Topics may include (but are not limited to): Female filmmakers throughout history and across continents; Feminist Films; Representations of Femininity in Hollywood; Sexuality and Film; Queer Theory.

## FINANCE (FINA)

## FINA 3000 - Financial Management I (3)

Prerequisites: MATH 1111 or MATH 1001, ECON 2106, ACCT 2101
This course introduces students to the basic concepts of finance. These concepts are necessary understanding corporate and personal financial management. Topics include financial statement analysis, time value of money, security valuation, cost of capital, and capital budgeting.

## FINA 3101 - Money and Banking (3)

Prerequisites: ECON 2105; ECON 2106; BUSA 2000.
Cross-listed with ECON 3101
An in-depth study of monetary theory and policy recommendations, banking institutions and other financial and credit structures.

## FINA 3102 - Financial Management II (3)

Prerequisite: FINA 3000
This course is a continuation of FINA 3000 and deals with an in-depth study of long-term financing and capital structure decisions and working capital management. Topics include more complex issues in time value of money and security valuation (including the capital asset pricing model), risk and return, capital structure, dividend policy, weighted average cost of capital, capital budgeting and working capital management.

FINA 3400 - Public Sector Economics (3)
Prerequisite: ECON 2100 or ECON 2106 or Permission of Instructor
Cross-Listed: ECON 3400
This course investigates how government spending and taxation impacts individuals, markets and the economy in general. It covers the different methods used to evaluate these government policies and aims to increase students' awareness of the impacts of current policies. The spending policies covered include education, social security and health insurance with revenue policies include income, property and corporate taxes.

## FINA 4101 - International Finance (3)

Prerequisite: FINA 3000
In this course, student will get an overall understanding of what International Finance is, what the factors that can affect the financial results of a firm doing business internationally are and what the firm can do to diminish its exposure to these factors.

A study of the investment process and various financial investment alternatives available to investors with concentration on the formulation of a sound investment program for both individuals and institutions. Topics include stock and bond analysis, securities markets, futures contracts, option contracts, efficient market hypothesis, fundamental analysis and technical analysis.

## FINA 4104 - Financial Derivatives (3)

Prerequisite: FINA 3000
This course is designed to help students gain thorough understanding of the concepts of futures, options and other financial derivative instruments. It focuses on the introduction of risk allocation, structure design, valuation, pricing model and hedging techniques of financial derivatives and their applications to financial-risk management.

## FINA 4105 - Financial Planning (3)

Prerequisite: FINA 3000
This course will introduce students to topics on retirement planning, insurance planning, credit card planning, buying homes, tax planning and strategies and different investment products.

## FINA 4120 - Introduction to Econometrics (3)

Prerequisite: ECON 2105, ECON 2106, and BUSA 3000
Cross-Listed: ECON 4120
This course provides an introduction to the foundation for understanding and applying the basic techniques of regression models in economic analyses. The course will cover the types of data used in economic modeling, modeling techniques such as simple regression model, multiple regression model, and other models, and issues of variable selections. The focus of the course will be on how to apply these techniques to data and generate empirical results and how to interpret these results in a meaningful common sense language.

## FINA 4200 - Security Analysis and Portfolio Management (3)

Prerequisite: FINA 3000
Students will learn about investment alternatives available to investors and techniques to analyze these alternatives. Asset pricing models, security valuation, risk-return analysis and evaluation of portfolio performance are among the topics that will be covered.

## FINA 4201 - Financial Markets and Institutions (3)

Prerequisite: FINA 3000
Asset, liability and capital management for firms operating in the dynamic environment of the financial-services industry. Includes the regulation and evolution of depository institutions.

## FINA 4202 - Mergers and Acquisitions (3)

Prerequisite: FINA 3000
This course will provide an introduction and an overview of mergers and acquisitions. In today's world of aggressive and strategic corporate policy-making, this course will not only provide a theoretical framework to prospective business leaders, but will also enable them to cope with some of the real problems of mergers and acquisitions with a greater degree of confidence. Some of the topics to be covered in this course include: motives and determination of mergers; merger tactics; leveraged buyouts (LBOs); divestitures; safeguards against corporate raiders and junk bonds; and the various theories of mergers.

## FINA 4700 - Special Topics in Finance (3)

Prerequisite: FINA 3000; Approval of Advisor
This course provides a supervised study of a current, relevant topic that is otherwise not covered in any course already in the catalog. The course may be repeated for credit with different topics. A willing professor must first agree to carry out an independent study with the student on the proposed topic per the School of Business policy.

## FINA 4751 - Internship in Finance (3)

Prerequisite: FINA 3000, FINA 3000/4000 level elective and 3.0 overall GPA
Individually designed learning opportunity in which the student is involved in the normal financial management related operations of an organization in the private or public sector.

## FRENCH (FREN)

## FREN 1001 - Elementary French I (3)

Introduction to listening, speaking, reading and writing in French and to the culture of French-speaking regions.

## FREN 1002 - Elementary French II (3)

Prerequisite: FREN 1001 or permission of the instructor
Continued listening, speaking, reading and writing in French with further study of the culture of French-speaking regions.

## FREN 2001 - Intermediate French I (3)

Prerequisite: FREN 1002 or permission of the instructor
A continuation of development in listening, speaking, reading and writing skills in French with further study of the culture of francophone regions and an introduction to French-language literature.

## FREN 2002 - Intermediate French II (3)

Prerequisite: FREN 2001 or permission of the instructor
A review and expansion of French grammar with intensive practice in conversation and writing. Culture and history will be examined through French-language literature, news reporting and film.

## FREN 3010 - French Conversation and Composition (3)

Prerequisite: ENGL 0989; ENGL 0099; Completion of French 2002 or the equivalent, as determined by the instructor (through AP, IB or CLEP credit or through the French placement exam)
This upper-level course is designed to improve students' conversation and composition skills through the study of French film. Emphasis will be placed on vocabulary building and advanced grammar structures. This course is taught entirely in French.

FREN 3045 - French Literature and Civilization in Translation (3)
Prerequisite: ENGL 1102 and FREN 1001 or permission of instructor
FREN 3045 is a survey of French-language literature that presents writings in the context of the major developments of a broad historical period. The course will chronologically follow the evolving geography, history, and artistic and intellectual movements of French-speaking areas of the world. While texts will be primarily read in English, linguistic and poetic features of the original works will also be explored. For this reason, students of FREN 3045 must have a basic familiarity with the French language. The course may be repeated for credit up to three times if the topics varies.

## GEOGRAPHY (GEOG)

## GEOG 1101 - Introduction to Human Geography (3)

Prerequisite: ENGL 0989
A survey of global patterns of resources, population, culture and economic systems. Emphasis is placed upon the factors contributing to these patterns and the distinctions between the technologically advanced and less advanced regions of the world.

GEOG 1103 - Geographic Perspectives on Multiculturalism in the United States (3)
Prerequisite: ENGL 0989
Geographic factors underlying multiculturalism and ethnic relationships in the United States. Three interrelated themes are emphasized: the spatial development and organization of culture; population growth, migration and urbanization; and the spatial dimensions of political, economic and social processes.

## GEOG 1111 - Introduction to Physical Geography (3)

Prerequisite: ENGL 0989
An introduction to physical geography, surveying climate, vegetation, soils, landforms and water resources in their areal interrelations and distributions.

GEOG 1112 - Introduction to Weather and Climate (3)
Prerequisite: ENGL 0989
Georgia Gwinnett College 2015-16 Catalog

Components of weather processes and their measurement. Climatic elements and their control factors. Geographic classification of climatic and vegetative types on the Earth's surface.

## GEOG 1112L - Introduction to Weather and Climate Laboratory (1)

Prerequisite: ENGL 0989
Laboratory exercises supplement the lecture material of GEOG 1112.

## GEOG 1113 - Introduction to Landforms (3)

Prerequisite: ENGL 0989
Introductory analysis and classification of major types of land surfaces, stressing geographic characteristics. Study and interpretation of relationships between landforms and other phenomena through maps, air photos and field observations. World coverage with stress on North America.

## GEOG 1113L - Introduction to Landforms Laboratory (1)

Prerequisite: ENGL 0989
Laboratory exercises supplement the lecture material of GEOG 1113.

## GEOG 1125 - Resources, Society and the Environment (3)

Prerequisite: ENGL 0989
Interactions between physical systems and human activities and their effects on environmental quality and sustainability are emphasized. Topics include: geography of population and resource consumption, food production, water and air quality, energy policy, land/biotic resource management. Contrasting social, ethical and technological perspectives on environmental concerns are explored.

## GEOG 2201 - World Regional Geography (3)

Prerequisites: ENGL 1102; and either GEOG 1101 or GEOG 1111
This course surveys different geographical regions of the world. It introduces the regional concept in geography which emphasizes the spatial distributions and interactions of culture, history, economy, population and environment. The world is viewed as an interdependent community built of regions and countries. World Regional Geography examines a world that is undergoing various transformations at many different spatial scales.

GEOG 3320 - Geographical Information Science (GIS) (3)
Prerequisite: ENGL 1102, ITEC 1001 and either GEOG 1101, or GEOG 1111, or GEOG 1112, or GEOG 1113, or GEOG 1125, or GEOG 2201 or consent of instructor
Geographical Information Science (or GIS, sometimes called Geographical Information Systems) is the foundation of all modern geography. This course is an introduction to the concepts and uses of GIS. It is an activity-based course. Students will learn to make maps on computer, conduct spatial searches, and do individual projects. Lecture topics include history of GIS, GIS data structures and sources of data, GIS tools, vendors and software, applications, and resources. Exercises include spatial data display and query, map generation, and simple spatial analysis.

## GEOG 3330 - Geography of the World Economy (3)

Prerequisites: ENGL 1102 and either GEOG 1101, GEOG 1111 or GEOG 2201
The study of spatial distributions and interactions of local to global economic activities. The course investigates the changing locations and spatial patterns of economic activity, including: production in agriculture, manufacturing, and services; spatial economic principles of trade, transportation, communications, and corporate organization; regional economic development, and the diffusion of technological innovation. The course examines the relationship between the globalization of economic activity and regional development. Additionally, this course examines the causes and geographic patterns of social inequality worldwide.

## GEOG 3340 - Cultural Geography (3)

Prerequisite: ENGL 1102 and either GEOG 1101, GEOG 1111 or GEOG 2201
Global study of human spatial distributions and interactions. As an advanced course in human/cultural geography, this class examines theory and topics of the relationships between culture and spaces/places, especially spatial aspects of social, economic and political power. The focus is on the construction of landscapes and the everyday practices that imbue them with meaning. Students develop analytical skills to investigate places from a variety of methods, and learn to interpret the landscape around them as a expression of cultural (and other) forces. Students learn to "read" the world
and "read the landscape" as it presents itself in the form of the built environment, a landscape that is shaped by its multifaceted inhabitants, and cultural and geographical forces.

## GEOG 4010 - Advanced Geographical Information Science (3)

Prerequisite: GEOG 3320
This course builds upon the skills and knowledge acquired in GEOG 3320-Geographical Information Science. Advanced GIS is best described as applied concepts and technologies in GIS in the sense that this course is projectbased and designed to be applicable to a student's particular interests and future professional needs. This is an expansion of GIS and geospatial data from visualizing spatial data to geospatial data analysis and data collection using GIS as a means for solving problems.

## GEOG 4490 - Special Topics in Geography (3)

Prerequisite: ENGL 1102; and GEOG 1101, 1111 or 2201
This course permits a group of students the opportunity to study, in depth, an advanced area of geography not covered by regular course offerings, or to explore new topics. Courses are intended to reflect emerging concepts or approaches within contemporary geography. Topics and instructors will be announced prior to preregistration. May be repeated for credit if content differs. Topics will vary, including but not limited to: Medical Geography, World Development, Meteorology, Political Geography, Community Research, and Particular Regional Topics (Africa, Latin America, Asia, etc.)

## GLOBAL STUDIES (GLOB)

## GLOB 4000 - Global Studies Capstone Course (3)

Prerequisite: Students must be approved participants of the Global Studies Certification Program. Additionally, they must have completed all other requirements of the program: 1) two 3000 or 4000 level i-courses. 2) a two-course sequence in foreign language (or the equivalent as satisfied by testing), and 3) at least 3 credit hours earned as part of a study abroad program. Prerequisites may overlap. For example: Two i-courses taken in a study aboard program would satisfy requirements 1 and 3 .
The interdisciplinary field of Global Studies examines the increasing interconnectedness of the world's governments, industries, movements, systems, communities, and individuals. In the Global Studies Capstone course, student will increase their intercultural competency while examining multinational regions and transnational issues from U.S. and non-U.S. perspectives. Additionally, students will do a research or service project involving an international organization or partnership or a multinational corporation based in Georgia. Students will be expected to approach global issues using perspectives and methodologies acquired in their major programs. Note: Pre-registration for the Capstone Course signals the completion of all other Global Studies Certification Program requirements.

## HISTORY (HIST)

## HIST 1111 - Survey of World History/Civilization I (3)

Prerequisite: ENGL 0989
A survey of World History to early modern times.

## HIST 1111H - Survey of World History/Civilization I - Honors (3)

Prerequisite: ENGL 0989 (if applicable)
Co-requisite: Enrollment in the GGC First Year Honors Experience or Honors Program; or, permission of the Dean of Liberal Arts and the Director of the GGC Honors Programs.
A survey of World History to early modern times. This course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that History 1111-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## HIST 1112 - Survey of World History/Civilization II (3)

Prerequisite: ENGL 0989
A survey of World History from early modern times to the present.

## HIST 1121 - Survey of Western Civilization I (3)

Prerequisite: ENGL 0989
A survey of Western Civilization to early modern times.

## HIST 1122 - Survey of Western Civilization II (3)

Prerequisite: ENGL 0989
A survey of Western Civilization from early modern times to the present.
HIST 2111 - Survey of United States History I (3)
Prerequisite: ENGL 0989
A survey of United States History to the post-Civil War period.
HIST 2111H - Survey of United States History I Honors (3)
Prerequisite: Successful completion of ENGL 0989 (if applicable).
Co-requisite: Enrollment in the GGC First Year Honors Experience or Honors Program; or, permission of the Dean of Liberal Arts and the Director of the GGC Honors Programs.
A survey of U.S. History to the post-Civil War period. This course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that History 2111-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## HIST 2112 - Survey of United States History II (3)

Prerequisite: ENGL 0989
A survey of United States History from the post-Civil War period to the present.

## HIST 2500 - Survey of Latin American History (3)

Prerequisite: ENGL 0989
This course will survey the diverse history of Latin America from pre-Columbian times to the recent past. Students will gain general knowledge of the historical geography of the region and a broad structural understanding of the processes and ongoing problems faced by Latin America colonies and nations, the diverse live experiences of Latin America's past, and the interconnections of Latin American and U.S. History.

## HIST 2520 - Introduction to the History of the Middle East (3)

Prerequisite: ENGL 1102
Introduction to Middle East history from the fifth century to modern times

## HIST 2530 - Introduction to the History of India (3)

Prerequisite: Successful completion of ENGL 1102 with a grade of "C" or better
An introduction of the history of South Asia from 1500 BCE to the modern world.

## HIST 3050 - History Content Methods (4)

Prerequisite: Admission to the Teacher Education Program and successful completion of the following courses: EDUC 3300 and EDUC 3350
This course will focus on methods for implementing student-centered instruction in History. Special emphasis will be placed on the particular ways of knowing associated with the study of History and incorporating these ways of knowing into learning activities for secondary students. Candidates will design, implement and assess learning activities for secondary students. A field component accompanies this course.

## HIST 3110 - America to 1789 (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum This course traces conditions in America from before the arrival of Europeans to North America, to the process of creating the United States. Specific focus will be on Native American culture, the characteristics of the British Colonies, the struggle for independence and the forces that shaped the creation of the Constitution.

HIST 3115 - Early National US History: 1790-1840 (3)

Georgia Gwinnett College 2015-16 Catalog

Prerequisite: ENGL 1102; Completion of Area E History requirement
History of the U.S. from adoption of the US Constitution through the Mexican War, with emphasis on the formation and reorganization of national political parties and on the sectional politics resulting from territorial expansion, economic development, and social reform.

## HIST 3120 - Civil War and Reconstruction (3)

Prerequisites: ENGL 1102 and completion of Area E History requirement
Political, constitutional, economic, and military developments in the US and the Confederacy during and after the
American Civil War.

## HIST 3125 - America in the Gilded Age and Progressive Era (1877-1919) (3)

Prerequisite: Completion of Area E History Requirement and ENGL 1102
History 3125 will examine the various social, political, and economic issues that dominated American life from the end of Reconstruction through World War I. During this period known jointly as the Gilded Age (1877-1890) / Progressive Era (1890-1920), America matured as a nation and became an international economic and military powerhouse. Specific topics will include: industrialism, the urban political machine, rural backlash, the rise of labor, immigration, American imperialism, and social reform

## HIST 3135 - America Since 1945 (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum This course examines cultural, political, economic and diplomatic developments in the United States since the end of the Second World War. Topics covered include the Cold War, the civil rights and women's movements, mass immigration from Asia and Latin America and the "Reagan Revolution."

HIST 3150 - US Economic History (3)
Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum A study of the macroeconomic elements in the historic growth of the United States from colonial to recent times, including the use of human and natural resources. An analysis is made of such evolutionary institutions as corporations and labor unions, as well as the changing role of government, technological innovations, competition, agrarian/industrial pioneering and other issues in the development of America.

## HIST 3185 - American Military History (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum A study of the military history of the United States from colonial times to the present. This course emphasizes the relationship of the military establishment to American society, civil-military relations, the growth of military professionalism, the development and use of new military technologies, and the evolution of strategy, operations and tactics in U.S. military history.

## HIST 3200 - African American History to 1877 (3)

Prerequisite: Completion of Area E History requirement and ENGL 1102
This course is designed to explore the varied range of experiences of African Americans from the origins of the TransAtlantic Slave Trade through the Civil War and Reconstruction. Topics include urban and rural enslavement throughout all regions of North America, resistance, free blacks, gender, property ownership and entrepreneurship, parenthood, citizenship, military service, education, leadership, and contributions to American culture, among others.

## HIST 3203 - African American History since 1877

Prerequisite: Successful completion of ENGL 1102 with a grade of "C" or better and of the Area E History requirement This course will explore the varied range of cultural contributions and challenges of African Americans since the end of the Civil War to the present. Major topics include examination of the Jim-Crow ear, the Harlem Renaissance, the modern Civil Rights Movement and the Black Power Era.

## HIST 3250 American Environmental History (3)

Prerequisite: Completion of Area E History requirement and ENGL 1102
This course examines the relationship between Americans and their environment from the colonial period to the present. Topics include the effect of European settlement patterns on the environment, the role of technology in altering
landscapes, the growth of the preservation and conservation movements, and the rise of state and federal environmental regulations.

## HIST 3265 - History of Georgia (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum This course traces four centuries of Georgia history, from Native American habitation and Spanish exploration to modern times. Examining the dominant social and cultural themes in Georgia history, the course delves into the interactions of Georgians at various points in the state's history, noting both common experience and diversity. The course will focus on certain themes and topics that have shaped not only Georgia's history, but also that of the American South and greater United States. The course will also explore Georgia's connection to the world at large and how the state's history has influenced global events.

## HIST 3310 - Greece and the Ancient Near East (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum This course examines the Ancient Near East (Mesopotamia and Egypt) before tracing conditions in Greece from the late Dark Ages and Homer to the death of Alexander the Great. The course will especially investigate the rise of various city states, the role of religion and myth in constructing meaning, the rise of centralized political structures and in Greece the rise of tyranny and democracy, the origins of such modern literary and spoken genres as history, drama and rhetoric, the rise of hoplite and phalanx styles of warfare and the origins of western science and philosophy. The course will also examine the clash of cultures in the centuries of conflict between Persia and Greece.

## HIST 3315 - Rome and the Mediterranean (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum Examines the origins of the city of Rome, the process by which it built an empire encompassing the Mediterranean basin, that empire's interactions with other peoples and states which it encountered and the manner by which it absorbed, borrowed and adapted characteristics of these peoples which were fused into one culture disseminated throughout most of Europe, the Middle East and Northern Africa. Emphasizes the period between the beginnings of the city and the collapse of the western part of the empire in the fifth century.

## HIST 3325 - Renaissance and Reformation Europe (3)

Prerequisite: Completion of Area E History requirement and ENGL 1102 with a grade of " C " or better This course analyzes the intellectual, political, and social developments of fifteenth and sixteenth century Europe. These same currents encouraged a florescence of artistic and scientific developments that challenged and modified forms of expression and thought, and led to violent challenges to Church authority. We will also consider European dynastic connections and tensions, developments in state craft, and innovations in military tactics and weaponry.

## HIST 3330 - Early Modern Europe 1500-1789 (3)

Prerequisite: Completion of Area E History requirement and ENGL 1102 with a grade of "C" or better This course covers the political, cultural, military and economic developments of Europe during a period of transition from the late medieval period to the modern era. It explores the military revolutions as well as the revolutionary movements in science, religion and politics that shaped the European continent and its extended empires.

## HIST 3335 - History of Europe Since 1789 (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum. A study of the social, political, intellectual and economic history of Europe since the French Revolution. Special emphasis on the revolutionary age and the rise of liberal and conservative political ideologies; social classes and the industrial revolution; modern nationalism and the nation-state; the New Imperialism; the era of the world wars, especially the struggle between democracy, fascism and communism; the Cold War; the history of women and family life; and economic and political integration in contemporary Europe.

## HIST 3406 - History of Britain from its Origins to 1688 (3)

Prerequisite: Successful completion of ENGL 1102 with a grade of "C" or better and of Area E History Requirements History of Britain from the earliest human communities through its Roman period, its Medieval experience including the beginnings of representative government, its crucial role in the Protestant Reformation, its early creation of a global empire, its cultural flourishing in the Elizabethan period, and its establishment of a parliamentary constitutional monarchy.

HIST 3407 - Modern Britain and the Empire 1688 to Present (3)
Prerequisite: Completion of the Area E History requirement and ENGL 1102
This course will trace the development of Great Britain and its Empire as it shaped its national identity through the Protestant Reformation, the Establishment of the world's largest global empire, the creation of a parliamentary democratic government, pioneering an industrial revolution, and through its people's struggle for social justice. It will focus upon the political, social, economic, and cultural developments that made Britain a dominant world power and eventually brought Britain to its current global position.

## HIST 3427 - Modern Germany (3)

Prerequisite: Completion of Area E History requirement and ENGL 1102
History 3427 is a survey of the political, economic, social, and cultural history of Germany since 1848. Special emphasis will be given to German nationalism; the unification of Germany; society and politics in the Kaiserreich; German imperialism and the First World War; the crisis and collapse of the Weimar Republic; the Nazi dictatorship; the Second World War and the Holocaust; the Federal Republic of Germany; the German Democratic Republic; and the problems and prospects of reunification.

## HIST 3500 - The Atlantic World (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum This course traces the creation of a Trans-Atlantic community that spanned four continents, two subcontinents and five centuries. Between 1400 and the mid-1800s, the fortunes and misfortunes of Europe, Africa and North and South America were intertwined, creating a common historical experience. This course will examine the dominant themes in that history: the Age of Exploration, European colonization, the creation of the Atlantic slave trade and the Age of Revolutions. As the Atlantic Ocean served as both a borderland of conflict and a conduit for exchange, the study of the Atlantic World provides an inter-regional context within which to compare and contrast various topics in political, economic, religious, social, intellectual and environmental history.

## HIST 3507 - History of Modern Mexico (3)

Prerequisite: Completion of Area E History Requirement and ENGL 1102
The course examines the history of Mexico from the Independence wars to the recent past. Themes of the course will include Mexico's struggles to unify and develop; its history of dictatorship under Porfírio Díaz in the nineteenth century, and under the PRI party in the twentieth century; its history of protest and revolution, and its interconnections with the United States and the world.

## HIST 3510 - History of Colonial Latin America (3)

Prerequisite: Completion of Area E History and ENGL 1102
This course focuses on the history of Latin America from the eve of Spanish and Portuguese conquest in the late $15^{\text {th }}$ century to the independence movements of the early $19^{\text {th }}$ century. Themes will include the conquest of the Inca and Aztec Empires, the exploration and settlement of Argentina, Brazil and Chile, the Bourbon and Pombaline Reforms, the African slave trade, $18^{\text {th }}$ century uprisings, and the distinct origins of independence movements in Argentina, Venezuela and Mexico.

## HIST 3520 - History of Middle East and India (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum
The Middle East and India from the earliest times to the present. Special attention will be given to the origins of civilizations and major world religions in ancient period; the rise and development of Islam up to the early modern period; and the political, cultural, social and economic history of the Middle East and India in modern times, including imperialism, nationalism, independence and religious revival.

## HIST 3525 - Europe and the Islamicate World 6000-1800 (3)

Prerequisites: Completion of English 1102 and the History requirement in Area "E."
This course will trace the dynamic relationship between "Europe" and the "Middle East" from the rise of Islam to the Enlightenment. Through philosophical works and travel accounts from the Mediterranean region, students will examine how European and Middle Eastern views of the "other" evolved over time as the domination of the Mediterranean shifted from East to West. We will investigate this dynamic within the context of the major components of culture and assess the points of contact that led to moments of intolerance and conflict and periods of amicable and co-beneficial associations

## HIST 3535 - History of Modern India and South Asia (3)

Prerequisite: ENGL 1102 and completion of the Area E History requirement
The history of India/South Asia from the period of British colonialism, through independence, partition and to the current period. The themes explored in the course includes the British colonial encounter, social reform movements, communalism and economic development.

## HIST 3545 - The Byzantine Empire (3)

Prerequisite: ENGL 1102 and completion of the Area E History requirement
Lecture based course focusing on the Byzantine Empire, from its birth starting with the division of the Roman Empire to its final demise in 1453, when the Ottomans conquered Constantinople. Course traces the scientific, artistic, political, military, and cultural achievements of this long-lived empire, and follows it evolution for antiquity to a medieval society, sowing the seeds of a number of developments during the Renaissance.

## HIST 3540 - History of China and Japan (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum
Examines the history of China and Japan from the appearance of agriculture around the Yellow River to modern times.

## HIST 3710 - History of Business in America, Britain and Japan (3)

Prerequisite: ENGL 0989, ENGL 0099 and completion of history requirements in Area E of the Core Curriculum This course traces the evolution of the business enterprise in America, Britain and Japan from 1600 to the modern era. Specific focus will be on the historic factors for business growth, the relationship between business and labor, the rise of regulation and the impact of business on society.

## HIST 3721 - History of Ancient and Medieval Science (3)

Prerequisite: ENGL 0989, ENGL 0099 and completion of history requirements in Area E of the Core Curriculum Examines the interactions of science and technology with the social and cultural development of world civilization, the importance of scientific inquiry as compared with other kinds of inquiry and the key contributions made by significant investigators, inventions and events. Emphasizes the period from earliest times to the Scientific Revolution of the Sixteenth Century.

## HIST 3722 - History of Modern Science and Technology (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum Examines the interactions of science and technology with the social and cultural development of world civilization, the importance of scientific inquiry as compared with other kinds of inquiry and the key contributions made by significant investigators, inventions and events. Emphasizes the period from just before the Scientific Revolution of the Sixteenth Century to modern times.

## HIST 3740 - Ancient and Medieval Military History (3)

Prerequisite: Completion of Area E History requirement and ENGL 1102
Examines the history of warfare in the ancient and medieval worlds. Close attention will be paid to the goals of warfare both personal and political and the structural means for declaring and fighting wars. It will also focus extensively on the composition and organization of military forces and the tactics and equipment of war, and how these change over time.

## HIST 3760 - History of Politics and Culture, from Antiquity to the Enlightenment (3)

Prerequisite: ENGL 0989, ENGL 0099 and completion of history requirements in Area E of the Core Curriculum This course investigates the history of the interaction between political culture and ideas and how these mutually shape each other from antiquity to the Enlightenment. While the course is historical in nature, a final unit focuses on critiquing the entire tradition of culture, politics and ideas. It culminates by requiring students to construct their own ideal state.

## HIST 3775 - Medieval Life, Religion and Thought (3)

Prerequisite: ENGL 1102 and completion of history requirements in Area E of the Core Curriculum A study of the history, culture and religious life of the medieval world, the class examines documents, texts and archaeological data from Late Antiquity to the High Middle Ages (300-1500). Topics include the transformation of late Roman society and politics, kingship, chivalry and romance, religion, Icelandic sagas, philosophy and mysticism, historically understanding medieval texts, encounters with non-European cultures, crusade, plague and the life of the " 3 orders."

HIST3850 - Introduction to Public History (3)
Prerequisites: Completion of English 1102 and the History Sequence in Area "E."
An introduction to the principles, techniques and basic approaches used in the professional practice of public history. The course is a survey of different disciples which comprise public history, including (but not limited to) historic preservation, historic and cultural site management, heritage tourism, museum administration, and archives and record management.

## HIST4145 - Sixties America (3)

Prerequisites: Completion of English 1102 and the History Requirement in Area "E"
A study of America in the 1960s, a crisis period in U.S. history out of which emerged major cultural change and new political arrangements. Students will examine a variety of secondary and primary sources -- novels, "underground" newspapers, photographs, music, documentaries and government documents - to develop an understanding of the racial, ethnic and social movements that dominated the era.

## HIST 4250 - Intellectual and Cultural History of Colonial America (3)

Prerequisites: ENGL 1102 and completion of the Area E history requirement
This course surveys the intellectual and cultural history of the British colonial origins of the United States up to 1763. We'll study the ideas, philosophies, religious beliefs, art, literature, popular culture, entertainment, artifacts, and everyday habits of Americans who lived during this early period. Several interrelated themes structure this course; the changing relationship between "high" and "low" culture; the evolution of thinking about representative democracy and government; the recurrent national quest for distinctly "American" forms of intellectual and cultural expression; and the role of religion, schools, and science in shaping American thought.

## HIST4388 - World War II (3)

Prerequisites: Completion of English 1102 and the History Requirement in Area "E."
A study of the origins, course and consequences of the Second World War, focusing equal attention on the Pacific and European theaters from the early 1930s up to 1945. This course emphasizes diplomacy and military history, but also examines the impact of total war on the civilian populations, governments, soldiers and nations that fought the conflict.

## HIST 4527 - Jews and Christians in the Islamicate World (3)

Prerequisite: Completion of Area E History Requirement and ENGL 1102
The course focuses on Jewish, Christian, and Muslim communal relationships from the seventh century to the end of the eighteenth century in Southwest Asia, North Africa, and the Iberian Peninsula. Topics include intra- and intercommunal cultural, political, and commercial developments, as well as the status of minorities within these religious groups. This course does not emphasize the specific doctrines of these religions, but rather investigates how people of different faiths lived together.

## HIST4575 - The Atlantic Slave Trade (3)

Prerequisites: Completion of English 1102 and the History requirement in Area "E."
This course traces the development of the Atlantic slave trade from its fifteenth-century infancy to its abolition in the nineteenth century. Among the topics to be covered: the African cultural context and understanding of slavery; the mechanics of the slave trade; the demographics of the slave trade; the experience of the slave trade for the enslaved and for slavers; comparative European slavery systems; the evolution of western racial thought; the transformative impact of Atlantic slavery on Africa, the Americas and Europe; and the emergence of an international abolitionist movement.

## HIST 4670 - Social Revolutions in Modern Latin America (3)

Prerequisites: Completion of the Area E history requirement and ENGL 1102
The course examines the role of social revolutions in Latin America's history since the early twentieth century. Emphasis may be placed on various revolutions of the modern era including Mexico, Cuba, Central America, Bolivia and Chile. The course will explore the complex origins, processes, and experiences of revolution and analyze the diverse impacts of social revolutions both nationally and internationally.

HIST 4780 - Cultural and Intellectual History of the Ancient Mediterranean World (3)
Prerequisite: Successful completion of ENGL 1102 with a grade of C or higher, sophomore status or higher, and completion of Area E History Requirements

An historical investigation into the cultures and ideas of the Mediterranean world and of the historical role of these in the synthesis of cultures. Politics, ideas, and the human view of the world from 800 BCE to 600 CE . It will culminate with the ways that the contributions of the ancient world were preserved in Late Antiquity.

## HIST4900 - History Capstone (3)

Prerequisite: Completion of 33 credit hours in history.
The culminating experience for all history majors not specializing in teacher education in which students will produce a senior project that draws upon the skills and competencies learned while majoring in history. Students will work with the instructor and in consultation with other history faculty to design, research and write a significant thesis, historiographical essay, or other project on a historical topic.

## HIST 4990 - Special Topics in History (3)

Prerequisite: Completion of Area E history requirement and ENGL 1102
Selected special topics of interest to faculty and students. May be repeated for credit when topic varies.

## HONORS

## HNRS 1000 (1)

Prerequisite: Students must be admitted to the First Year Honors Experience
HNRS 1000 introduces First Year Honors Experience students to the concepts, expectations, and requirements of the GGC Honors Program through discussion, reflection, and analysis of a theme, text, or topic of the instructor's choosing integrative of GGC's four core values of Scholarship, Creativity, Leadership, and Service. It familiarizes FYHE students with the honors program - the design of the program, the level of commitment expected of honor students, the experiences honor students can expect, and the requirements they will need to fulfill in order to graduate from GGC with honors - and acclimates them to the rigor and depth of honors study.

## HNRS 3000 - Honors Special Topics (3)

Prerequisites: Students must be admitted to the GGC Honors Program, hold sophomore status or higher, and have completed Area A of the core curriculum
HNRS 3000 guides students through intensive interdisciplinary inquiry on course topics which vary by semester. HNRS 3000 places special emphasis on how interdisciplinary study fosters civic engagement and sustainable partnerships across disciplines and communities, through experiential learning and service. The course offers students exposure to faculty and/or staff expertise from diverse disciplines, with an emphasis on experiencing GGC's four core values of scholarship, leadership, service and creativity.

## INFORMATION TECHNOLOGY (ITEC)

## ITEC 1001 - Introduction to Computing (4)

Prerequisite: ENGL 0989; MATH 0997 or MATH 0999
Introduction to computers and applications software. Upon completion of this course students will: (1) understand the evolution of information technology and future trends; (2) describe the ethical issues surrounding the uses of digital information; (3) demonstrate proficiency in the use of various personal productivity software; (4) understand the functionality and interaction among the main hardware components of a computer and appropriate terminology; (5) acquire basic knowledge of computer security, protection mechanisms and privacy threats on Internet; (6) understand the role of computing tools in supporting collaborative projects; (7) understand the principles of computer networking; (8) understand different types of systems and application software.

## ITEC 1001H - Introduction to Computing Honors (4)

Prerequisite: ENGL 0989; MATH 0997 or MATH 0999
Co-Requisite: Enrollment in the GGC First Year Honors Experience or Honors Program; or, permission of the Dean of the School of Science and Technology and the Director of the GGC Honors Programs.
This 4-credit hour course provides an introduction to computers and applications software. Areas of study include: hardware; system software; application software; problem solving; networking and security; and application packages such as word processing, spread sheets, presentation software, and database. This course also offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service,
and scholarship. In part, this means that ITEC 1001-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## ITEC 2110 - Digital Media (4)

Prerequisite: ITEC 1001; ENGL 0099
A course that takes students through the development of all forms of digital media. Upon completion of this course students will: (1) understand various forms of digital media in the Internet environment; (2) build digital media documents as a communication tool in the Internet environment; (3) publish digital media documents in the Internet; (4) apply multimedia in digital media publication; (5) evaluate digital media; (6) understand legal issues on digital media.

## ITEC 2110-H - Digital Media (4)

Prerequisite: ITEC 1001
The Digital Media Honors course is being offered to provide students in GGC's Honors Program with an enhanced learning experience. The course will offer an integrated educational experience providing opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that Digital Medial 2110-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community. Students also will increase their conceptual knowledge of emerging digital technologies while gaining hand-on experience with interdisciplinary projects that extend beyond the walls of the classroom to the GGC campus and larger community.

## ITEC 2120 - Introduction to Programming (4)

Prerequisite: ITEC 1001; ENGL 0099; Math 1111 or MATH 1001
An introduction to concepts, principles and skills of programming. Upon completion of this course students will: (1) Demonstrate algorithmic thinking and its function in building solutions; (2) design and implement programming solutions to solve problems; (3) apply basic programming concepts including: variables, arrays, conditional expressions, control structures, and functions; (4) implement programming solutions that interact with external data sources; (5) describe the major facets of the professional practice of software development.

## ITEC 2130 - Web Technologies (4)

Prerequisite: ITEC 1001
Upon completion of this course, students will be able to: 1.) Design, create and deploy a website; 2.) Design and create web animations; 3.) Describe the social and economic implications of social networking; 4.) Discuss current and emerging web technologies; and 5.) Utilize web technologies for an international environment.

## ITEC 2140 - Programming Fundamentals (4)

## Prerequisite: ITEC 1001; ENGL 0099; MATH 1111

This course is recommended for ITEC Majors and Minors only. An introduction to concepts, principles and skills of programming. Upon completion of this course students will: 1) understand the evolution of computer languages (from machine code to object-oriented); 2) understand the concept of the coding process and code manipulation; 3) analyze real world problems and design algorithmic and programming solutions; 4) understand the general ideas of classes and objects as elements of a programming environment; 5) know general ideas about conditional expressions, functions and control structures; 6) prepare, execute and debug program code within an interactive programming environment; 7) demonstrate a consistent and readable programming style.

## ITEC 2150 - Intermediate Programming (4)

Prerequisite: ITEC 2140; MATH 2300 or concurrent enrollment in MATH 2300
More advanced programming concepts, principles and skills. Upon completion of this course students will: (1) understand and apply the concepts of inheritance, polymorphism and generic classes in OOP to design a programming solution; 2. Demonstrate an understanding of exception handling to write robust programming solutions; 3. Understand and apply reusability in OOP through classes, inheritance and genericity in the implementation of programming solutions; 4. Understand and use Input/Output mechanisms; 5. Demonstrate an understanding of the basics of recursion and have the ability to apply recursion to solve problems that are recursive in nature; 6 . Demonstrate an understanding of basic data structures (stacks, queues, lists) and be able to choose the most adequate data structure to solve a problem; 7. Explain the representation of primitive data types and objects in memory; 8. Prepare, execute and debug program code within an interactive programming environment; 9. Demonstrate a consistent and readable programming style.

Georgia Gwinnett College 2015-16 Catalog

## ITEC 2201 - Introduction to Information Systems (3)

Prerequisite: ITEC 1001 (ITEC 2110 \& ITEC 2120 recommended for IT Majors); ENGL 0099
A study of the fundamentals of information systems, including what they are and how they affect organizations. Upon completion of this course students will: (1) understand the key concepts of information systems (IS) and information technology (IT); (2) understand how IS and IT can be applied to gain competitive advantage in business; (3) understand the role and impact of IS/IT on globalization; (4) understand the role of application software in organizing data and demonstrate an ability to use such software; (5) demonstrate knowledge web site development using application software; (6) understand the different information systems used to support business functions at an organization; (7) understand the system development life cycle and its role in developing/supporting information systems; (8) understand the importance of project management and demonstrate an ability to use project management software; (9) understand the security, ethics and privacy issues involved along with future emerging trends in technology

## ITEC 3100 - Introduction to Networks (3)

Prerequisite: ITEC 1001; ENGL 0099; ITEC 2140
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) A top-down exploration of networking. Upon completion of this course students will be able to: (1) understand the basics of data communications and networking; (2) describe the overall network architectures, especially the Internet concepts and terminologies; (3) explain how network hardware and software work together; (4) understand major network protocols (TCP/IP and related protocols); (5) recognize network infrastructure hardware (hub, switch, router, gateway, wireless access and so on); (6) understand network design and operation essentials; (7) acquire basic knowledge of security issues in computer networks.

## ITEC 3150 - Advanced Programming (3)

Prerequisite: ITEC 2150
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) A conceptual and practical introduction to advanced programming. After completing the course students will be able to: (1) demonstrate an ability to code, debug and test event driven programs; (2) understand the basic principles of multithreading and demonstrate an ability to code, debug and test simple multi-threaded programs ; (3) understand the basic concepts of memory allocation and management; (4) demonstrate the ability to choose from fundamental data structures, their algorithms and implementations; (5) know the different algorithmic strategies and demonstrate an ability to analyze them; (6) demonstrate a consistent and readable programming style.

## ITEC 3200 - Introduction to Databases (3)

Prerequisite: ITEC 2140 or ITEC 2120 and (ITEC 2201 or BUSA 3100)
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Introduction to fundamental concepts of database management. Upon completion of this course students will be able to: (1) understand data, metadata and database systems core concepts; (2) understand logical/physical data organization and transaction management fundamental concepts; (3) understand the relational database model; (4) understand and use entity relationship (ER) modeling for conceptual design; (5) understand and use normalization of database tables technique to reduce data redundancy; (6) understand and use the core portion of structured query language (SQL) for data manipulation; (7) design, test and use databases within the course scope and in framework of Microsoft Access database application environment

## ITEC 3300 - Information Security (3)

Prerequisite: ITEC 2201 or BUSA 3100
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) This course is intended to introduce students to the basics of information security. Upon completion of this course students will be able to: 1) Define and analyze the key concepts of information security, including confidentiality, integrity, authentication and availability, and identify the salient issues, viewpoints, and trade-offs of information security; 2) Describe and apply the basic concepts and primitives of cryptography, including private-key and public-key encryption, message authentication and digital signature; 3) Describe and apply basic mechanisms of system security, including access control and confinement; 4) Explain attacks against the internet and web applications; 5) Describe protocols that secure the internet and web, including secure email protocols, defense against Structure Query Language (SQL) injection, Secure Socket Layer (SSL), and intrusion detection of malware; and 6) identify and examine basic human and ethical issues in information security and apply appropriate security controls to systems.

## ITEC 3350 - Digital Commerce (3)

Prerequisite: ITEC 2201 or BUSA 3100
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) This course covers basic business practices using electronic commerce. Upon completion of this course students will be able to: (1) understand the key concepts of e-commerce; (2) demonstrate knowledge of various e-commerce business models; (3) identify and discuss current business issues in e-commerce; (4) demonstrate an understanding of the technology infrastructure for e-commerce; (5) demonstrate a working knowledge of security issues related to ecommerce; (6) evaluate different types of payment systems used in ecommerce; (7) demonstrate an understanding of the online marketing communications in e-commerce; (8) demonstrate proficiency in developing a business report on the Web using HTML; (9) analyze and evaluate an e-commerce business; (10) plan an e-commerce business.

## ITEC 3450 - Computer Graphics and Multimedia (3)

Prerequisite: ITEC 2110 and ITEC 2140
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) This course introduces the many facets of interactive multimedia design and production. Upon completion of this course students will be able to: (1) understand the foundations of computer graphics: hardware systems, math basis, light and color; (2) understand applications of computer graphics; (3) be able to perform transformations, rotations and scaling using transformation matrices; (4) be able to perform graphics programming using opengl; (5) understand key components of the rendering pipeline, especially visibility, rasterization, viewing and shading; (6) come to appreciate the complexities of modeling realistic objects; (7) become acquainted with some advanced topics in computer graphics (texturing, animation, physically-based modeling, procedural modeling, curves and surfaces, interaction, visualization and virtual reality).

## ITEC 3550 - User Centered Design (3)

Prerequisite: ITEC 2110; ITEC 2150; ITEC 2201
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) This course develops an understanding of the user-centered design process. Upon completion of this course students will be able to: (1) discussing a variety of user interfaces including websites, graphical user interfaces and embedded systems; (2) using industrial applications illustrating how UI design issues have been addressed within different organizations; (3) exercises using different media.

## ITEC 3600 - Operating Systems (3)

Prerequisite: ITEC 2201 and ITEC 2150
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) This course examines operating system design concepts, data structures and algorithms and systems programming basics. Upon completion of this course students will be able to 1) describe the structures and components of an operating system; 2) explain basic operating system concepts and functions, advantages and issues associated with virtualization; 3 ) implement short and long term CPU scheduling to control multitask programs; 4) illustrate operations of UI and able to implement simple interrupt handling in a context of UI; 5) implement multi-process and concurrent process programs utilizing process synchronization; 6) describe how file systems are organized and how files are managed in OS; 7) describe memory management strategies and how those strategies are implemented in OS.

## ITEC 3700 - Systems Analysis and Design (3)

Prerequisite: ITEC 2201, ITEC 2140
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Students become familiar with various concepts, principles and stages of computer-based information systems analysis and design Upon completion of this course students will be able to: (1) apply a variety of techniques to analyze business problems and discover system requirements; (2) effectively communicate system requirements to both technical and non-technical audiences business and other areas; (3) identify candidate technical solutions, analyze those candidate solutions and recommend a target system that meets requirements and major topics in AI; (4) prepare technical design specifications for building systems that meet a given set of system requirements with an emphasis on the interface and program levels; (5) describe general design principles from within and outside of the systems development field and evaluate extent to which existing systems conform to such principles.

## ITEC 3860 - Software Development I (4)

Prerequisite: ITEC 2150; ITEC 2201 or ITEC 1201
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop)

First course in a sequence that teaches students to use the software development life cycle including problem definition, systems analysis, requirements gathering, designing systems, development of systems, testing and implementation. Upon completion of this course students will be able to: (1) Demonstrate skills needed to gather software requirements from the client and analyze them to create software specifications; (2) Choose appropriate software development model based on software requirements; (3) Create a software design by applying sound design principles and using modeling tools; (4) Demonstrate the knowledge and proper usage of design patterns to create reusable designs; (5) Develop and implement automated and manual unit tests; (6) Develop project plans and utilize them to track project development; (7) Collaboratively develop a simple system using object-oriented approach.

## ITEC 3870 - Software Development II (4)

Prerequisite: ITEC 3860
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Second course in a sequence that teaches students to use the software development life cycle including problem definition, systems analysis, requirements gathering, designing systems, development of systems, testing and implementation. Upon completion of this course students will be able to: (1) apply project management concepts to the software development process; (2) effectively measure the software process using various metrics; (3) identify and describe various software systems; (4) describe the differences in developing various software systems; (5) develop a software system of medium complexity using a software development process appropriate for it; (6) develop and implement a test plan for the software system developed; (7) design and implement user interfaces.

## ITEC 3900 - Professional Practice and Ethics (3)

Prerequisite: ITEC 2201 or BUSA 3100
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Familiarizes students with professional practice in the information technology profession. Upon completion of this course students will be able to: (1) learn about the common practice in information technology profession; (2) identify the best practice and practical it collaboration skills; (3) understand societal context and it technology's impact on social matters; (4) learn about it ethical issues and professional responsibilities; (5) explain how to use the web and internet properly; (6) learn to respect intellectual property rights; (7) understand privacy and security issues; (8) familiar with the open source movement; (9) understand software code of ethics.

## ITEC 4100 - Advanced Networks (3)

Prerequisite: ITEC 3100
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) More advanced networking concepts, principles and skills. Upon completion of this course students will be able to: (1) learn advanced network protocols including ipv6; (2) learn next generation wire line network architecture; (3) learn next generation infrastructure for wireless networks; (4) learn advanced network applications including VoIP, video on demand, multimedia conference and so on.

## ITEC 4110 - Digital Media Capstone Project (4)

Prerequisite: ITEC 2110 and Senior Standing
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) More advanced digital media concepts, principles and skills. Upon completion of this course students will be able to: (1) propose a project in the digital media realm. the project will result in the production of some form of digital media or address some novel use or implementation; (2) orally defend the proposal providing preliminary timelines and milestones; (3) generate a detail plan for the execution of the chosen project that includes timelines and milestones; (4) demonstrate consistent forward progress along that timeline; (5) collect documents and notes in a portfolio that documents the process, progress and setbacks encountered during this project (which must include dated project notes kept in a bound project notebook); (6) produce, publicize and present the project and final result in a formal public forum; (7) apply multimedia in digital media publication; (8) evaluate digital media; (9) understand legal issues on digital media.

## ITEC 4130 - Human Computer Interaction (3)

Prerequisite: ITEC 2110; ITEC 2150; ITEC 2201
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Introduction to human-computer interaction and the design of systems that work for people and their organizations. Upon completion of this course students will be able to understand the manner in which humans interact with and use, their computers for productive work.

## ITEC 4150 - Enterprise Process Integration (4)

Prerequisite: ITEC 2150, ITEC 3200, ITEC 3700
The course addresses how processes in an organization can be improved, innovated, and enables by information technology. The course examines the methods and techniques to analyze, design, implement, automate, and integrate enterprise processes using information technology and systems. Course Outcome Goals: 1. Understand how to describe and analyze processes in an organization 2. Understand enterprise process modeling concepts and techniques 3 . Be able to model enterprise processes in an organization 4 . Be able to identify weaknesses in a given enterprise process design and suggest improvements 5 . Understand the basic steps and different approaches to process redesign 6 . Be able to redesign a given process with improvement patterns and best practices 7. Be able to develop an implementation and integration strategy for IT-enabled enterprise processes.

## ITEC 4170 - International Studies in Information Technology (3)

Prerequisite: ITEC 2201 and approval by the instructor
The course covers a variety of information technology topics with an emphasis on the impact of global issues on design, development and adoption of IT systems. The course involves traveling to a foreign country (or countries) to examine differences and similarities of IT systems between the U.S. and other countries. Specific content and instructions will vary by the instructor. Upon completion of this course students will be able to: 1) Compare and contrast IT systems between the U.S. and other countries; 2) Analyze differences in IT resources and infrastructure in different countries; 3) Understand the impact of cultural differences on development and implementation of IT systems; (4) Evaluate the impact of globalization of IT industry.

## ITEC 4200 - Advanced Databases (4)

Prerequisite: ITEC 3200
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) More advanced database concepts, principles and skills. Upon completion of this course students will be able to: 1) Demonstrate in-depth knowledge of database concepts and capabilities within the database management framework; 2) Demonstrate use of database manipulations techniques in a database management system; 3) Demonstrate understanding of database structures in the creation and management of database objects; 4) Implement goals 1 through 3 in one or more of the following: database programming, database design/modeling and/or database administration/architecture.

## ITEC 4210 - Information Analytics and Data Mining (3)

Prerequisite: ITEC 2150 and ITEC 3200
This course enables students to gain an appreciation and understanding of enterprise data, the benefits that can accrue from mining that data, and the kinds of technologies and systems needed to implement and mine enterprise-wide data warehouses. Course Outcome Goals: 1) Define data warehouses and data mining and their role in supporting organizational operations. 2) Demonstrate proficiency in the key techniques, tools and processes for data mining within enterprises and organizations. 3) Interpret the fundamentals of the core building blocks of data mining system. 4) Identify emerging technologies in the context of data warehousing ad data mining. 5) Describe different methods of data mining as a problem-solving technique. 6) Explain how information analytics and data mining can be used to support the decision making process.

## ITEC 4250 - Embedded Systems (3)

Prerequisite: ITEC 3870
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) More advanced database concepts, principles and skills. Upon completion of this course students will be able to: (1) Demonstrate in-depth knowledge of database concepts and capabilities within the database management framework; (2) Demonstrate use of database manipulation techniques in a database management system; (3) Demonstrate understanding of database structures in the creation and management of database objects; (4) Implement goals 1 through 3 in one or more of the following: database programming, database design/modeling and/or database administration/architecture.

## ITEC 4260 - Software Testing and QA (3)

Prerequisite: ITEC 3860
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Concepts and techniques for testing software and assuring its quality. Topics cover software testing at the unit, module, subsystem and system levels; automatic and manual techniques for generating and validating test data; the testing

Georgia Gwinnett College 2015-16 Catalog
process; static vs. dynamic analysis; functional testing; inspections; and reliability assessment. Upon completion of this course students will be able to: (1) learn about theory of software testing; (2) gain skills in various testing environments; (3) develop test cases; (4) practice QA and software testing via projects.

## ITEC 4310 - Operating Systems Security (3)

Prerequisite: ITEC 3300
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop)
This course teaches security principles for OS security. Upon completion of this course students will be able to: (1) learn security principles for Unix and Windows systems; (2) implement account security; (3) implement file system security; (4) assess security risks; (5) reduce security risks.

## ITEC 4320 - Internet Security (3)

Prerequisite: ITEC 3300
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Topics in cryptography and network security. Upon completion of this course students will be able to: (1) understand the constructions of basic cryptographic primitives and protocols (e.g. private-key and public-key cryptography, zeroknowledge proofs, secure multi-party protocols, etc.), learn to reason their security/insecurity and apply them to secure the internet; (2) learn how to construct secure authentication protocols; (3) learn the principles of designing secure protocols for the internet and its applications; (4) understand the constructions, strengths and weakness of the standard protocols deployed to secure the internet and its applications (e.g. IPsec, ieee 802.11i, Kerberos, pki, ssl/tls, set); (5) learn the techniques for defense against malware; (6) learn the techniques for defense against denial of service attacks; (7) learn the principles of designing secure protocols for e-commerce and other applications (e.g. secure payment, auction and voting).

## ITEC 4330 - System Administration (4)

Prerequisite: ITEC 3100 and ITEC 3600
ITEC 4330 System Administration teaches students the fundamentals of system administration using modern operating systems. Upon the completion of the course, students are able to: 1) install and configure a multi-user serve OS and computer programs in a server computer; 2) manage (add, remove and/or restrict) user accounts in the system with access privileges; 3) monitor system resource (such as CPU, memory and I/O) usages and utilize the monitored results for effective administration; 4)operate master consoles using command line interfaces to install/configure/monitor computer systems; 5) use scripting language to automate common administration tasks; 6) describe basic issues (including user access privileges, file system permissions) in security as system administrator.

## ITEC 4400 - Special Topics in Information Technology (1-4)

Prerequisites: Completion of Area F and approval by instructor
Focused study of a specialized topic, problem, issue, or technology of interest to faculty and students. May be repeated if topics are different. No more than 6 credit hours may be applied toward the major. Upon completion of the course, students will: 1) Demonstrate knowledge of emerging IT concepts or technologies that are related to the special topic. 2) Demonstrate knowledge of applicable literature, as is relevant to the special topic 3) Demonstrate proficiency in solving IT problems.

## ITEC 4450 - Web Development (4)

Prerequisite: ITEC 2130, ITEC 2150 and ITEC 3200
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @www.ggc.edu/itlaptop) Fundamental programming concepts and techniques in web development. Upon completion of this course students will be able to: 1)Understand the basic concepts of web clients and servers, as well as how they enable the operation of webbased applications; 2) Choose appropriate technologies and development tools to address a given web development task; 3) Develop web site front-ends using client side programming; 4) Develop web site back-ends using server side programming; 5) Develop web sites that integrate with local or remote databases; and 6: Understand the development life cycle for web-based applications and services.

## ITEC 4550 - Mobile Application Development (3)

Prerequisite: ITEC 2110, ITEC 2150
This course covers fundamental programming concepts and techniques used in mobile applications development. Upon completion of this course students will be able to design, simulate, construct, debug, test, deploy and document a substantial mobile application project. After completing the course students will be able to: 1) Describe the various
platforms and frameworks used to develop mobile applications. 2) Describe the mobile application life cycle. 3) Design, simulate, construct, debug, test and deploy mobile applications. 4) Create applications for a variety of devices. 5) Create user interfaces appropriate for mobile applications. 6) Interface with other co-resident applications, such as locationbased services, browsers, and multimedia applications. 7) Interface with mobile platform peripheral interfaces, such as: cameras, near field communication sensors, Bluetooth, accelerometers, compass, gyroscopes, and phone hardware. 8) Publish applications in the mobile app ecosystem such as Google Play Store, Apple App Store, Windows App Store, etc.

## ITEC 4650 - Game Development (3)

Prerequisite: ITEC 2150 and ITEC 3450
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Fundamental programming concepts and techniques in computer gaming. Upon completion of this course students will be able to learn those concepts and techniques in current state-of-the-art video games.

## ITEC 4700 - Artificial Intelligence (3)

Prerequisite: ITEC 2150
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Introduction to Artificial Intelligence in IT applications. Upon completion of this course students will be able to: (1) understand the basics of AI from historical, philosophical perspective; (2) understand the impact of artificial intelligence in business and other areas; (3) develop a conceptual understanding of the basic issues and major topics in AI; (4) develop programming and designing skills that could be applied in building AI systems; (5) be able to select and implement a suitable AI method for a given problem.

## ITEC 4750 - Enterprise Architecture Design (4)

Prerequisite: ITEC 2201, ITEC 4150
This course develops the competencies necessary to conceptualize, design, implement and, manage enterprise architecture. An enterprise architecture is a blueprint for organization change that describes how the organization operates today and how it intends to operate in the future. This course presents leading frameworks for developing and managing enterprise architecture; provide "hands on" experience with a variety of enterprise architecture modeling tools, techniques and methods; and, introduce students to leading commercially-available enterprise-wide applications commonly referred to as Enterprise Resource Planning Systems (ERP). Course Outcome Goals: 1. Understand enterprise architecture and how it relates to an organization's overall structure at the operational, tactical and strategic levels. 2. Demonstrate proficiency in the key techniques, tools and processes for enterprise architecture design. 3. Develop and articulate an enterprise-architecture for an exemplar organization using one of the main enterprisearchitecture frameworks. 4. Acquire a fundamental understanding of the leading enterprise architecture methodologies. 5. Acquire basic knowledge of Enterprise Resource Planning Systems (ERP) and how these course serve as the basis for an organizations enterprise-architecture. 6. Understand emerging technologies in the context of enterprise architecture modeling. 7. Gain an appreciation of working on enterprise architecture modeling projects in a team environment and obtain experience with team-management. 8. Understand how enterprise architecture decisions impact the firm.

## ITEC 4810 - Information Technology Project I (3)

Prerequisite: ITEC 3100, ITEC 3200, ITEC 3300, ITEC 3700
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Capstone project course for Information Technology majors. Upon completion of this course students will be able to: (1) apply common project practice; (2) utilize ITEC knowledge and experience (in a synthesized way) in problem solving; (3) explore (in-depth) documentations; (4) understand the importance of system documentation; (5) deliver practical results following industry practice.

## ITEC 4820 - Information Technology Project II (3)

Prerequisite: ITEC 4810
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Capstone project course for Information Technology majors. Upon completion of this course students will be able to: (1) apply common project practice; (2) utilize ITEC knowledge and experience (in a synthesized way) in problem solving; (3) explore (in-depth) documentations; (4) understand the importance of system documentation; (5) deliver practical results following industry practice.

## ITEC 4860 - Software Development Project (3)

Prerequisite: ITEC 3200, ITEC 3150 and ITEC 3870
Georgia Gwinnett College 2015-16 Catalog

Co-Requisite: ITEC 4260
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Capstone project course for Information Technology majors. Upon completion of this course students will be able to: (1) apply common software project practice; (2) develop software projects; (3) understand the importance of system documentation; (4) deliver practical software following industry practice.

## ITEC 4900 - Information Technology Internship (3)

Prerequisite: ITEC 2150, ITEC 3100, ITEC 3200, ITEC 3900 and permission of Internship Coordinator
Additional Requirement: Windows based laptop or Apple MacBook (see IT Laptop Program @ www.ggc.edu/itlaptop) Internships are supervised experiential experiences in an ITEC related field. Upon completion of the course, the student will (1) Acquire real world job experience by successfully completing an internship with a company or organization, (2) Utilize effective oral and written communication with customers, clients, supervisors, and other employees in the working environment, (3) Obtain skills to assist with the transition from academia to the organizational environment, and (4) Demonstrate critical thinking and problem analysis, utilizing various tools and technologies.

## INTEGRATED SCIENCE (ISCI)

## ISCI 2001 - Integrated Life/Earth Science (3)

Prerequisites: Completion of the Area D Science requirement with grade of C or better in each course
This course is an integrated science course covering major concepts in the areas of life and earth science. The course will emphasize the nature and skills of science as well as the understanding of major science concepts and principles in these fields. The use of an inquiry based approach throughout the course will enhance the application of these concepts to the teaching of elementary and middle grades students. Upon completion of the course, students will: 1) Demonstrate scientific method and the process of scientific inquiry; 2) Describe the organization of life from the cellular level to the ecosystem; 3) Understand how organisms interact with their environment; 4) Understand the geological processes that shape the earth and their impact on the biosphere; 5) Demonstrate understanding of the components of the solar system; 6) Communicate effectively regarding scientific topics in oral and written form using appropriate scientific terminology; 7) Apply scientific concepts covered in the course to global issues and perspectives including newsworthy scientific stories.

## ISCI 2002 - Integrated Physical Science (3)

Prerequisites: Completion of the Area D Science requirement with grade of C or better in each course This course is intended for students planning a career in elementary education. It provides a conceptual understanding of important concepts of physical science and the application of pedagogical knowledge, grounded in research-based techniques, necessary to teach physical science concepts in order to meet the diverse needs of learners across P-5 grade environments. Topics will include matter, energy, motion, circuits, waves and optics. The level of mathematics required will be the level of one equation and one unknown. Use of technology is required. This course is aligned with state and national standards. Upon completing the course, students will: (1) Be aware of the importance of curiosity, honesty, openness and skepticism in science and will exhibit these traits in their own efforts to understand how the world works; (2) Have the computational and estimation skills necessary for analyzing data and following scientific explanations; (3) Appropriately use tools and instruments for observing, measuring and manipulating objects in scientific activities; (4) Use the ideas of system, model, change and scale in exploring scientific and technological matters; (5) Communicate scientific ideas and activities clearly; (6) Apply the important features of the process of scientific inquiry. (7) Apply fundamental physical science concepts related to matter, energy, force and fields to real world systems.

## ISCI 2500K - Physics and Earth Sciences (4)

Prerequisites: Passing or exempting ENGL 0989
Co-requisite: MATH 1113
This course is for secondary education majors and does not meet the requirements for other Biology tracks. This is an Interdisciplinary Science that course gives secondary education students a background in physics and earth sciences, as required by NSTA (National Science Teachers Association) and GPSC (Georgia Professional Standards Commission). Topics to be covered include: Physics (motion, gravity, energy transformation, waves, electromagnetism, nuclear, quantum and relativity), Astronomy (origin and structure of the universe and the solar system, observational tools and conditions for life), Geology (history and composition of Earth, plate tectonics, resources and weathering) and Climate (the atmosphere, forecasting and climate change). Elementary algebra and trigonometry are used. Upon completion of this course students will be able to: (1) Demonstrate curiosity, honesty, openness and skepticism in science; (2) Apply the scientific method; (3) Construct and interpret charts, graphs and tables to draw conclusions; (4) Use computational
Georgia Gwinnett College 2015-16 Catalog
and estimation skills to analyze data and compose scientific explanations; (5) Collect, present and analyze scientific data gathered through experiment and literature searches; (6) Communicate scientific information effectively in oral and written form using appropriate terminology and media.

## ISCI 2800 - Life \& Earth Science II (4)

Prerequisite: CHEM 2212K, PHYS 1112K
Upon completion of this course, students will: 1) apply the scientific method and the process of scientific inquiry to answer appropriate questions, 2) describe the fundamental principles of molecular biology and bioenergetics and their relationship, 3) describe the fundamental principles of ecology, 4) describe the fundamental principles of geochemistry, cycles of matter and the energetics of earth systems, 5) demonstrate an understanding of stellar evolution, 6) communicate effectively regarding scientific topics in oral and written form using appropriate scientific terminology, and 7) apply scientific concepts to issues in society, business, industry and health fields.

## LEADERSHIP (LEAD)

## LEAD3000 - Essentials of Leadership (3)

Prerequisite: MGMT 3000
This course introduces students to the foundations of leadership, necessary to be effective leaders in organizations. The course provides an overview of the major theories of leadership, as well as an understanding of basic leadership principles necessary to effectively lead organizations.

## LEAD3100 - Leading Organization Change (3)

Prerequisite: MGMT 3000
This course investigates processes of planned organizational change with emphasis on organizational change theory, organizational diagnosis, change intervention strategies, overcoming resistance to change and the role of power and influence.

## LEAD 3500 - Leadership in Teams (3)

Prerequisite: MGMT 3000
This course introduces students to leadership in teams, emphasizing topics such as interpersonal dynamics, conflict management and negotiation, leadership in diverse organizations and managing diversity, and relevant ethical and social issues. Students will be exposed to discussion on questions including how to inspire others, how to mobilize people and harness difference, how to thrive in a team, how to lead change, how to overcome adversity and failure, etc. This course emphasizes the foundations of leadership necessary to be effective leaders in organizations and provides an overview of the major theories of leadership, as well as an understanding of basic leadership principles necessary to effectively lead organizations.

## LEAD3700 - Decision Making and Creative Problem Solving (3)

Prerequisite: MGMT 3000
This course focuses on making decisions and developing creative solutions to difficult problems within an organizational context. Students will have the opportunity to learn about various decision making models, including the process of creative problem solving. To achieve this goal students will gain substantial hands on experience with creative problem solving and problem solving techniques that are applied to a number of domains (i.e. leadership, change, entrepreneurship, conflict management etc.) and will also be exposed to the concept of situational constraints on decision making. This course also introduces heuristics for the application of various decision making models to help students understand when various techniques are appropriate.

## LEAD4100 - Global Leadership (3)

Prerequisites: Essentials of Leadership (LEAD 3000) and Global Business (BUSA 3200), each completed with a grade of C or better; or, consent of the instructor
This course examines the traits, skills and behaviors needed to be an effective leader in a global context. Leadership theory, organizational building, social change and interdisciplinary approaches to complex global issues will be the main components of this course.

LEAD4750 - Leadership Practicum (3)
Prerequisites: MGMT 4350; Senior standing or permission of the instructor

This course gives students an opportunity to identify, plan, implement and evaluate a leadership project within the context of a community-based organization. Students will work as part of a team to identify a project, in collaboration with the organization's leaders, that will benefit the organization and will allow the students to further develop their leadership skills. The project will be carried out under the guidance of the course faculty member and a designated member of the organization.

## MATHEMATICS (MATH)

## MATH 0987 - Foundations for Quantitative Reasoning (4*)

A study of the essential mathematical concepts required for success in MATH 1001: Quantitative Reasoning. Topics may include numeracy, proportional reasoning, algebraic reasoning, modeling via functions, and skills for mathematical success. After completing this course, the student will be able to: 1 . Interpret and use mathematical language appropriately, including the areas of set theory, logic, probability and statistics. 2. Use appropriate technology in the evaluation, analysis, and synthesis of information in problem-solving situations. 3. Express and apply basic tools of logic. 4. Analyze and communicate quantitative and mathematical information presented in multiple ways (including graphical, numerical and verbal). 5. Learn appropriate study skills to enhance the possibilities for future success in mathematics and science courses.

## MATH 0989- Foundations for College Algebra (4*)

A study of essential mathematical concepts required for success in MATH 1111: College Algebra. Topics include properties of numbers, linear equations and inequalities, quadratic equations, graphs, polynomials and roots. After completing this course, the student will be able to: 1 . Express and analyze relationships using functions in multiple ways (graphical, numerical, symbolic and verbal). 2. Model situations using appropriate functions (linear, quadratic, higherdegree polynomial). 3. Manipulate mathematical information, concepts, and thoughts to solve problems using multiple representations of polynomial, radical and rational functions. 4. Demonstrate mathematical creativity and critical thinking by applying problem-solving strategies to solve multiple-step problems involving polynomial equations and inequalities and systems of linear equations. 5. Use appropriate technology in the evaluation, analysis, and synthesis of information in problem-solving situations. 6. Use mathematical language appropriately. 7. Learn appropriate study skills to enhance the possibilities of future success in mathematics.

## MATH 0997 - Support for Quantitative Reasoning - Access Reasoning (2)

Prerequisite: MATH 0987 or appropriate MPI or Compass scores between 28-36 on the COMPASS Algebra Test Co-Requisite: MATH 1001
This course is designed as a co-requisite course and should only be taken with MATH 1001: Quantitative Reasoning. Students enrolling in this co-requisite course must remain enrolled in both courses for the semester. Student will not be permitted to withdraw from one of the courses (either MATH 0997 or MATH 1001) and not the other. Students who do not successfully complete this course will be expected to re-enroll in the co-requisite model (MATH 0997 and MATH 1001) the following semester. This course is designed to support students taking MATH 1001: Quantitative Reasoning with just in-time assistance. Topics will parallel topics studied in MATH 1001 as well as essential quantitative skills needed to be successful in MATH 1001. After completing this course, the student will be able to 1: Interpret and use mathematical language appropriately, including the areas of set theory, logic, probability, and statistics. 2: Use appropriate technology in the evaluation, analysis, and synthesis of information in problem-solving situations. 3: Express and apply basic tools of logic. 4: Analysis and communicate quantitative and mathematical information presented in multiple ways (including graphical, numerical and verbal) 5: Demonstrate mathematical creativity and critical thinking to create combinatorial arguments. 6: Learn appropriate study skills to enhance the possibilities of success in the quantitative aspects of future courses.

## MATH 0999 - Support for College Algebra-Access Algebra (2)

Prerequisite: MATH 0989 or appropriate MPI or Compass scores between 28-39 on the Compass Algebra Test. Co-Requisite: MATH 1111
This course is designed as a co-requisite course and should only be taken with MATH 1111 College Algebra. Students enrolling in this co-requisite course must remain enrolled in both courses for the semester. Students will not be permitted to withdraw from one of the courses (either MATH 0999 or MATH 1111) and not the other. Students who do not successfully complete this course will be expected to re-enroll in the co-requisite model (Math 0099 and MATH 1111) or in MATH 0099 the following semester. This course is designed to support students taking MATH 1111: College Algebra with just-in-time assistance. Topics will parallel topics being studied in MATH 1111 as well as essential quantitative skills needed to be successful in MATH 1111. After successfully completing this course, the student will be
able to: 1. Express and analyze relationships using functions in multiple ways (graphical, numerical, symbolic and verbal). 2. Manipulate mathematical information, concepts, and thoughts to solve problems and simplify expressions. 3. Demonstrate mathematical creativity and critical thinking by applying problem-solving strategies to solve multiple-step problems. 4. Use appropriate technology in the evaluation, analysis, and synthesis of information in problem-solving situations. 5. Use mathematical language appropriately. 6. Learn appropriate study skills to enhance the possibilities of future success in mathematics and science courses.

## MATH 1001 - Quantitative Skills and Reasoning (3)

Prerequisite: Appropriate MPI or Compass scores of 37 and above on the COMPASS Algebra Test
This course emphasizes quantitative reasoning skills needed for informed citizens to understand the world around them. Topics include logic, basic probability, data analysis, and modeling from data. After successfully completing this course, students will be able to: 1 . Interpret and use precise mathematical language appropriately, including (but not limited to) the areas of set theory, logic, probability and statistics. 2. Use appropriate technology in the evaluation, analysis, and synthesis of information in problem-solving situations. 3. Use logical connectors appropriately to form compound statements and apply them to ap0plications such as searching databases. 4. Read, interpret, and present data in multiple representations, especially graphical and numerical. 5. Create and analyze combinatorial arguments using tools such as permutations and combinations. Note: This course is an alternative in Area A of the Core curriculum and is not intended to supply algebraic background for students who intend to take Pre-Calculus or the Calculus sequences for mathematics and science majors.

## MATH 1111 - College Algebra (3)

Prerequisites: Appropriate MPI or Compass scores of 40 and above on the COMPASS Algebra Test
This course provides an in-depth study of the properties of algebraic, exponential and logarithmic functions as needed for calculus. Emphasis is on using algebraic and graphical techniques for solving problems involving linear, quadratic, piece-wise defined, rational, polynomial, exponential, and logarithmic functions. Upon completion of this course a student will: 1. Express and analyze relationships using functions in multiple ways (graphical, numerical, symbolic and verbal); 2. Model situations using appropriate functions (linear, quadratic, higher-degree polynomial, exponential and logarithmic); 3 . Demonstrate mathematical creativity and critical thinking by applying problem-solving strategies to solve multiple-step problems involving polynomial, exponential and logarithmic equations and inequalities and systems of linear equations; 4. Manipulate mathematical information and concepts to solve problems using multiple representations of polynomial, exponential and logarithmic functions; 5. Use mathematical language appropriately; 6. Use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations.

## MATH 1113 - Pre-calculus (4)

Prerequisite: SAT math $\geq 550$, ACT math score $\geq 24$ OR MATH 1111; ENGL 0099
This course is designed to prepare students for calculus, physics and related technical subjects. Upon completion of this course a student will be able to: (1) express and analyze relationships using functions in multiple ways (graphical, numerical, symbolic and verbal); (2) model situations using appropriate functions (linear, quadratic, higher-degree polynomial, exponential, logarithmic, rational and trigonometric); (3) demonstrate mathematical creativity and critical thinking in applying appropriate functions to solve a variety of mathematical problems; (4) manipulate mathematical information and concepts to solve problems using multiple representations of polynomial, exponential, logarithmic, rational and trigonometric functions; (5) demonstrate advanced algebraic manipulation skills; (6) interpret and use precise mathematical language appropriately; (7) use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations.

## MATH 1113H Pre-Calculus Honors (4)

Prerequisite: SAT math $\geq 550$, ACT math score $\geq 24$ OR MATH 1111; ENGL 0099
Co-requisite: Enrollment in the GGC First Year Honors Experience or Honors Program; or, permission of the Dean of the School of Science and Technology and the Director of the GGC Honors Programs.
This course is designed to prepare students for calculus, physics and related technical subjects. Upon completion of this course a student will be able to: (1) express and analyze relationships using functions in multiple ways (graphical, numerical, symbolic and verbal); (2) model situations using appropriate functions (linear, quadratic, higher-degree polynomial, exponential, logarithmic, rational and trigonometric); (3) demonstrate mathematical creativity and critical thinking in applying appropriate functions to solve a variety of mathematical problems; (4) manipulate mathematical information and concepts to solve problems using multiple representations of polynomial, exponential, logarithmic, rational and trigonometric functions; (5) demonstrate advanced algebraic manipulation skills; (6) interpret and use precise mathematical language appropriately; (7) use appropriate technology in the evaluation, analysis and synthesis of
information in problem-solving situations. The instructor will assign Honors projects as part of the course. This course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that Math 1113-H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## MATH 2000 - Statistics (3)

Prerequisites: ENGL 0989; ENGL 0099; MATH 1111 or MATH 1001
A non-calculus introduction to descriptive and inferential hypothesis testing, linear regression and correlation, the normal distribution and estimation. Upon completion of the course students will be able to: (1) see statistical analysis as a practical and useful tool in today's society; (2) understand that variability is natural, predictable and quantifiable; (3) know the parts of the process through which statistics works to answer questions; (4) choose the appropriate graph and analysis technique(s) to address research questions; (5) communicate the results of a statistical study in the context of the given scenario, including scope of inference and causality; (6) use statistical language appropriately; (7) use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations.

## MATH 2008 - Foundations of Numbers and Operations (3)

Prerequisites: MATH 1001 or MATH 1111 or MATH 1113
This course is an Area F introductory mathematics course for early childhood education majors. This course will emphasize the understanding and use of the major concepts of numbers and operations. Additional topics may include geometry, data analysis and probability, problem solving, logic, statistics and measurement. As a general theme, strategies of problem solving will be used and discussed in the context of various topics. Upon completion of this course, early childhood education students will be able to: (1) Solve problems using multiple strategies, manipulative and technological tools; interpret solutions; and determine the reasonableness of answers and efficiency of methods (IEE 2, IEE 3); (2) Communicate using precise mathematical terminology (IEE 1); (3) Construct and justify arguments as well as interpret solutions; and determine reasonableness of answers and efficiency of methods; (4) Understand numbers, ways of representing numbers, relationships among numbers and number systems; (5) Understand meanings of operations and how they relate to one another.

## MATH 2200 - Calculus I (4)

Prerequisite: MATH 1113
An introduction to differential calculus. Upon completion of this course a student will be able to: (1) interpret and use precise mathematical language and be able to construct and follow mathematical proofs; (2) use a complete catalog of the tools of calculus (e.g., limits, continuity, differentiation and integration); (3) demonstrate mathematical creativity and critical thinking by applying problem-solving strategies to solve multiple-step calculus problems; (4) demonstrate an understanding of the interconnectedness between the major topics in the course from various perspectives (i.e. graphical, numerical, symbolic and verbal); (5) Use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations.

## MATH 2200H - Calculus I Honors (4)

Prerequisite: Prerequisite: MATH 1113
Co-requisite: Enrollment in the GGC First Year Honors Experience or Honors Program; or, permission of the Dean of the School of Science and Technology and the Director of the GGC Honors Programs.
An introduction to differential calculus. Upon completion of this course a student will be able to: (1) interpret and use precise mathematical language and be able to construct and follow mathematical proofs; (2) use a complete catalog of the tools of calculus (e.g., limits, continuity, differentiation and integration); (3) demonstrate mathematical creativity and critical thinking by applying problem-solving strategies to solve multiple-step calculus problems; (4) demonstrate an understanding of the interconnectedness between the major topics in the course from various perspectives (i.e. graphical, numerical, symbolic and verbal); (5) Use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations. The instructor will assign Honors projects as part of the course. This course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that Math $2200-\mathrm{H}$ consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## MATH 2210 - Calculus II (4)

Prerequisite: MATH 2200
A continuation of Calculus I. Topics include application of definite integrals; derivatives and integrals with inverse trigonometric functions; indeterminate forms and l'Hopital's rule; techniques of integration; polar coordinates; infinite sequences and series.

## MATH 2220 - Calculus III (3)

Prerequisite: MATH 2210
In this course, the concepts of single variable calculus are extended to functions of more than one variable and vector valued functions. Topics from vector analysis and multivariate calculus will include vector calculus, directional and partial differentiation, gradients, differential calculus of vector valued functions, multiple, iterated, line and surface integrals and applications of these concepts .

## MATH 2300 - Discrete Math (3)

## Prerequisite: MATH 1111

The study of objects and ideas that can be divided into separate or discontinuous parts. Upon completion of this course students will be able to: (1) Reason mathematically and use mathematical language appropriately to demonstrate an understanding of comprehending and constructing mathematical arguments; (2) perform combinatorial analysis to solve counting problems and analyze algorithms; (3) demonstrate an understanding of discrete structures including sets, permutations, relations, graphs and trees; (4) demonstrate algorithmic thinking using mathematical creativity and critical thinking by specifying algorithms, verifying that algorithms work and analyzing the time required to perform specific algorithms; (5) use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations.

## MATH 2450 - Linear Algebra (3)

Prerequisite: Math 2200
Upon successful completion of the Linear Algebra I course, the students should be able to: (1) Perform computations involving vectors, matrices and systems of linear equations, both by-hand and using appropriate technology; (2) Identify real-world applications which can be modeled using systems of linear equations, and develop linear models for these problems (e.g., linear regression models for statistics problems); (3) Use appropriate technology to solve large-scale systems of linear equations; (4) State the rules (axioms) which vector spaces/subspaces must obey, and check whether a given nonempty set of objects is a vector space/subspace; (5) Recognize linear transformations from one vector space into another vector space and identify special sets of vectors including the kernel and the range; and (6) Determine eigenvector and eigenvalue pairs, and use them to analyze problems (e.g., the long-term behavior of a dynamical system).

## MATH 2500 - Foundations of Mathematics (3)

Prerequisite: MATH 2210 or MATH 2210 with concurrency
An introduction to the language and tools used in upper level mathematics courses. After completing this course, students should be able to: (1) Construct a rigorous mathematical proof using a variety of techniques including induction, contradiction, and contrapositive; (2) Determine whether a mathematical argument is valid given the appropriate content background, and identify the flaws in an invalid mathematical argument; (3) Use the tools of naïve set theory;(4) Demonstrate a knowledge of and ability to use various foundational mathematical concepts such as functions, relations, ordering and cardinality.

## MATH 2600 - Mathematical Modeling (3)

Prerequisite: MATH 2200
This course is an introduction to the application of mathematical models to real systems in areas including chemistry, biology, physics and economics. Upon completion of this course, students will be able to (1) Identify the salient characteristics of a mathematical model; (2) Apply a mathematical modeling process to translate real-world problems into models; (3) Evaluate and apply mathematical methods, including estimation, optimization, simulation, and sensitivity analysis; (4) Evaluate different technologies and apply them to the development and analysis of mathematical models; (5) Classify and apply discrete or continuous, probabilistic or deterministic, and empirical or theoretical models; (6) Collaborate as members of a team throughout the development and analysis of mathematical models; (7) Communicate aspects of a mathematical model including the development, results, and conclusions in both oral and written forms.
MATH 3000 - Applied Statistics (3)
Prerequisite: MATH 2000
Georgia Gwinnett College 2015-16 Catalog

Applied Statistics is designed to prepare students to use a variety of statistical packages to solve real-world problems. The course will cover and expand on the statistical concepts covered in MATH 2000, including descriptive statistics, probability distributions, regression, one and two -sample tests, and ANOVA. Upon successful completion of the Applied Statistics course, the students should be able to: 1) Calculate and interpret statistical measures of a dataset. 2) Develop and apply graphical representations of univariate and multivariate data. 3) Perform simulations to generate data in order to solve applied problems. 4) Analyze data through a series of inferential methods such as hypothesis tests, confidence intervals, and regression. 5) Demonstrate proficiency using major statistical packages.

## MATH 3008 - Numeracy (3)

Prerequisite: Admission to Teacher Education
The course is part of the Special Education major and is designed to help teachers adapt instruction for students with exceptionalities in mathematics. Course content includes assessing the nature and level of students' P-12 mathematics using a model of mathematical learning and designing developmentally appropriate instruction based on the results of such assessments. Course Outcome Goals: This course focuses on preparing special education majors to: (1)Identify students who have a mathematical learning disability by knowing and applying the various criteria for mathematical learning disabilities. (2)Use models of mathematical learning to identify the nature or type of a mathematical learning disability. (3)Use models of mathematical learning to develop instruction that allows students with mathematical learning disabilities to achieve required numeracy standards.

## MATH 3011 - Geometry for Teachers (3)

Prerequisite: MATH 2008
Math 3011 is designed to prepare students to teach geometry up to grade level 6. MATH 3011 is a content course that gives prospective teachers a deeper understanding of geometry and measurement. This course may not be used to satisfy degree requirements for students majoring in Mathematics. Upon complete of this course students will be prepared to teach geometry by being able to: (1) Demonstrate mathematical creativity and critical thinking by applying geometric understanding to solve a variety of mathematical problems using multiple representations. (2) Interpret and use mathematical language appropriately. (3) Use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations. (4) Use geometric applications and procedures to present methods, results and conclusions both in written and oral form. (5) Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships. (6) Specify locations and describe spatial relationships using coordinate geometry and other representational systems. (7) Apply transformations and use symmetry to analyze mathematical situations. (8) Use visualization, spatial reasoning and geometric modeling to solve problems.

## MATH 3021 - Geometry (3)

Prerequisite: MATH 2500
This course is a modern treatment of geometry primarily from the metric approach, but with some reference to the Euclidean Synthetic approach. Topics include parallelism, similarity, area, constructions, non-Euclidean and finite geometries. After successfully completing this course, students will be prepared to teach geometry by being able to: (1) Demonstrate an understanding of the historical development of geometry from its Euclidean foundations on through the formulation of hyperbolic and elliptical non-Euclidean geometries. (2) Demonstrate an understanding of the axiomatic foundations of various geometries and skill in formulating conjectures, proving theorems, disproving nontheorems and solving problems in these geometries. (3) Demonstrate an understanding and skill in comparing and contrasting geometries - finite, non-finite, affine, projective, elliptic, hyperbolic, parabolic and such. (4) Demonstrate an understanding and skill in proving theorems and solving problems in two and three-dimensional Euclidean geometry whether through synthetic, vector, matrix and/or transformational approaches. (5) Demonstrate an understanding and skill with Geometric and other appropriate software as it relates to different approaches and the study of different geometries.

## MATH 3100 - Differential Equations I (3)

Prerequisite: MATH 2210
Math 3100 provides students with a foundation modeling with and solving differential equations. The course will include coverage of solution methods, existence and uniqueness of solutions and approximation methods. Applicability of differential equations to a variety of physical phenomena will be explored. After completing this course, students should be able to (1) Identify and classify various types of differential equations. (2) Find general and particular solutions of first-order linear differential equations by various methods, including integrating factors, separation of variables and Bernoulli methods. (3) Find general and particular solutions of second-order linear differential equations by various

Georgia Gwinnett College 2015-16 Catalog
methods, including reduction of order, undetermined coefficients, variation of parameters and solution by series. (4) Use Laplace transforms to solve differential equations. (5) Use differential equations to model physical phenomena. (6) Solve systems of first-order linear equations using various methods, including finding eigenvalues and eigenvectors. (7) Use technology to analytically and numerically solve differential equations.

## MATH 3111 - Algebra and Problem Solving (3)

Prerequisite: MATH 2008
MATH 3111 is designed to prepare students to teach algebra up to grade 6. MATH 3111 is a content course that gives prospective teachers a deeper understanding of algebra and problem-solving. The course may not be used to satisfy requirements for mathematics major. Course outcome goals: After successfully completing this course, students will be prepared to teach algebra by being able to (1) Demonstrate knowledge of the content necessary for teaching algebra. (2)Demonstrate mathematical creativity and critical thinking by applying algebraic methods to solve a variety of mathematical problems using multiple representations. (3)Interpret and use mathematical language appropriately. (4)Use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations.
(5)Use algebraic applications and procedures to present methods, results and conclusions both in written and oral form. (6)Use mathematical models to represent and understand quantitative relationships (7) Understand patterns, relations and functions.(8)Represent and analyze mathematical situations using algebraic symbols (9)Analyze change in various contexts.

## MATH 3300 - Mathematical Statistics I (3)

Prerequisite/Co-requisite: MATH 2220
Mathematical Statistics I is designed to prepare students to use calculus theory for solving problems involving probability and statistics. The course will include coverage of various statistical concepts including probability distributions, sampling distributions, moment generating functions, expectation and independence. Upon successful completion of the Mathematical Statistics I course, the students should be able to: (1) Compute probabilities involving derivatives and integrals, both by hand and using appropriate technology. (2) Identify real-world situations which can be modeled using probability distributions. (3) State the rules that probability distributions must obey and use these rules for solving calculus problems. (4) State mathematical properties governing statistical independence and use these properties to solve calculus problems and to make statistical calculations (e.g., covariance). (5) Determine the appropriate probability distribution to describe a given situation and use this probability distribution to analyze problems. (6). Model and solve applied problems using discrete and continuous probability distributions using calculus.

## MATH 3311 - Probability, Statistics and Problem Solving (3)

Prerequisite: MATH 2008
This course is designed to prepare early education pre-service teachers to provide instruction of basic concepts in probability and statistics. The course will include coverage of various probability and statistical concepts described in the National Council of Teachers of Mathematics (NCTM). Some of these topics include measures of development of a research question, collecting data to address research questions and the multicultural development of probability and statistics. Upon successful completion of the Probability, Statistics and Problem Solving course, the students should be able to: (1) Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them. (2)Select and use appropriate statistical methods to analyze data. (3) Develop and evaluate inferences and predictions that are based on data. (4) Understand and apply basic concepts of probability. (5) Collect data using observations, surveys and experiments. (6) Represent data using tables and graphs such as line plots, bar graphs and line graphs. (7) Recognize the differences in representing categorical and numerical data. (8) Demonstrate knowledge of the historical development of statistics and probability including contributions from diverse cultures.

## MATH 3350 - Applied Mathematics (3)

Prerequisites: MATH 2600 and MATH 3100
This course will focus on theories and applications of mathematical modeling techniques such as partial differential equations for a variety of problems in the natural sciences. Technology will be used to numerically and graphically interpret result of real-world problems. Students will: Utilize partial differential equations and boundary value problems in solving application problems. Apply a mathematical modeling process to translate real-world problems into relevant representations. Utilize dimensional analysis and scaling techniques to develop and analyze mathematical models. Evaluate and apply mathematical methods, including estimation, optimization, simulation and sensitivity analysis. Apply mathematics to problems in discipline specific areas such as Biology, Finance, Physics, etc in terms of differential equations.

## MATH 3400 - Applied Linear Algebra (3)

Prerequisite: MATH 2450
This course covers advanced topics in Linear Algebra including but not limited to: eigenvectors and eigenvalues, real vector spaces and their subspaces, symmetric and positive definite matrices, orthogonality and least squares, orthonormal bases, the Gram-Schmidt process and inner product spaces. Upon successful completion of the Applied Linear Algebra course, the students should be able to: 1. Perform computations involving matrices that are symmetric, positive definite, and similar, both by hand and using appropriate technology. 2. Identify real-world applications which can be modeled using eigenvalues, eigenvectors, and matrices of general transformations between finite dimensional vector spaces in addition to other topics. 3. Formulate and use appropriate technology to solve Least Squares Problems. 4. Define, identify, and solve problems involving orthonormal bases, in particular, problems involving the Gram-

Schmidt Process. 5. Define, and identify real vector spaces, inner product spaces, and their corresponding subspaces.

## MATH 3450 - Numerical Methods I (3)

Prerequisites: MATH 2450, MATH 3100
Computational simulations are used in many fields. This course introduces the development and mathematical analysis of practical algorithms for the basic areas of numerical analysis. Students will study methods and implement algorithms to obtain numerical results accurately and efficiently. After completing this course, students should be able to: (1)Quantify the effects of finite precision arithmetic on numerical algorithms using basic error analysis. (2)Utilize methods of interpolation and approximation to fit functions to available data. (3)Use direct and iterative methods to solve linear algebraic systems. (4)Apply numerical differentiation and quadrature techniques to approximate derivatives and integrals.

## MATH 3500 - Abstract Algebra I (3)

Prerequisite: MATH 2450; MATH 2500
This course is an axiomatic introduction to groups, rings and fields and their properties. The four main components of this course are: groups and subgroups, normal subgroups and quotient groups, homomorphisms and isomorphisms and rings and fields. After successfully completing this course, students will be able to: (1) Prove properties of an algebraic system working from basic axioms in each of the four components. (2) Use theorems and techniques to solve problems in each of the four components. (3) Solve problems involving a standard set of examples in each of the four components. (4) Identify real-world applications of abstract algebra and solve problems related to those applications.

## MATH 3550 - History of Mathematics (2)

Prerequisite: MATH 2500
This course presents a historical development of various areas in mathematics and important figures in mathematics from ancient and modern times. Upon completion of this course a student will: (1) Explore the utility of mathematics from a historical and cultural perspective; (2) Solve problems of historical significance; (3) Develop their sensitivity to the diversity of cultures contributing to the development of mathematics and to the unique perspectives of students for groups underrepresented in the mathematical sciences; (4)Develop and share curricular materials and teaching strategies to promote knowledge and appreciation for historical and cultural foundations of mathematics; (5) Explicitly address the designated NCTM Content Standards.

## MATH 3600 - Mathematics Content Methods (4)

Prerequisite: Admission to the Teacher Education and successful completion of the following courses: EDUC 3300, EDUC 3350 and Math 2200
This course will focus on methods for implementing student-centered instruction in mathematics. Special emphasis will be placed on the particular ways of knowing associated with mathematics and incorporating these ways of knowing into learning activities for secondary students. Candidates will design, implement and assess learning activities for secondary students. A field component accompanies this course.

## MATH 3700 - Real Analysis I (3)

Prerequisite: MATH 2500
This course introduces students to the fundamentals of mathematical analysis at an adequate level of rigor. The core components of the course are sets and the real line, metric spaces, sequences and series of functions and the theory of differentiation and integration. After completing this course, students should be able to: (1) Explain and restate theorems and definitions in different contexts and as they apply to special cases in each of the four core components of the course. (2)Identify which theorems and definitions apply to various situations in each of the four core components of the course (3) Construct proofs in each of the four core components of the course. Use the theorems and techniques to
solve problems in each of the four core components of the course. (4)Use the theorems and techniques to solve problems in each of the four core components of the course. The course is intended to provide students with a fuller understanding of the calculus, as well as prepare them for graduate school in mathematics and other disciplines requiring analytical and numerical solution of equations arising from mathematical modeling.

## MATH 4100 - Differential Equations II (3)

Prerequisites: MATH3100 and MATH2220
This course provides students with a foundation modeling with and solving differential equations. The course will include coverage of solution methods, existence and uniqueness of solutions and approximation methods. Applicability of differential equations to a variety of physical phenomena will be explored. After completing this course, students should be able to: Identify and classify PDEs as elliptic, parabolic or hyperbolic; Used the method of characteristics, separation of variables, eigenfunction expansion, Fourier analysis and Green's function techniques to solve PDEs where applicable; Use Laplace, heat and wave equations to model physical phenomena; Use technology to analytically and numerically solve differential equations on bounded domains.

## MATH 4150 - Complex Analysis (3)

Prerequisite: MATH2500
This course provides students with a foundation in the theory and applications of complex analysis. The four core components covered in the course are (i) complex numbers and elementary functions of a complex variable (ii) limits, continuity and analyticity (iii) the Cauchy integral formula, power series and Laurent series and (iv) the Residue theorem and its applications. After completing the course, student should be able to: explain and restate theorems and definitions in different contexts and as they apply to special cases in each of the four core components of the course; identify with theorems and definitions apply to various situations in each of the four core components of the course; construct proofs in each of the four core components of the course; use the theorems and techniques to solve problems in each of the four core components of the course.

## MATH 4200 - Special Topics in Mathematics (3)

Prerequisite: Instructor consent
This course provides an in-depth look at a topic not covered by the existing mathematics courses. The course may be repeated if topics are different.

## MATH 4250 - Topology (3)

Prerequisite: MATH 2500 and MATH 2220
This course introduces students to the fundamentals of topology at an adequate level of rigor. The three core components covered in the course are (i) Sets and Topologies, (ii) Properties of Topological Spaces and (iii) Functions between Topological Spaces. After completing this course, students should be able to: 1. Explain and restate theorems and definitions in different contexts and as they apply to special cases in each of the three components of the course. 2 . Identify which theorems and definitions apply to various situations in each of the three core components of the course. 3. Construct proofs in each of the three core components of the course. 4. Use the theorems and techniques to solve problems in each of the three core components of the course. This course is intended to provide students with an introduction to topology, as well as prepare them for graduate school in mathematics and other disciplines.

## MATH 4300 - Mathematical Statistics II (3)

Prerequisite: MATH 3300
Mathematical Statistics II is designed to prepare students to use calculus theory for the development of probability and statistical models. The course will include coverage of various statistical concepts including probability distributions for functions of random variables, sampling distributions, properties of estimators, order statistics and hypothesis testing. After completing this course, students should be able to: 1 . Determine probability distributions of functions of random variables; 2. Develop probability models of real world situations and analyze the results; 3 . Develop models for sampling distributions; 4. Evaluate the quality (e.g., bias, mean square error, sufficiency, consistency) of statistical estimators; 5. Determine functions for statistical estimators using the method of moments and maximum likelihood estimation; 6 . Use computer technology to simulate probability distributions, sampling distributions and estimators; 7. Model and solve applied problems by synthesizing the components of the course (probability distributions, sampling distributions and statistical estimators); and 8. Apply methods for conducting statistical hypothesis testing to reach conclusions for research questions.

## MATH 4500 - Abstract Algebra II (3)

Georgia Gwinnett College 2015-16 Catalog

## Prerequisite: MATH 3500

This course is a continuation of Math 3500, Abstract Algebra I. The first four main components of this course are an axiomatic continuation and a more in-depth study of the components of Abstract Algebra I: (i) groups; (ii) homomorphism and isomorphisms; (iii) rings; and (iv) fields, with concentration on the latter two. The fifth component is special topics (chosen by the instructor) that may include Sylow Theorems, Finite Simple Groups, Generators and Relations, Frieze Groups and Crystallographic Groups and Algebraic Coding Theory. After successfully completing this course, students will be able to: (1) Prove properties of an algebraic system working from basic axioms in each of the five components. (2) Use theorems and techniques to solve problems in each of the five components. (3) Solve problems involving a standard set of examples in each of the five components. (4) Identify real-world applications of abstract algebra and solve problems related to those applications.

## MATH 4600 - Advanced Mathematical Modeling (3)

Prerequisite: MATH 2600 and MATH 3450
This course is a continuation of Math 2600: Mathematical Modeling and involves a more in-depth study of components including estimation, optimization, simulation and sensitivity analysis. Additional topics covered may include partial differential equations, variational calculus, stochastic processes and finite elements. After successfully completing is course, students will be able to: (1) Identify the salient characteristics of a mathematical model. (2) Apply a mathematical modeling process to translate real-world problems into models. (3) Evaluate and apply mathematical methods, including estimation, optimization, simulation and sensitivity analysis. (4) Evaluate different technologies and apply them to the development and analysis of mathematical models. (5) Classify and apply discrete or continuous, probabilistic or deterministic and empirical or theoretical models. (6) Collaborate as members of a team throughout the development and analysis of mathematical models. (7) Communicate aspects of a mathematical model including the development, results and conclusions in both oral and written forms.

## MATH 4700 - Real Analysis II (3)

Prerequisite: MATH 3700
This course introduces students to the fundamentals of mathematical analysis at an adequate level of rigor. The four core components covered in the course are (i) multi-dimensional spaces with a focus on three-dimensions as a metric space, (ii) elements of point set topology in 3-space (iii) the classical theory of differentiation and integration in 3-space (iv) curves and surfaces in 3-space. After completing this course, students should be able to: (1)Explain and restate theorems and definitions in different contexts and as they apply to special cases in each of the four core components of the course.(2)Identify which theorems and definitions apply to various situations in each of the four core components of the course. (3)Construct proofs in each of the four core components of the course. (4)Use the theorems and techniques to solve problems in each of the four core components of the course (5)Use the theorems and techniques to solve problems in each of the four core components of the course.

## MATH 4900 - Mathematics Capstone (3)

Prerequisite: MATH 4500 or MATH 4600 or MATH 4700
This course is the culminating experience for the mathematics major. The course serves to synthesize information that the mathematics major has learned throughout the program of study. During the course, the student will participate in a research project, provide outreach and interpret research articles. Upon successful completion of the Mathematics Capstone course, the students should be able to: 1. Locate, select, organize and present mathematical information in an appropriate manner. 2. Use appropriate mathematical language and reasoning in written and oral form. 3. Evaluate, analyze and synthesize information to solve applications both individually and as a team. 4. Use technology as a tool to help solve real-world applications and/or non-trivial theoretical problems. 5. Contribute to the mathematics community and the community at large in a service capacity.

## MANAGEMENT (MGMT)

MGMT 3000 - Principles of Management (3)
Prerequisites: BUSA 2105; BUSA 2106 or ITEC 2201; or consent of instructor
An introduction to the management process, emphasizing planning and strategy, organizational theory and structure, organizational behavior, ethical leadership, motivation, communication, and team building.

## MGMT 3040 - Human Resource Management (3)

Prerequisite: MGMT 3000. A study of modern personnel functions. Topics may include: staffing, human resource development, compensation and benefits, and employee relations.
Georgia Gwinnett College 2015-16 Catalog

## MGMT 3250 - Management of Non-Profit Organizations (3)

Prerequisite: MGMT 3000
The course will focus on those management issues that are pertinent for effective management of nonprofit organizations. Topics covered include the scope of the nonprofit sector, management issues as they pertain to nonprofits, fundraising, financial management, accountability, volunteer management issues, strategic planning, marketing, governance, and leadership.

## MGMT 3400 - Ethics and Corporate Social Responsibility (3)

Prerequisite: MGMT 3000
A study of the issues, philosophies and ethical implications which face businesses in an increasingly complex global society. Covers methods for analyzing and applying personal values, recognizing organizational, cultural and social influences on ethical behavior and recognizing ethical issues and dilemmas in the corporate setting. Also explores the business and society relationship, stakeholder management, and corporate social responsibility.

## MGMT 4100 - Organization Behavior (3)

Prerequisite: MGMT 3000 or permission of instructor
A study of individual and group behaviors and their influence and interrelationships in an organizational environment.

## MGMT 4101 - International Management (3)

Prerequisites: MGMT 3000; BUSA 3200
This course focuses on the challenges and opportunities associated with organizational management and business strategy in the global environment. The major areas and themes covered by this course are the following: the environment of international management, the role of culture, international strategic management, and international human resource management.

## MGMT4105 - Theories of Motivation (3)

Prerequisite: MGMT 4100
This course examines topics of motivation and leadership in the workplace by addressing theoretical formulations, major research findings and real-world applications of the various theories of motivation. Issues related to these topics will include gender, job attitudes, cross-cultural influences, and organizational reward systems.

## MGMT 4200 - Organizations and Technology (3)

Prerequisites: MGMT 3000; BUSA 3100
This course focuses on how managers use technology to assist with business functions and achieve organizational goals.
The relationship of technology to other processes within organizations is examined.

## MGMT 4220 - Project Management (3)

Prerequisites: BUSA 3100 or ITEC 1201/2201
This course uses established project management principles and examines the use of systematic processes for maximizing resources for work within optimum cost and time parameters. The methodology includes: identification of individual tasks, time implications and costs of each task; logical work flows and bottlenecks; analysis of corrective actions; balancing cost parameters against time impacts; and utilization of appropriate software to analyze projected scenarios to create optimization.

## MGMT 4300 - Entrepreneurship and New Ventures (3)

Prerequisites: MGMT 3000; MKTG 3000
Cross-Listed with MKTG 4301
This course studies new ventures and businesses, the characteristics of successful entrepreneurs, the process of starting a new business and the determinants of new venture performance. Students will be required to prepare a business plan for a prospective new venture.

## MGMT 4350 - Leadership in 21st Century Organizations (3)

Prerequisites: MGMT 3000; MGMT 4100 recommended
This course examines the traits, skills and behaviors of effective leaders. The role of leaders in sustaining profitability, productivity and excellent customer service in $21_{\text {st }}$ century organizations will be emphasized. An overview of the research literature on leadership will be included. Students will gain insights into how to enhance their own leadership skills.

## MGMT 4400 - Negotiations (3)

Prerequisites: MGMT 3000; MGMT 4100 recommended
In this course, students learn how to become effective negotiators in managerial settings. The course is largely experiential, where students learn by doing. Simulated negotiations are also utilized as a means to enhance learning.

## MGMT 4600 - Operations Management (3)

Prerequisite: MGMT 3000; ITEC 1001; BUSA 2000
This course provides a frame of reference for using quantitative models in support of business decision making. Topics include model components, simulation, optimization, time series and causal forecasting, decision analysis, Monte Carlo simulation, linear programming, quality management and other techniques for project and operations management. The course emphasizes the value of these approaches in a wide variety of functional settings.

## MGMT4620 - Systems Analysis and Design for Managers (3)

Prerequisites: BUSA 3100 or ITEC 1201 or ITEC 2201; ITEC 2120 or ITEC 2140; ITEC 3200; MGMT 4220
Includes the concepts, methodologies and techniques involved in information systems design and analysis. Presents an overview of information systems and the systems development life cycle for the systems analyst/manager. Course emphasis focuses on tools and techniques used to document information systems. Presents students with real-world system analysis skills and techniques within the framework of the systems development life cycle (SDLC). Examples and cases are drawn from actual systems projects that enable students to learn in the context of solving problems, much like the ones they will encounter on the job.

## MGMT 4650 - International Management of IT (3)

Prerequisites: BUSA 3100 or ITEC 1201/2201 (Management Information Systems)
Discussion and in-depth analysis of contemporary information systems topics with emphasis on the economic and technological impact of computer information systems on the business environment. Coverage includes a discussion of the international considerations of the adoption of information technology innovations, international considerations for software development, challenges of cross-border communications, international human resource considerations and international monetary considerations

## MGMT 4700 - Strategic Management (Capstone) (3)

Prerequisites: BUSA 3000; BUSA 3100; BUSA 3200; FINA 3000; MGMT 3040; MGMT 3400; MGMT 4100; MGMT 4600; MKTG 3000; Senior Standing
The Capstone is designed to integrate knowledge gained in the functional business areas and to exercise students' skills in problem identification, strategy formulation, adoption, implementation, evaluation and termination.

## MARKETING (MKTG)

## MKTG 3000 - Principles of Marketing (3)

Prerequisites: BUSA 2105; BUSA 2106
An introduction to the basic principles of marketing and the marketing environment. Topics include consumer markets, channels of distribution, product and pricing policies, promotion, and ethical planning

## MKTG 3050 - Consumer Behavior (3)

Prerequisite: MKTG 3000
A study of the social, economic and cultural influences and expectations which affect attitude formation and decisionmaking processes of consumers.

## MKTG 3060 - Retailing (3)

Prerequisite: MKTG 3000
An examination of the fundamentals necessary for establishing and effectively operating a retail concern. Includes consideration of the marketing and management challenges faced by retailers.

MKTG 3200 - Business to Business Marketing (3)
Prerequisite: MKTG 3000

Explores special problems and considerations of marketing products and services to organizational buyers. The course examines organizational buyer behavior, business to business promotion, pricing and development of industrial products.

## MKTG 3400 - Professional Selling (3)

Prerequisite: MKTG 3000
This course helps students develop an understanding of the personal selling process and its role within an organization's promotional mix. Customer relationship management (CRM), negotiating skills, as well as other personal selling skills are examined.

## MKTG 4025 - Marketing Research (3)

Prerequisites: MKTG 3000; BUSA 2000
A study of the methods and procedures designed to provide management with information on which to base decisions, including developing and evaluating marketing strategies. Topics include the gathering and use of marketing information from primary and secondary sources, quantitative and qualitative research methodologies.

## MKTG 4100 - Marketing Management (3)

Prerequisites: MKTG 3000, MGMT 3000
Study at an advanced level of the major issues and problem areas facing marketing executives. Development of complete marketing programs; discussion of major marketing problems; analysis of cases.

## MKTG 4200 - Promotion (3)

Prerequisite: MKTG 3000
A study of the principles, concepts and practices relating to the different kinds of communications employed in the dissemination of information about products and services to potential buyers. Aspects of messages and media will be explored.

## MKTG 4300 - Advertising (3)

Prerequisite: MKTG 3000
A focus on the formulation of advertising strategy. Includes the use of research to develop and evaluate advertising, as well as creative strategy and media planning. Ethical aspects of advertising are also discussed.

## MKTG 4301 - Entrepreneurship \& New Venture (3)

Prerequisite: MGMT 3000; MKTG 3000
Cross-Listed with MGMT 4300
This course studies new ventures and businesses, the characteristics of successful entrepreneurs, the process of starting a new business and the determinants of new venture performance. Students will be required to prepare a business plan for a prospective new venture.

## MKTG 4400 - International Marketing (3)

Prerequisites: MKTG 3000; BUSA 3200
An examination of the major marketing issues and opportunities facing business managers in an international setting. Primary emphasis is on the study of developing and adjusting strategies in light of home and host countries' incentives and restrictions.

## MKTG 4450 - Global Marketing and the Internet (3)

Prerequisites: MKTG 3000; BUSA 3200
The course focuses on global marketing in the internet age and examines the characteristics of e-commerce that are likely to apply in the international area. It focuses on the intersection of the international environment, e-commerce and marketing with particular attention to the impact of internet technology on marketing strategy and practices and the marketing mix. The course also describes the importance of cultural dynamics and business customs on effective internet marketing. The e-commerce environment is examined in countries located in Europe, Latin America and the Far East.

## MKTG 4500 - Studies Abroad (3 or 6)

Cross-listed with BUSA 4500

Prerequisites: Consent of Instructor. Analysis of the role and impact of cultural, economic, social, political and legal factors on business through travel to a foreign country or countries. Includes lectures, discussions and facilities tours. Direct costs such as airfare, hotels, etc., are added to normal tuition charges.

## MKTG 4700 - Special Topics in Marketing (3)

Consent of Instructor
Study of current topics in Marketing and/or related disciplines. May be repeated for credit when topic varies.

## MKTG 4751 - Business Internship/Experiential Learning (3)

Prerequisite: MKTG 3000; MKTG 4025 and 3.0 overall GPA
Individually designed learning opportunity in which the student is involved in the normal operations of an organization in the private or public sector.

## MILITARY SCIENCE AND LEADERSHIP (MSL)

## MSL 1010 - Leadership and Personal Development I (2)

Prerequisite: Completion of Student Success Courses (Math, English 0989, and ENGL 0099) if required for admissions to GGC and Freshman or Sophomore status and US Citizenship
Co-Requisite: MSL 1010L
Introduces students to issues and competencies that are central to a commissioned officer's responsibilities. Established framework for understanding officer ship, leadership and Army values followed are "life skills" such as physical fitness and time management.

## MSL 1010L - Leadership and Personal Development I Lab (1)

Co-Requisite: MSL 1010
Introduction to the fundamental components of service as an officer in the Army. Overview of the purpose and scope of Army ROTC with emphasis on the role of today's Army, officer ship, leadership and values. Basic skills include rappelling, familiarization with military weapons and unit organization.

## MSL 1020 - Leadership and Personal Development II (2)

Prerequisite: Completion of Student Success Courses (Math and English) if required for admissions to GGC and Freshman or sophomore status and US Citizenship
Co-Requisites: MSL 1020L
Establishes foundation of basic leadership fundamentals such as problem solving, communications, briefings and effective writing, goal setting, techniques for improving listening and speaking skills and an introduction to counseling.

## MSL 1020L - Leadership and Personal Development II Lab (1)

Co-Requisite: MSL 1020
Establishes foundation of basic leadership fundamentals such as problem solving, communications, briefings and effective writing, goal setting, techniques for improving listening and speaking skills and an introduction to counseling.

## MSL 2010 - Foundations of Leadership (2)

Prerequisite: Completion of Student Success Courses (Math, and English) if required for admissions to GGC and Freshman or Sophomore status and US Citizenship
Co-requisite: MSL 2010
Students identify successful leadership strategies and styles by examining team dynamics and leadership theories that form the basis of the Army leadership framework. Students also study historical case studies and engage in interactive exercises. Students practice aspects of personal motivation and team building in the context of planning, executing and assessing team exercises.

## MSL 2010L - Foundations of Leadership Lab (1)

Co-Requisite: MSL 2010
Students examine how to build successful teams, various methods for influencing action, effective communication in setting and achieving goals, the importance of timing the decision, creativity in the problem solving process and obtaining team buy in through immediate feedback.

## MSL 2020 - Foundations of Tactical Leadership (2)

Georgia Gwinnett College 2015-16 Catalog

Prerequisite: Completion of Student Success Courses (Math and English) if required for admissions to GGC and Freshman or Sophomore status and US Citizenship
Co-requisite: MSL 2020L
The course examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). This course highlights dimensions of terrain analysis, patrolling and operation orders. Further study of the theoretical bass of the army Leadership Requirement Model explores the dynamics of adaptive leadership in the context of military operations. The course provide smooth transition into MSL 3010. Cadets develop greater self-awareness as they assess their own leadership styles and practice communication and team-building skills. COE case studies give insight into the importance and practice of teamwork and tactics in real-world scenarios.

## MSL 2020L - Foundations of Tactical Leadership Lab (1)

Co-requisite: MSL 2020
Students examine how to build successful teams, various methods for influencing action, effective communication in setting and achieving goals, the importance of timing the decision, creativity in the problem solving process and obtaining team buy in through immediate feedback.

## MSL 3010 - Adaptive Team Leadership (3)

Prerequisite: MSL 1010, MSL 1020, MSL 2010, or MSL 2020 with grade of C or higher or completed ROTC basic camp, or military service equivalent
Students conduct self-assessment of leadership style, develop personal fitness regimen and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem solving techniques. Students receive direct feedback on leadership abilities.

## MSL 3010L - Adaptive Team Leadership Lab (1)

Prerequisite: MSL 1010, MSL 1020, MSL 2010, or MSL 2020 with grade of C or higher or completed ROTC basic camp, or military service equivalent
Students conduct self-assessment of leadership style, develop personal fitness regimen and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem solving techniques. Students receive direct feedback on leadership abilities.

## MSL 3020 - Applied Team Leadership (3)

Prerequisite: MSL 1010, MSL 1020, MSL 2010, or MSL 2020 with grade of C or higher or completed ROTC basic camp, or military service equivalent
Examines the role communications, values and ethics play in effective leadership. Topics include ethical decisionmaking, consideration of others, spirituality in the military and survey Army leadership doctrine. Emphasis on improving oral and written communication abilities.

## MSL 3020L - Applied Team Leadership (1)

Prerequisite: MSL 1010, MSL 1020, MSL 2010, or MSL 2020 with grade of C or higher or completed ROTC basic camp, or military service equivalent
Examines the role communications, values and ethics play in effective leadership. Topics include ethical decisionmaking, consideration of others, spirituality in the military and survey Army leadership doctrine. Emphasis on improving oral and written communication abilities.

## MSL 3500 - Military Science Independent Study I (3)

Prerequisite: ROTC Basic Course completion of (MSL1010, MSL1020, MSL2010, MSL2020 or constructive credit for military service through the Army/American Council on Education Registry Transcript Systems (AARTS) Leadership training and preparation that enables cadets to enhance their abilities in the art and science of leadership. These leaders are responsible for discipline, morale, training, welfare and daily leadership of their subordinates within the ROTC program of study. The theory and doctrine learned throughout the Military Science program of study are continually reinforced in the practical experiences of daily leadership and laboratories comprised of troop leading procedures, inspections, counseling subordinates, planning and executing activities, drill, and ceremonies. Students will be prepared in areas of military staffing, the military decision making process, and the practical application of transformational, adaptive, and situational leadership techniques.

## MSL 4010 - Adaptive Leadership (3)

Prerequisite: MSL 1010, MSL 1020, MSL 2010, or MSL 2020 with grade of C or higher or completed ROTC basic camp, or military service equivalent
Develops student proficiency in planning and executing complex operations, functioning as a member of a staff and mentoring subordinates. Students explore training management, methods of effective staff collaboration and developmental counseling techniques.

## MSL 4010L - Seminar in Leadership and Management I Laboratory (1)

Prerequisite: MSL 1010, MSL 1020, MSL 2010, or MSL 2020 with grade of C or higher or completed ROTC basic camp, or military service equivalent
Develops student proficiency in planning and executing complex operations, functioning as a member of a staff and mentoring subordinates. Students explore training management, methods of effective staff collaboration and developmental counseling techniques. MSL 4010L is mandatory for all students enrolled in MSL 4010 and is offered fall semester each year.

## MSL 4020 - Leadership in a Complex World(3)

Prerequisite: MSL 1010, MSL 1020, MSL 2010, or MSL 2020 with grade of C or higher or completed ROTC basic camp, or military service equivalent
Study includes case study analysis of military law and practical exercises on establishing an ethical command climate. Students must complete a semester long Senior Leadership Project that requires them to plan, organize, collaborate, analyze and demonstrate their leadership skills.

## MSL 4020L - Leadership in a Complex World Laboratory (1)

Prerequisite: MSL 1010, MSL 1020, MSL 2010, or MSL 2020 with grade of C or higher or completed ROTC basic camp, or military service equivalent
Study includes case study analysis of military law and practical exercises on establishing an ethical command climate. Students must complete a semester long Senior Leadership Project that requires them to plan, organize, collaborate, analyze and demonstrate their leadership skills. MSL 4020L is mandatory for all Students enrolled in MSL 4020 and is offered spring semester each year.

## MSL 4500 - Military Science Independent Study II (3)

Prerequisite: ROTC Basic Course Completion (MSL1010, MSL1020, MSL2010, MSL 2020) or constructive credit for military service through the Army/American Council on Education Registry Transcript System (AARTS)
Leadership training and preparation that enables cadets to enhance their abilities in the art and science of leadership. These leaders are responsible for discipline, morale, training, welfare and daily leadership of their subordinates within the ROTC program of study. The theory and doctrine learned throughout the Military Science program of study are continually reinforced in the practical experiences of daily leadership and laboratories comprised of troop leading procedures, inspections, counseling subordinates, planning and executing activities, drill, and ceremonies. Students will be prepared in areas of military staffing, the military decision making process, and the practical application of transformational, adaptive, and situational leadership techniques.

## MUSIC (MUSC)

## MUSC 1100 - Music Appreciation (3)

Introduction to Music History and literature.

## MUSC2020 - Survey of Latin American Music (3)

Prerequisite: ENGL 1101, 1102 and completion of any Area C course
Introduction to the variety of music from Latin America. Latin American Music will be studied within its historical and cultural contexts. Students will learn to distinguish and describe different genres and musical styles, historical and modern.

## MUSC 2200 - Survey and Analysis of European Art Music

Prerequisite: ENGL 0099; ENGL 0989
This course traces the development of art music in Europe starting in the medieval style period and ending with contemporary European music. Emphasis is placed on active listening, concentrating on the unique musical characteristics of each listening example. This course will consider the musical styles of particular periods and specific
composers including Machaut, Du Fay, Josquin, Palestrina, Monteverdi, Handel, Bach, Mozart, Beethoven, Schubert, Robert and Clara Schumann, Liszt, Berlioz, Brahms, Wagner, Verdi, Mahler, Schoenberg, Berg, Stravinsky, Debussy and later $20^{\text {th }}$ century figures. Students will explore music within its stylistic and cultural contexts, including aspects of form, composition, social significance, and politics. Students will learn to distinguish and describe different genres and musical styles.

## MUSC 2300 - Global Studies in Music (3)

Prerequisite: ENGL 0989
This course leads and directs students on an exploration of musical and cultural practices from broad selection of ethnic groups from around the world. Through the intensive study of musical texts, recordings and performances, students will learn how to comprehend and analyze the power and meaning of music and how it both shapes and influences and the cultural settings in which it is found.

## MUSC 2500 -Vocal Ensemble (Chorus) (1)

MUSC 2500 is designed to offer students the opportunity to participate in a vocal ensemble (chorus). The ensemble will rehearse regularly and present one or two public performances per semester. Musical literature will be chosen each semester to suit the abilities of the students enrolled. Service performances (graduation, commencement, etc...) are required. As a one credit hour per semester course, it is repeatable for credit in subsequent semesters, up to 4 credits total.

## MUSC 3050 - Music Theory I (3)

Prerequisite: Completion of any Area C Arts/Literature Course.
Music Theory I introduces the fundamentals of music theory: notation, rhythm and pitch orientation, accidentals, key and time signatures, metric organization, intervals, scale formation, triad construction and chord spelling, elementary ear training and sight singing. In addition this class will include the application of these fundamentals to composition and analysis and an introduction to the keyboard.

## MUSC 3550 - Music Production and Sound Design for Digital Media (3)

Prerequisite: MUSC 3050 and either ITEC 2110 or ITEC 2120 or ITEC 2140
MUSC 3550 instructs students in the theory and practice of Music and Sound Production for: audio, video games, webdesign, and mobile media. This class studies historical and contemporary theory and practice as well as the role of composer and sound designer in the field of Digital Media.

## NURSING (NURS)

## NURS 3000 - Health Assessment (4)

Prerequisite: Admission to the Nursing Program; Consent of Director of Nursing Co-Requisite: NURS 3020 and NURS 3030
This course builds upon previous courses in the arts and sciences to introduce the student to essential skills and concepts for nursing practice related to nursing health assessment for individuals across the lifespan. Students will practice foundational critical thinking skills in physical, sociocultural, and environmental data collection for diagnosis and planning of client care. Emphasis will be placed on using a conceptual approach to develop nursing assessment skills in simulated and laboratory settings related to medical asepsis, safety, mobility, comfort, nutrition, and elimination. Quality improvement and management of health information will also be addressed.

## NURS 3010 - Integrated Pathophysiology and Pharmacology (4)

Prerequisite: Successful completion of NURS 3000, NURS 3020, NURS 3030, NURS 3040 with a "C" or higher Co-Requisite: NURS 3021, NURS 3031, NURS 3050
This course builds on previous science, mathematics, and nursing courses to explore concepts related to altered function and adaptive responses in individuals from illness, injury, and disease across the lifespan. Exemplars will be used to describe pathophysiologic changes related to genes and genomics, cell function and homeostasis, inflammation and immunity, thermoregulation, fluid and electrolyte balance, clotting, hemodynamics, tissue perfusion, oxygenation, nutrition and elimination, metabolic and hormonal regulation, glucose metabolism, intracranial regulation, tissue integrity, sensory perception, reproduction, and mobility. Emphasis will be placed on diagnosis, treatment, and pharmacotherapies.

## NURS 3020 - Wellness \& Illness I (7)

Prerequisite: Admission to the nursing program; consent of Director of Nursing
This clinical course complements the co-requisite courses, giving students the opportunity to examine commonly occurring alterations in wellness in individuals across the lifespan with primary focus on adult and geriatric populations with integration of pediatrics and mental health. This course will introduce students to the nursing process with an emphasis on assessment, diagnosis, and planning, with beginning application of interventions and evaluation. Integration of patient populations will teach students principles of holistic nursing. The clinical laboratory, clinical simulation lab, and off-site clinical experiences will engage students to begin to develop and explore the needs of vulnerable population. The clinical focus for this course will be in two distinct areas of vulnerable populations: geriatrics and incarcerated adults. This course will enable students to use the nursing process for promotion and restoration of health in individuals. Exemplars will be used with unfolding case studies to engage students in learning the concepts of: caring, clotting, mechanisms, diversity among individuals, elimination, fluid \& electrolytes, glucose regulation, intracranial regulation, mobility, nutrition, oxygenation, pain, perfusion, professional behaviors, sensory perception, therapeutic communication, thermoregulation, and tissue integrity. This course will expose students to the introduction of concepts taught throughout the four Wellness and Illness courses. Student provided off campus travel is required.

## NURS 3021 - Wellness \& Illness II (7)

Prerequisite: NURS 3000, NURS 3020, NURS 3030, NURS 3040 with a " C " or higher
Co-Requisite: NURS 3031, NURS 3010, NURS 3050
This clinical course builds upon NURS 3020 and complements the co and pre-requisite courses giving students the opportunity to examine acute and chronic alterations in wellness in individuals and families across the lifespan. The primary focus is on providing evidence-based care to pediatric and adolescent populations with integration of adult, gerontological, and mental health topics. In this course, the concepts will necessitate a higher level of critical thinking when exploring interrelationships between physical and psychosocial co-morbidities and students will intentionally apply the nursing process in the care of clients. The clinical laboratory, clinical simulation lab, and off-site clinical experiences will engage students in the nursing care of pediatric and adolescent clients. Additionally, student will continue to explore the needs of vulnerable populations and how family dynamics affect overall health. Exemplars will be expanded upon from previous courses with unfolding case studies to engage students in learning the concepts of: caring, clotting mechanisms, diversity among individuals, elimination, fluid \& electrolytes, glucose and hormonal regulation, growth \& development, intracranial regulation, mobility, nutrition, oxygenation, pain, perfusion, professional behaviors, sensory perception, therapeutic communication, and thermoregulation. Students will examine concepts related to the health of individuals with the addition of families and be challenged to use evidence-based practice in planning care. Student provided off campus travel is required.

## NURS 3030 - Professional Nursing I (1)

Prerequisite: Admission to the nursing program; Consent of Director of Nursing
Co-Requisite: NURS 3000, NURS 3020
Professional Nursing I is a course to assist students in understanding a registered nurse's scope of practice, patient rights, confidentiality, ethics terminology, and professional organizations. Students will have the opportunity to begin to develop their professional portfolio as part of the course.

## NURS 3031 - Professional Nursing II (2)

Prerequisite: Successful completion of NURS 3000, NURS 3020, NURS 3030, NURS 3040 with a "C" or higher Co-Requisite: NURS 3021, NURS 3010, NURS 3050
This hybrid course further explores the ethical and legal content related to moral theories and the application to nursing practice. In addition, this course allows students to self-reflect on personal bias that impact nursing care and exposes students to ethical dilemmas in health care. Advocacy for populations will be explored and demonstrated through service learning opportunities offered in the course. Role playing, case studies, legal case review, and social media are some of the learning modalities used in this course. Students will have the opportunity to continue develop their professional portfolio through preparation for job interviews and resume writing.

## NURS 3040 - Nursing Research (3)

Prerequisite: Admission to the nursing program; Consent of Director of Nursing
This course will provide the student an opportunity to explore research principles and discover the importance of nursing research to health care and nursing science. Emphasis on basic review of literature skills, identification and critique of research evidence, and the ability of students to identify research problems and formulate questions is central in the course.

Georgia Gwinnett College 2015-16 Catalog

## NURS 3050 - Public Health I (2)

Prerequisite: Successful completion of NURS 3000, NURS 3020, NURS 3030, NURS 3040 with a " C " or higher Co-Requisite: NURS 3021, NURS 3031, NURS 3010
This course exposes students to foundational principles of public health nursing and care of individuals and families in non-acute health care settings. Students will discover community resources available for individuals and families across the lifespan, which foster health promotion, disease prevention and risk reduction. After completing a community assessment, students will outline a plan for an identified community health problem, focusing on health promotion. Furthermore, students will explore factors that challenge public health nurses in meeting community health needs.

## NURS 4000-A - Gerontological Nursing - Nursing Elective (4)

Prerequisite: Successful completion of NURS 3010, NURS 3021, NURS 3031, NURS 3050 with a "C" or higher Co-Requisite: NURS 4010, NURS 4020, NURS 4050
This intra-professional and interdisciplinary elective course introduces students to the management of care in various specialty populations and to the role of the nurse as a member of the health care team. The focus is on understanding intro- and interdisciplinary collaboration while exploring various sub-disciplines in nursing such as gerontology, critical care, emergency department, or management and leadership. Aspects of wellness and illness and the impact of culture and diversity in each population will be explored. Students will have clinical experiences with appropriate health care professionals in practice settings in addition to collaborating and interacting with peers from all electives in classroom and online form. The gerontology elective introduces students to wellness and illness in the elderly, with a focus on healthy aging. The emphasis is on understanding the impact of an aging population on communities and on understanding physiologic, spiritual, and psychosocial changes associated with aging. The nurse's role in promoting culturally sensitive independent living and healthy aging is explored.

## NURS 4000-B - Critical Care- Nursing Elective (4)

Prerequisite: Successful completion of NURS 3010, NURS 3021, NURS 3050 with a "C" or higher Co-Requisite: NURS 4010, NURS 4020, NURS 4050
This intra-professional and interdisciplinary elective survey course introduces students to the management of care in various specialty populations and to the role of the nurse as member of the health care team. The focus is on understanding intra- and interdisciplinary collaboration while exploring various sub-disciplines in nursing such as gerontology, critical care, emergency department, or management and leadership. Aspects of wellness and illness and the impact of culture and diversity in each population will be explored. Students will have clinical experiences with appropriate health care professionals in practice settings in addition to collaborating and interacting with peers from all electives in classroom and online form. The Critical Care elective introduces students to wellness and illness in clients experiencing high acuity alterations in wellness, with a focus restorative care. The emphasis is on understanding the impact of populations with high acuity illness on communities and on understanding physiologic, spiritual, and psychosocial changes associated with severe illness. The nurse's role in promoting culturally sensitive care is explored.

## NURS 4010 - Nursing Leadership I (2)

Prerequisite: Successful completion of NURS 3010, NURS 3021, NURS 3031, NURS 3050 with a " C " or higher Co-Requisite: NURS 4000, NURS 4020, NURS 4050
This hybrid course provides a foundation in nursing leadership preparing students to provide care for diverse individual, families, and groups on a managerial and organizational level. Students will integrate knowledge and skills from previous courses in nursing and other disciplines with knowledge from leadership theory to understand issues in delivery of quality and safe health care. The course will emphasize skills of prioritization and delegation, intra-and-inter-professional communication, teamwork and collaboration, decision-making, ethical and legal issues, technology and informatics, advocacy, and conflict resolution in the delivery of care. The focus of this course is to develop a servant leadership approach to the delivery and improvement of health care. The professional portfolio will be reviewed in this course.

## NURS 4011 - Nursing Leadership II (2)

Prerequisite: Successful completion of NURS 4000, NURS 4010, NURS 4020, NURS 4050 with a "C" or higher Co-Requisite: NURS 4021, NURS 4032, NURS 4040
This hybrid course builds upon Nursing Leadership I to integrate knowledge and experiences from nursing and other disciplines to prepare nursing students with skills to care for communities and populations through leadership on a system level. Students will examine organizational structures, work force and professional issues, budget planning, legislative and economic influences, disaster preparedness, crisis management, and planned change. The course focuses on development of foundational skills to lead transformations across complex cultural, organizational and institutional boundaries in a global health society.

Georgia Gwinnett College 2015-16 Catalog

## NURS 4020 - Wellness and Illness III (7)

Prerequisite: Successful completion of NURS 3010, NURS 3021, NURS 3031, NURS 3050 with a "C" of higher Co-Requisite: NURS 4000, NURS 4010, NURS 4050
This clinical course builds upon NURS 3021 and complements the co and pre-requisite courses giving students the opportunity to examine acute and chronic alterations in wellness in individuals, families, and groups across the lifespan. The primary focus is on providing evidence-based care to the child bearing family and to clients with mental health disease. The spectrum of coping and stress will be discussed using examples from each vulnerable population. In this course adult and gerontological topics are also discussed as related to the child bearing female and mental illness. Students will apply new concepts from previous courses and critically explore interrelationships between physical and psychosocial co-morbidities. Students will intentionally apply the nursing process as appropriate in the care of clients to include family dynamics and therapeutic communication with a focus on evaluation. The clinical laboratory, clinical simulation lab, and off-site clinical experiences will engage students in nursing care. Exemplars will be expanded upon from previous courses with unfolding case studies to engage students in learning the concepts of: abuse, addiction, adherence, caring, cognition, coping, clotting mechanism, culture and diversity. Elimination, fluid \& electrolytes, glucose and hormonal regulation, growth and development, intracranial regulation., mobility, nutrition, oxygenation, pain, perfusion, professional behaviors, reproduction and sexuality, sensory perception, stress, therapeutic communication, thermoregulation, and tissue integrity. Student provided off campus travel is required.

## NURS 4021 - Wellness and Illness IV (7)

Prerequisite: Successful completion of NURS 4000, NURS 4010, NURS 4020, NURS 4050 with a "C" or higher Co-Requisite: NURS 4011, NURS 4032, NURS 4040
This senior level clinical course builds upon NURS 4020 and complements the co and pre-requisite courses giving students the opportunity to examine acute and chronic multisystem alterations in wellness in individuals. Families, and groups across the lifespan. Emphasis is placed on practicing skills of delegation, prioritization, and coordination of care to promote, maintain, and restore health, and prevent illness. The student will understand dimensions of patient care addressing the holistic needs of individuals, families, and groups. The clinical focus is on student role transformation through critical analysis and judgment using principles of leadership to care for groups of clients from diverse and/or vulnerable populations. Amplification and integration of previous course concepts are incorporated within classroom, simulation, and clinical settings. Student provided off campus travel is required.

## NURS 4032 - Professional Nursing III (3)

Prerequisite: Successful completion of NURS 4000, NURS 4010, NURS 4020, NURS 4050 with a "C" or higher Co-Requisite: NURS 4011, NURS 4021, NURS 4040
This hybrid nursing course examines professional behaviors of the registered nurse will be discussed and the impact of these behaviors on client care, outside media venues, and interprofessional relationships. Additionally, students examine the importance of life-long learning to personal and professional growth, reflective practice, and the profession of nursing. Student will collaborate on a group project with students outside of the discipline of nursing to gain insight into interprofessional education. Student will also have the opportunity to continue develop their professional portfolio as part of the course.

## NURS 4040 - Nursing Capstone (3)

Prerequisite: Successful completion of NURS 4000, NURS 4010, NURS 4020, NURS 4050 with a "C" or higher Co-Requisite: NURS 4021, NURS 4032, NURS 4011
This hybrid course focuses on the integration and synthesis $f$ key program learning outcomes demonstrated in a Capstone Project. Student will conduct a group project which identifies a key community health problem and formulates an intervention plan which is presented to group, community, or population stakeholders. The project will require an extensive written and oral assignment that incorporates concepts and principles learned throughout the nursing program including related social, ethical, political, and economic elements. Final group project will be presented to faculty and stakeholders including students, staff, and community partners. The completed Student Portfolio will also be evaluated in this course. Student provided off campus travel is required.

## NURS 4050 - Public Health II (2)

Prerequisite: Successful completion of NURS 3010, NURS 3031, NUS 3050 with a "C" or higher Co-Requisite: NURS 4000, NURS 4010, NURS 4020
This course will build upon content from NURS 3050 and focus on the care of groups, communities, and populations in diverse settings. Students will explore health needs and health disparities of vulnerable populations and reflect on how attitudes of these populations affect healthcare. Community, state and global surveillance as it pertains to physical and

Georgia Gwinnett College 2015-16 Catalog
environmental issues impacting health will be investigated. Students will learn about the role of the public health registered nurse in emergency preparedness planning.

## PHILOSOPHY (PHIL)

## PHIL2010 - Introduction to Philosophy (3)

Prerequisite: Successful completion of ENGL 0989 and ENGL 0099 with a grade of C or higher required; ENGL 1101 recommended
This course provides an introduction to philosophical thoughts and ideas by allowing students to explore: the kinds of sound argument, the arguments for and against the existence of an Ultimate Reality, the potential character of that Reality, questions regarding the meaning (or meaninglessness) of life, ethical decision making and sources of human knowledge. During the course, students will learn the meaning and vocabulary of philosophy, value of critical thinking and application of philosophy across disciplines. Students will also examine philosophical thought in a global context.

## PHYSICAL EDUCATION (PHED)

## PHED 1010 - Beginning Badminton (1)

This course will focus on the development of badminton skills, strategies, rules and terminology for the game. Students completing this course will be able to 1) identify equipment, rules and benefits of badminton; 2) demonstrate fundamental skills (e.g., serve, clear, drive, drop, smash) and tactics (offense and defense) during game play in badminton.

## PHED 1015- Beginning Tennis (1)

This course is designed to teach fundamental tennis skills which include, stance and footwork, the serve, forehand and backhand strokes, volleys, types of shots, basic rules and regulations and game play strategies. Students completing this course will be able to: 1 ) identify equipment, facilities, rules, and regulations needed to play tennis; 2 ) demonstrate basic skills such as the serve, forehand, backhand, and volley; 3) demonstrate tactical understanding (e.g., offense, defense) of singles and doubles game play.

## PHED 1025 - Power Stretch (1)

This course is designed to focus on postures, breathing techniques, and relaxation skills while stretching and strengthening the entire body. Power stretch will provide an introduction to the philosophy and practice of Yoga and Pilates techniques. This blended course is designed to release stress and muscle tension, enhance the ability to concentrate, and stretch and strengthen the body in a group fitness setting. Students completing this course will be able to: 1) perform 10 out of 12 basic power stretch postures with proper form (e.g., Sun Salutation, Forward Fold, Chaturanga, Upward Facing Dog, Downward Dog, PIYO Push-up, Tree Pose, Warrior I, Warrior II, Warrior III. Pyramid, Right Angle), 2) create two 32 count power stretch combinations including one upper body focused combination and one lower body focused combination.

## PHED 1030 - Beginning Soccer (1)

This course is designed to provide students with the knowledge and fundamental skills which include, passing, kicking, dribbling, small team game play strategies, basic rules and regulations necessary to motivate active participation in soccer. Students completing this course should be able to: 1) demonstrate basic skills (such as passing, trapping, dribbling, heading, throwing, shooting), 2) demonstrate tactical understanding of basic offensive (moving into open space, attach in depth, width) and defensive skills (marking, zone, one on one, delay) during game play, 3) understand basic terminology (e.g., offsides, corner kick) pertaining to the game of soccer.

## PHED 1040 - Volleyball (1)

This course is designed to teach fundamental volleyball skills which include passing, setting, spiking, and serving, while incorporating game rules and strategies. Students completing this course should be able to: 1) identify equipment, rules and the benefits of volleyball, 2) perform basic skills (e.g., passing, hitting, serving) and tactics (offense and defense) during game play in volleyball.

## PHED 1050 - Body Sculpting and Core

The course is designed to maximize total body conditioning by building and sculpting muscles, strengthening the core and improving flexibility and balance. Body Sculpting and Core will introduce students to proper resistance training

Georgia Gwinnett College 2015-16 Catalog
technique in a cardio-infused group exercise setting. Course format includes a fun and challenging strength training routine that promotes a lifetime commitment to fitness. Students completing this course should be able to: (1) demonstrate proper lifting technique for 15 repetitions in 10 out of 12 exercises - squats, chest press, deadlift, dead row, clean and press, triceps press, triceps extension, dips, lunges, lateral raises, overhead press, and bicep curls and (2) identify specific muscle groups targeted by each "Body Sculpting and Core" exercise performed.

## PHED 1060 - Weight Training (1)

This course will teach students the proper use of weight equipment, safe lifting technique and skills, as well as develop an understanding of the major muscle groups and the importance of strength and conditioning programs. Students completing this course will be able to: 1) understand strength and conditioning principles, rules, techniques, terminology, use of equipment, safety precautions, and etiquette in the weight room; 2) demonstrate skill-oriented exercises relevant to strength training, health-related fitness, aerobic and anaerobic performance for specific muscle groups or whole body.

## PHED 1070 - Beginners Swimming (1)

This course will focus on the basic concepts and skills required of a novice swimmer. Students completing this course will be able to: 1) demonstrate proper alignment and propulsion while performing the prone glide, elementary backstroke, and backstroke each over a distance of 25 yards; 2) identify swimming terminology and water safety skills.

## PHED 1071 - Intermediate Swimming (1)

Prerequisite: PHED 1070 or Faculty evaluation
Requirements: Students must be able to float on his/her back for 1 minute as well as swim 25 yards continuously. This course is designed to teach intermediate level skills and fitness in swimming, which include, freestyle, backstroke, breaststroke, and open turns. Students completing this course will be able to: 1) swim 100 yards using the proper stroke mechanics, body alignment, and propulsion for each of the following strokes: freestyle, backstroke, and breaststroke, and 2) identify swimming terminology and describe principles of hydrodynamics.

## PHED 1080 - Fitness for Life Walking (1)

This course focuses on individual improvement in cardiovascular fitness by regular and progressive walks. Distance and times for walks are gradually increased as the semester progresses. Students completing this course should be able to: 1) complete the 3 mile walk test at maximal effort and be rated in the "Fair" fitness category or above and 2) identify the health related benefits of fitness walking.

## PHED 1090 - Cardio Kickboxing (1)

This course will teach students the proper technique and fundamentals for cardio kickboxing and introduce them to a new form of lifetime aerobic activity, utilizing punches and kicks as well as improving their physical fitness. This course will also address all of the five components of fitness. Students completing this course should be able to: 1: perform moderate to high intensity cardio kickboxing movements including jab, cross, hook, upper-cut, side push kicks, back push kick, front kick and roundhouse.

## PHED 1101 - Choices for Life (1)

As a result of successful completing this course students should be able to: 1) Explain the inter-relationship between the eight dimensions of wellness. 2) Understand the risks and lifestyle behaviors that are related to chronic diseases. 3) Understand the benefits of physical activity and a healthy diet for protection against stressors and chronic diseases. 4) Understand the scope of stress and learn ways to manage certain stressor. 5) Understand the fundamentals of Nutrition and how food is related to lifestyle diseases. 6) Identify positive changes and choices one can implement to enhance healthy living. 7) Understand the mechanism of chemical addiction and its relation to alcoholism, the illegal, recreational and prescription drug addictions in current society. 8) Understand the major STD threats in the current society.

## PHED 1102 - Physical Activities for Health and Well-being (2)

This course provides an introduction into the components of fitness and their impact on health and wellness. It provides the theoretical framework for applications of aerobic and resistance training in a variety of populations (e.g. healthy college-aged students, those with disabilities, older adults, children). The class will also address nutritional requirements for fitness and the impact of fitness on mental health, as well as the use of sport psychology strategies for fitness goals. Course Objectives: Students taking this course will learn to: (1)Explain the five components of fitness and their impact on overall health and wellness (2)Explain proper techniques of aerobic and resistance training in various populations(3)Discuss principles and guidelines for practicing lifelong fitness in various populations (4)Explain the principles of building an effective physical training program in various populations (5)Discuss how exercise is a strategy
Georgia Gwinnett College 2015-16 Catalog
for disease prevention and overall health in various populations (6)Explain the nutritional requirements for fitness (7)Discuss the effect of exercise on mental health (8)Discuss how sports psychology strategies can be used for disease prevention.

## PHED 1120 - Introduction to Golf (1)

A physical education course designed to teach the basic skills used to solve the many unique tactical problems found in the game of golf. Additional content will include safety, rules, etiquette, equipment, and the benefits of cardiorespiratory, muscular, and flexibility training for golf performance. An additional fee and student provided transportation will be required. Students are required to supply their own golf clubs which minimally must include a putter, pitching wedge, and short-mid irons ( $8,7,6$, or 5 ). Students completing this course will be able to: 1 ) identify the origin of golf and basic equipment used in the game today (clubs, balls, and training aids); 2) demonstrate a variety of basic short game skills (putting, chipping, pitching, and sand play) and the full swing (using short to mid-irons); 3) analyze strengths and weaknesses of a full golf swing.

## PHED 1130 - Basics of Hiking (1)

An outdoor physical education course designed to teach the basic concepts and skills used in basic hiking. Additional content will include benefits, safety, equipment, etiquette and the translation/navigation of trail maps. An additional fee will be required and students must provide own transportation to local trails which are off campus.

## PHYSICAL SCIENCE (PSCI)

## PSCI 1101K - Physical Science with Laboratory (4)

Prerequisites: MATH 0987 or MATH 0989; ENGL 0989 and ENGL0099
Physical science is a general education course for non-science majors. It is a theme-based course with a menu of themes offered each semester. Physical Science courses do not need to be taken in sequence. Upon completion of this course students will: 1) Communicate scientific issues effectively in oral and written form; 2) Distinguish scientific studies from popular opinions by employing critical thinking skills and the scientific method; 3) Effectively collect, analyze and present data and correctly construct and interpret charts, graphs and tables to draw scientific conclusions; 4) Apply the fundamental concepts and methodologies of physics and/or chemistry to investigate a scientific theme.

## PSCI 1102- Physical Science (3)

Prerequisites: MATH 0987 or MATH 0989, ENGL 0989 and ENGL0099
Physical science is a general education course for non-science majors. It is a theme-based course with a menu of themes offered each semester. Physical Science courses do not need to be taken in sequence. Upon completion of this course students will: 1) Communicate scientific issues effectively in oral and written form; 2) Distinguish scientific studies from popular opinions by employing critical thinking skills and the scientific method; 3) Effectively collect, analyze and present data and correctly construct and interpret charts, graphs and tables to draw scientific conclusions; 4) Apply the fundamental concepts and methodologies of physics and/or chemistry to investigate a scientific theme.

## PHYSICS (PHYS)

## PHYS 1111K - Introductory Physics I with Laboratory (4)

Prerequisites: MATH 1113
An introductory course that will include material from Mechanics and Thermodynamics. Algebra and trigonometry will be routinely used. Upon completion of this course students will be able to: (1) Demonstrate a conceptual and mathematical knowledge of 1-D and 2-D Kinematics; (2) Demonstrate a conceptual and mathematical knowledge of Newton's Laws as applied to both linear and circular motion; (3) Demonstrate a conceptual and mathematical knowledge of Work, Energy, and Power; (4) Demonstrate a conceptual and mathematical knowledge of the Laws of Conservation of Energy and Linear Momentum; (5) Demonstrate a conceptual and mathematical knowledge of Torque and Elasticity; (6) Effectively collect and present scientific data gathered through experiment; (7) Use computational and estimation skills to analyze data, construct and interpret charts, graphs, and tables, and compose scientific explanations.

## PHYS 1112K - Introductory Physics II with Laboratory (4)

Prerequisite: MATH 1113 and either PHYS 1111K or PHYS 2211K with grade of C or better
An introductory course that will include material from Electricity, Magnetism, Optics, and Waves. Algebra and
trigonometry will be routinely used. Upon completion of this course students will be able to: (1) Demonstrate a
conceptual and mathematical knowledge of electrostatic force, field, potential energy and potential for point charges; (2) Demonstrate a conceptual and mathematical knowledge of DC circuits containing batteries, resistors, and capacitors; (3) Demonstrate a conceptual and mathematical knowledge of magnetic forces and fields and induction; (4) Demonstrate a conceptual and mathematical knowledge of ray and wave optics; (5) Effectively collect and present scientific data gathered through experiment; (6) Use computational and estimation skills to analyze data, construct and interpret charts, graphs, and tables, and compose scientific explanations.

## PHYS 2211K - Principles of Physics I with Laboratory (4)

Prerequisite: MATH 2200
An introductory course that will include material from Mechanics and Thermodynamics. Algebra, trigonometry, and differential and integral calculus will be routinely used. Upon completion of this course students will be able to: (1) Demonstrate a conceptual and mathematical knowledge of 1-D and 2-D Kinematics as applied to both linear and rotational motion; (2) Demonstrate a conceptual and mathematical knowledge of Newton's Laws as applied to both linear and rotational motion; (3) Demonstrate a conceptual and mathematical knowledge of Work, Energy, and Power; (4) Demonstrate a conceptual and mathematical knowledge of the Laws of Conservation of Energy, Linear Momentum, and Angular Momentum; (5) Demonstrate a conceptual and mathematical knowledge of Simple Harmonic Motion; (6) Effectively collect and present scientific data gathered through experiment; (7) Use computational and estimation skills to analyze data, construct and interpret charts, graphs, and tables, and compose scientific explanations.

## PHYS 2212K - Principles of Physics II with Laboratory (4)

Prerequisite: PHYS 2211K and MATH 2210 with grade of C or better
An introductory course that will include material from Electricity, Magnetism, Optics, and Waves. Algebra,
trigonometry, and differential and integral calculus will be routinely used. Upon completion of this course students will be able to: (1) Demonstrate a conceptual and mathematical knowledge of electrostatic force, field, potential energy and potential; (2) Demonstrate a conceptual and mathematical knowledge of DC circuits containing batteries, resistors, and capacitors; (3) Demonstrate a conceptual and mathematical knowledge of magnetic forces and fields and induction; (4) Demonstrate a conceptual and mathematical knowledge of ray and wave optics; (5) Effectively collect and present scientific data gathered through experiment; (6) Use computational and estimation skills to analyze data, construct and interpret charts, graphs, and tables, and compose scientific explanations.

## PHYS 3000 - Modern Physics (3)

Prerequisites: PHYS 2212K; or both MATH 2210 and PHYS 1112K
A culminating introductory physics course that covers modern topics in physics such as relativity, quantum phenomenon, atomic physics, nuclear physics, solid-state physics, and cosmology. Algebra, trigonometry, and differential and integral calculus will be routinely used. Upon completion of this course students will be able to: (1) Demonstrate broad knowledge of electromagnetism and its applications to 21st century technology; (2) Demonstrate a conceptual and mathematical knowledge of relativity; (3) Demonstrate a conceptual and mathematical knowledge of basic quantum mechanics; (4) Apply quantum mechanics principles to the physics of the atom.

## POLITICAL SCIENCE (POLS)

## POLS 1101 - American Government (3)

Prerequisite: ENGL 0989
Covering the essential facts of national government in the United States, with some attention given to state government, including the State of Georgia, this course satisfies state law, requiring examination on United States and Georgia Constitutions.

## POLS 1101H - Introduction to American Government Honors (3)

Prerequisite: Successful completion of ENGL 0989 if applicable.
Co-requisite: Enrollment in the GGC First Year Honors Experience or Honors Program; or, permission of the Dean of Liberal Arts and the Director of the GGC Honors Programs
Covering the essential facts of national government in the United States, with some attention given to state government, including the State of Georgia, Political Science 1101-Honors satisfies state law, requiring examination on United States and Georgia Constitutions. This course offers an integrated educational experience providing you with opportunities where applicable to explore the meanings of and develop abilities related to the four core values espoused by the college and our Honors Programs: leadership, creativity, service, and scholarship. In part, this means that Political Science 1101-

Georgia Gwinnett College 2015-16 Catalog

H consistently will challenge you and offer you learning opportunities that fully support the College's Vision and Mission via the promotion of a dynamic learning community.

## POLS 2101 - Introduction to Political Science (3)

Prerequisite: POLS 1101
This course is an introduction to the Political Science fields of Political Theory, Comparative Politics and International Politics.

## POLS 2201 - State and Local Government (3)

Prerequisite: POLS 1101
Covering the essential facts of state and local government and politics in the United States, this course places particular emphasis upon the Constitution and the government of the State of Georgia.

## POLS 2280 - Research Methods in Political Science (3)

Prerequisite: POLS 2101 or permission of the instructor
This course provides an introduction to qualitative and quantitative methods of inquiry in Political Science.

## POLS 2401 - Current Global Issues (3)

Prerequisite: ENGL 0989
This course will explore the global dimensions of contemporary political and social issues, including terrorism, foreign aid, health and population concerns, environmental challenges, international trade, ethnic conflict and genocide.

## POLS 2601 - Introduction to Public Administration (3) <br> Prerequisite: POLS 1101

This course is a survey of the field of American public administration. It is designed to provide students with a general overview and introduction to the development, concepts, facts, functions and generalizations concerning the public administration system in the United States. It includes the study of the legislative, executive and judicial branches of the U.S. government, governmental agencies, non-governmental agencies, non-profit agencies and their interconnection in the policymaking and policy implementation process.

## POLS 3100 - Comparative Politics (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor An introduction to the comparative approaches for the study of politics, focusing on patterns of development and change in contemporary political systems. Georgia Gwinnett College 2011-2012 Catalog, p. 231

## POLS 3200 - Comparative Legal Systems (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course compares the development, structure and processes of the world's major legal systems from a global perspective, including common law, civil (code) law, religious and socialist legal systems and customary dispute resolution in traditional societies. The course explores the roles of a country's economic and political structures, culture and religion in administering justice.

## POLS 3350 - US Foreign Policy (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course examines the actors, concepts and policies in the development of U.S. Foreign. Special emphasis will be placed on the relationships the U.S. has with the world.

## POLS 3400 - International Relations (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course is an examination of the concepts and theories of international relations.

## POLS 3450 - Modern Political Theory (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor A survey of the historical writings of political thought from Hobbes to Marx

## POLS 3550 - Public Policy Process (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor Examination of the major theoretical approaches to the study of public policy at all levels of government. The course focuses on critical elements of the policy process such as the definition of public problems, agenda setting, policy formulation, policy implementation, oversight and policy change. Selective public policy issues will also be examined in detail.

## POLS 3600 - Content Methods (4)

Prerequisite: Admission to Teacher Education and successful completion of the following courses: EDUC 3300 and EDUC 3350. In addition, students must have successfully completed POLS 2280.
This course will focus on methods for implementing student-centered instruction in Political Science. Special emphasis will be placed on the particular ways of knowing associated with the study of Political Science and incorporating these ways of knowing into learning activities for secondary students. Candidates will design, implement and assess learning activities for secondary students. A field component accompanies this course.

## POLS 4000 - International Organizations (3)

Prerequisite: POLS 1101 and, ENGL 1102 with a grade of C or better or permission of the instructor
This course is designed to acquire an understanding of the ways in which international organizations function. Attention is devoted to both global and regional organizations and to organizations with both broad and narrow functional mandates.

## POLS 4001 - International Development (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course will introduce students to various approaches to international development, focusing on a variety of experiences of countries in the Global South. The course will explore several themes concerning international development, including foreign investment, women's issues, international trade, global inequality, the role of international organizations and corruption.

## POLS 4040 - Comparative Foreign Policy (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course examines the actors, concepts and policies in the development of foreign policy from a comparative perspective.

## POLS 4125 - Georgia Politics (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course will examine state and local government in the state of Georgia using both case study and comparative approaches.

## POLS 4160 - American Judicial Process (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course will examine the structure and organization of state and federal courts, the selection of judges, judicial reasoning and decision making, the powers of the courts and the impact of the courts on American government and society. A basic theme of this course is that courts, as governmental institutions, must be understood in light of their relations with other institutions of government and with the general public.

## POLS 4170 - Congress (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor An examination of the role of Congress in the American political system from both institutional and behavioral perspectives.

## POLS 4180 - The Presidency(3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course will examine the constitutional, institutional and personal powers of the president and the political role of the president.

## POLS 4220 - Topics in Comparative Politics (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor

The course provides intensive examination of current political problems in Comparative Politics. Topic may vary each time course is offered. Course may be repeated for credit if the topic is different.

## POLS 4230 - Topics in American Politics (3)

Prerequisite: POLS 2101 and ENGL 1102 with a grade "C" or better; or permission of the instructor This course provides intensive examination of current political problems in American Politics. Topic may vary each time course is offered. Course may be repeated for credit if the topic is different.

## POLS 4240 - Topics in International Relations (3)

Prerequisite: POLS 2101 and ENGL 1102 with a grade "C" or better; or permission of the instructor This course provides an intensive examination of current political problems in International Relations. Topic may vary each time course is offered.

## POLS 4350 - CJCR 4350 - Criminal Law (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course will examine the substantive criminal law, its origin and sources, the elements of crime and modifying circumstances and defenses. Also discussed are offenses against the person and property, those offenses involving specific intent and public welfare offenses.

## POLS 4390 - Legal Writing and Research (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor In this course, students will learn the tools and methods of legal research and writing. The course covers methods for locating and analyzing statutory and case authorities and writing legal memoranda, correspondence and briefs in trial court and appellate contexts. In addition, students will practice identifying issues in client interview settings and articulating legal issues in simulated appellate arguments.

## POLS 4400 - International Law (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor Law among states in peace and war. Historical background and political foundations of international law. The influence of judicial decisions, international courts and organizations, treaties and practices of states upon the growing body of international law.

## POLS 4425 - Political Negotiation and Conflict Resolution (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor
This course will explore the Alternative Dispute Resolution spectrum and political negotiation strategies.

## POLS 4460 - US Security Studies(3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor This course will analyze the most important challenges and threats to U.S. national security that have emerged in the Post-Cold War era. In addition, the course will attempt to assess the implications of these challenges for US foreign policy in the contemporary global environment.

## POLS 4480 - Practicum in ADR (Alternative Dispute Resolution (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor In this course, the student will examine the theoretical foundations of conflict resolution and apply the negotiation skills and mediation framework in simulations. The applied setting is designed to meet the Alternative Dispute Resolution Certificate Program.

## POLS 4490 - Senior Seminar (3)

Prerequisite: Senior Status ( 90 hrs ) and 30 hours of 3000-4000 level Political Science Courses, or permission of instructor In this course, the student will synthesize the various theoretical foundation courses and applied field studies from their political science curriculum. Special attention will be placed on the application of political science skills.

## POLS 4700 - Constitutional Law: Powers of Government (3)

Prerequisite: POLS 1101 and ENGL 1102 with a grade of C or better or permission of the instructor

This course addresses questions concerning the role of the Supreme Court in resolving legal problems that arise under our fundamental law, as well as issues concerning the Constitution's distribution of power between the national and state governments and among the branches of the national government.

## POLS 4720 - Constitutional Law: Civil Liberties and Civil Rights (3)

Prerequisite: POLS 1101 and ENGL 1102 (with a grade of C or better or permission of the instructor) Cross-Listed with CJCR 4720
This course focuses on constitutional protections of liberty and equality, including protections that stem from principles of substantive and procedural due process. Subjects typically covered in the course include equal protection, freedom of expression, rights to privacy, the right to free exercise of religion and the prohibition of laws respecting an establishment of religion.

## POLS 4989 - Directed Research (3)

Prerequisites: POLS 2101 and permission of instructor based on discipline approval
A pre-approved research based experiential activity in the field of political science with meaningful service to the field. The experiential activity shall include a presentation of original research to an establish audience. The research project must be designed with the instructor and approved by the discipline in the semester prior to enrollment. The project must consist of no fewer than 90 hours of supervised research. Students will be expected to establish learning outcomes that coincide with the discipline's program goals and prepare written research assessment paper that demonstrates learning objectives. POLS 4998 may count as POLS 4999 in the program of study.

## POLS 4990 - Internship (3)

Prerequisite: POLS 2101 and ENGL 1102 with a grade of C or better or permission of the instructor
A pre-approved experiential activity in the field of political science with meaningful service to the field. The experience should foster academic learning, personal growth and civic or global responsibility. The internship shall be a place internship of no fewer than 90 service hours in the field and must be pre-approved by the discipline in the semester prior to enrollment. Students will be expected to establish learning outcomes that coincide with the discipline's program goals and prepare written research assessment paper that demonstrates learning objectives.

## PSYCHOLOGY (PSYC)

## PSYC 1102 - Introduction to Psychology (3)

Prerequisite: ENGL 0989
This course surveys the major topics in psychology including, but not limited to biological psychology, human development, learning memory, social psychology, personality, abnormal behavior, and therapy.

## PSYC 2010 - Writing in Psychology (3)

Prerequisite: ENGL 1101
Co-Requisite: PSYC 1102
The purpose of this course is to improve your writing skills. The emphasis of this course is on writing for psychology papers. Attention will be paid to mastering the APA style. In addition, you will learn how to identify a topic for research, use online search engines to locate empirical articles for review, research and analyze empirical articles and compose a written review of literature.

## PSYC 2400 - Abnormal Psychology (3)

Prerequisite: PSYC 1102
This course explores the field of abnormal psychology. Abnormality will be presented through socio-historical and cultural contexts. The course will examine several theories of abnormality and the etiology, diagnosis, and treatment of major psychological disorders. In addition, the course will explore research issues related to disorders and treatments. The course will also present legal and social issues in the field of mental health.

## PSYC 2500 - Lifespan Developmental Psychology (3)

Prerequisite: PSYC 1102
This course provides a general introduction to the field of developmental psychology. We consider four major areas of development - physical, cognitive, emotional, and social - from conception to death. The course emphasized the interconnections of all facets of development and the strong interconnections between the individual, his or her family,
and the social world that provides a niche for development. Attention is given to normative development as well as to the diversity of individual patterns of growth. Diversity of social contexts for development is also emphasized. The course will pay special attention to those factors within the individual and the social context that promote healthy and competent growth and development.

PSYC 3000 - Application in Psychology (3)
Prerequisite: PSYC 1102; PSYC 2000 or 2010;
The course is aimed at allowing students to further explore the relationship of both basic and applied psychology to their world. Throughout the course, students will be exposed to various individuals (guest lecturers) from community agencies, local and regional laboratories, and program directors who will engage students in dialogue about the role of psychology in discovery, applied and basic social problems, and clinical/medical applications.

PSYC 3020 - Statistics for the Behavioral Sciences (4)
Prerequisite: PSYC 1102; MATH 1111 or higher
This course is designed as an introduction to the descriptive and inferential statistical methods used in psychology and provides students with the basic tools for evaluating data from studies in the behavioral sciences. Topics include basic descriptive measures of central tendency and variability; hypothesis testing; testing for differences between means, and correlation and measures of association. The applications of basic statistical concepts is emphasized.

## PSYC 3030 - Research Methods and Design (4)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 3020
This course explores the basic elements of research methodology (including ethical practices) as they are applied in psychology. Both experimental and non-experimental methods of research will be examined. Students will conduct research of their own design and will communicate these results with their peers.

## PSYC 3100 - Psychology of Learning (3)

Prerequisite: PSYC 1102
This course is a survey of the general learning principles that serve as the foundation of complex human and animal behavior. Particular attention will be paid to the conceptual, methodological, and theoretical issues surrounding classical and operant conditioning, and observational learning. Additionally, students will be exposed to everyday applications of these principles in a variety of settings inside and outside the realm of psychology.

## PSYC 3110 - Cognitive Psychology (3)

Prerequisite: PSYC 1102
Cognitive psychology is the scientific study of how sensory input is transformed, reduced, elaborated, stored, recovered, and used. This course provides an in-depth exploration of classic and contemporary theories of cognitive psychology. Emphasis is placed on understanding the various scientific methods that inform major information processing theories. Major topics include attention, mental representations, short-term and long-term memory, psycholinguistics, and judgment and decision making.

## PSYC 3120 - Sensation \& Perception (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2100 or PSYC 3100 or PSYC 3110; or permission of instructor for non-psychology majors.
How organisms sense and perceive the environment. Topics discussed: anatomy and physiology of the sensory systems, types of stimuli affecting sensory systems and current knowledge and theories of our perceptual abilities.

## PSYC 3130 - Cognitive Neuroscience (3)

Prerequisite: PSYC 1102; PSYC 2010; PSYC 2100 or PSYC 3100 or PSYC 3110; or permission of instructor for nonpsychology majors.
Cognitive neuroscience is the study of how the brain functions to produce complex human and animal cognition. After providing an overview of neuroanatomy and cognitive neuroscience methodology, specific research areas will be explored, including: sensation and perception, attention, learning and memory, cognitive control, and language. Students will be exposed to contemporary studies in these areas in addition to cases of brain injury so that students can appreciate the critical link between brain structure and function.

PSYC 3210 - Introduction to Neuroscience (3)
Prerequisite: PSYC 1102
Georgia Gwinnett College 2015-16 Catalog

This course examines how the internal and external environments act upon the central nervous system to produce perceptions, control body functions and generate behavior. Basic principles of neuroanatomy, neurophysiology and neurochemistry are discussed to develop an understanding of how these brain properties underlie human thought, physiology and behavior. Topics include neural bases of action; reward and motivation; learning and memory; emotions; sleep and biological rhythms; and neurological and neuropsychiatric disorders. Both experimental and clinical data are considered.

## PSYC 3220 - Comparative Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2200 or PSYC 3200; or permission of instructor for nonpsychology majors.
The biological bases of human and nonhuman behavior, with emphasis on underlying physiological mechanisms and on the development, evolution and function of behavior. Laboratory/research experience is included.

## PSYC 3301 - Social Psychology (3)

Prerequisite: PSYC 1102
This course explores social behavior in casual and workplace environments. We cover topics like attitudes, love, conformity, helping, and aggression. Laboratory/research experience is included.

## PSYC 3310 - Human Sexuality (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301; or permission of instructor for nonpsychology majors.
This course examines the biological, psychological, and sociological aspects of human sexual behavior. Theoretical and empirical findings, as well as current, personal, and social implications of human sexual behavior will be addressed. Topics include historical and international perspectives of human sexual behavior, variations in sexual behavior, deviance, social patterns, assessment and treatment of sexual disorders. The role of public policy and its legal implications will be covered.

## PSYC 3330 - Psychology and Culture (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301; or permission of instructor for nonpsychology majors.
The impact of culture on psychological processes and phenomena is examined. The universal human capacity for cultural adaptation and learning is investigated along with the effects of the major differences between the varying cultures of the Americas, Europe, Asia and Africa. Cultural differences in basic psychological processes including development, emotion, cognition, psychopathology and morality are considered.

PSYC 3350 - Introduction to Forensic Psychology (3)
Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2400 or PSYC 2300 or PSYC 3301; or permission of instructor for non-psychology majors.
This course will provide an overview of the field of clinical forensic psychology and the various ways in which psychology interacts with the legal system. This course will acquaint students with the substantive laws that are addressed in forensic evaluations (e.g., legal definitions of competency and criminal responsibility) and the ways in which forensic psychological practice may differ from general clinical practice (e.g., the importance of obtaining and evaluating thirdparty information when conducting forensic assessments). The nature and importance of relevant ethical principles governing the practice of psychology in relation to the legal system will also be discussed. Specific topics include psychological testimony, civil commitment, assessments of dangerousness, the rights of mentally disabled individuals, competency to stand trial, child custody disputes and assessment of psychological damages in civil litigation. The appropriate scope and limitations of psychological practice and techniques in relation to the legal system will be discussed throughout the course.

## PSYC 3370 - Industrial/Organizational Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301; or permission of instructor for nonpsychology majors.
This course will provide an introduction to the methods, practice, research and theories used in industrial/organizational psychology. Individual, group, and organizational issues and their influences on effectiveness and productivity in the workplace will be addressed. Topics included selection, training, appraisal, job attitudes, work motivation, leadership, job design, organizational culture, and work environment.

## PSYC 3400 - Personality Psychology (3)

Prerequisite: PSYC 1102; PSYC 2400 or PSYC 2500
The purpose of the course is to compare the contributions and limitations of major theoretical perspectives on social behavior and to learn about the nature of theory construction and theory-testing in psychology generally. Both general models and middle-level models of social behavior are reviewed. The advantages and disadvantages of different models for different levels and different kinds of social-personality phenomena are highlighted.

## PSYC 3410 - Psychopathology (3)

Prerequisite: PSYC 1102; PSYC 2010 or PSYC 2000; PSYC 2400 or permission of instructor for non-psychology majors. The course provides an advanced study of several psychological conditions and their treatment. These include chronic mental illness, suicide, eating disorders and depression. We draw on an array of disciplines, including psychology, psychiatry and the history of medicine, social anthropology, feminist studies and cultural studies. We pay critical attention to the differing practices of producing knowledge and the different kinds of knowledge that result.

## PSYC 3420 - Health Psychology (3)

Prerequisite: PSYC 1102; PSYC 2010 or PSYC 2000; PSYC 2300 or PSYC 3301; or permission of instructor for nonpsychology majors.
This course examines the biological, psychological, and sociological factors that influence health and well-being. The course will provide theoretical and empirical evidence that underlie prevention, intervention, and treatment of disease. This course will also cover individual differences, the effects of class and economic status, role of stress, lifestyle factors, environmental influences, and chronic illnesses. The role of complementary or alternative medicines, models of health care and health care systems and health policy included.

## PSYC 3430 - Models of Psychotherapy (3)

Prerequisites: PSYC 1102; PSDYC 2000 or PSYC 2010; PSYC 2400; or permission of instructor for non-psychology majors
This course reviews major theoretical models of psychotherapy and examines how change occurs through psychotherapy. Models may include behavioral, cognitive-behavioral, psychodynamic, interpersonal, feminist, personcentered, multicultural/integrative, and couples/family systems therapies. Empirically-supported treatments (ESTs) and controversies surrounding EST approaches will be addresses.

## PSYC 3440 - Clinical Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2400; or permission of instructor for non-psychology majors This course will present an introduction to clinical psychology by considering the scientific methods used in clinical psychology as well as descriptive, etiological and treatment perspectives on various forms of psychopathology and psychological dysfunction. Clinical psychologists often have a variety of professional roles and we will discuss some of the career paths that clinical psychologists follow, such as research, teaching, intervention and public policy. The required textbook for the course will provide you with an overview of the current research and theory on the causes, descriptions and treatments of different psychological disorders. Lectures, discussions and films will supplement the test, allowing for a more broad-based coverage of the material. Sections are a required part of the course and will allow for a more detailed examination of some of the topics. Laboratory/research experience is included.

## PSYC 3500 - Educational Psychology (3)

Prerequisite: PSYC 1102; PSYC 2010 or PSYC 2000; PSYC 2500; or permission of instructor for non-psychology majors.
This course considers a particular application of the more important psychological principles to educational theory and practice. This course embraces a systematic study of the educable being, habit formation, phases of learning, intellectual and emotional growth and character formation. Individual differences, transfer of training, interest, attention and motivation, insofar as they influence the teaching process, will be included. Laboratory/research experience is included.

## PSYC 3510 - Child Development (3)

Prerequisite: Prerequisite: PSYC 1102; PSYC 2010 or PSYC 2000; PSYC 2500; or permission of instructor for nonpsychology majors.
This course reviews the literature on child biological, motor, perceptual, cognitive (including intelligence), language, emotional, social and gender development. Child development history, theory and research strategies will be discussed, as well as the effect of family, peers, media and schooling.

PSYC 3520 - Adolescence (3)
Prerequisite: Prerequisite: PSYC 1102; PSYC 2010 or PSYC 2000; PSYC 2500; or permission of instructor for nonpsychology majors.
The course examines issues of adolescent development, experiences and contexts of adolescents' lives today. The course examines theories, research and issues of adolescent physical, social-emotional and cognitive development and their reciprocal influences. We will look at a range of environments that influence (and are influenced by) adolescents; including peers, family, schools, work, media and community. Each area of development is viewed within the context of adolescents' lives and using a bio psychosocial framework. Includes historical, demographic, cross-cultural and applied perspectives. Diversity issues such as culture, socio-economic class, ethnicity, gender and sexual orientation are interwoven throughout the course. We will assess elements of the environment that can impact, impede, or facilitate the experiences of adolescents and their families. Opportunities exist for application of course information to both personal and professional contexts.

## PSYC 3530 - Adult Development and Aging (3)

Prerequisite: Prerequisite: PSYC 1102; PSYC 2010 or PSYC 2000; PSYC 2500; or permission of instructor for nonpsychology majors.
This course examines different issues related to early, middle and late adulthood. Emphasis will be placed on physical, cognitive and psychosocial development. Several topics will be addressed including memory, work, relationships and death. An examination of diversity issues as they relate to adult development and the aging process will be infused throughout the course.

## PSYC 3540 - The Psychology of Gender (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; and either PSYC 2300 or PSYC 2500 or PSYC 3301; or permission of instructor for non-psychology majors
This course examines research and theory on gender from developmental, evolutionary, and social psychological perspectives. We examine what it means to be male, female, or another gender. A number of topics related to gender will be covered, including but not limited to: gender differences; gender role socialization, gender identity development; and gender as a biological, psychological, and social construct. We will also consider applications of gender studies research to issue of family, work, relationships, and education. Gender cannot be studied without addressing the intersections of race and class. Thus, emphasis will be placed on appreciating and negotiating the diversity of experiences in gender construction and development.

## PSYC 4110 - Memory (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2100 or PSYC 3100 or PSYC 3110; PSYC 3020; PSYC 3030 The course will discuss human memory and explore the capabilities and limitations of our memory. Major phenomena, experimental procedures and theoretical models of human memory will be discussed.

PSYC 4190 - Special Topics in Cognitive Neuroscience (3)
Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2100 or PSYC 3100 or PSYC 3110; PSYC 3020; PSYC 3030; or by permission of instructor for non-psychology majors.
This course is an in depth examination of a special topic in the area of Cognitive Neuroscience not normally covered in other psychology courses. Course content varies by semester and instructor but students will be notified before registration. Possible topics include: language, concepts and categories, reasoning and decision making, and cognitive gerontology.

## PSYC 4200 - Behavioral Neuroscience (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2200 or PSYC 3200 PSYC 3020; PSYC 3030
The goal of this course is to provide a comprehensive introduction to behavioral neuroscience. This includes a review of human brain anatomy, physiology and function with a focus on basic concepts of neural function, neurodevelopment and synaptic transmission. Primary literature will provide current and historical perspectives on experimental and clinical findings that contribute to our current understanding of nervous system function. Topics include hormones and reproductive behavior, sensory systems, sleep and biological rhythms, reward and motivation, mood, emotions and neurotechnological advances. Consideration of ethical issues surrounding neuroscience and its rapid advancements will allow immediate application of the content knowledge.

PSYC 4220 - Psychopharmacology (3)
Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2400; PSYC 2200 or PSYC 3200; PSYC 3020; PSYC 3030
Georgia Gwinnett College 2015-16 Catalog

This course examines the biological, psychological, and sociological aspects of psychoactive drugs on consciousness and behavior. The course will provide a broad view of the impact of drugs (licit and illicit) on human behavior. The mechanism of drug action on the brain and neurological systems, patterns and causes of the use and abuse of drugs on individuals and in different cultures and societies will be addresses. Treatment issues, prevention models and drug policies will also be discussed.

## PSYC 4301 - Advanced Social Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301; PSYC 3020; PSYC 3030
Advanced Social Psychology goes in-depth into theoretical conflicts of social behavior. Topics covered will include: 1) those involving individual processes in a social context, such as attitude formation, social perception, and the self; and 2) those involving interpersonal, group, and social processes such as attraction, conformity, altruism, and prejudice.

## PSYC 4320 - Group Dynamics (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301; PSYC 3020; PSYC 3030
Theory, research, and application of the social psychology of group formation, group structure, and group processes. Topics include, but are not limited to social identity, group decision-making, group performance, group conflict, leadership and followership, collective behavior, and intergroup relations.

## PSYC 4370 - Psychology and the Legal System (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300; PSYC 3020; PSYC 3030
An introduction to the application of psychological topics to law, including the legal process; trials and juries; eyewitness testimony; presentation of scientific evidence; and the use of social science in the legal system.

## PSYC 4380 - Psychology of Prejudice (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301; PSYC 3020; PSYC 3030
The course will review classic and current literature from experimental social psychology pertaining to stereotyping and prejudice. Issues that will be covered include the functions and costs of stereotyping, the formation and maintenance of stereotypes and stereotype change. Recent research concerning the role of cognitive processes in intergroup perception will be emphasized. Students in this course will critically examine both classic and contemporary research on stereotyping and prejudice, with particular attention to how approaches to this kind of research have changed over the past 20 years. Class discussions will focus on what stereotypes are, how they develop and are perpetuated, what their consequences are - both for the stereotypes and for his/her target. We will consider the theoretical distinction between stereotypes and prejudice and discuss whether this distinction has meaning in real life. From there, we will consider how prejudice is studied and evidenced in today's politically correct environment and how one attempt at a "solution" to prejudice (affirmative action) has turned out. The course will conclude with an exercise developed to help students respond to others' use of stereotyping and prejudice - whether they themselves are targets or not.

## PSYC 4390 - Special Topics in Social and Applied Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301; PSYC 3020; PSYC 3030; This course is an in-depth examination of a special topic in the area of Social Psychology, not normally covered n other psychology courses. Course content varies by semester and instructor but students will be notified before registration. Possible topics include Social Cognition, Sports Psychology, Political Psychology, Consumer Psychology, Black Psychology, Psychology and the Legal System,

## PSYC 4401 - Community Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PYSC 2300 or PSYC 3301; PSYC 3020; PSYC 3030
The purpose of this course is to provide an overview of the history, development and approaches of Community Psychology. It will focus on the relationship between the individual and the community to solve social problems. This course studies the issues and challenges associated with the development and assessment of innovative mental health intervention in community settings. Topics include the history of community health, multidisciplinary and multicultural participation, the development of health priorities in community settings and the role of partnership in program development.

## PSYC 4410 - Psychological Assessment (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2400; PSYC 3020; PSYC 3030
This course introduces the conceptual, practical, ethical and legal issues related to psychological assessment. Topics
include discussion of standards for testing (e.g., validity, reliability, norming, test development, avoidance of cultural bias) and general guidelines for selections of particular types of assessment methods for individuals (e.g., standardized test, direct observation, questionnaire, interview). Laboratory/research experience is included.

## PSYC 4430 - Developmental Psychopathology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2400; PSYC 3020; PSYC 3030
This course emphasizes an empirically-based developmental psychopathology perspective, with a focus on the biological and environmental risk and protective factors that shape abnormal and normal developmental trajectories. The course will consider genetic, biological, physiological, cognitive, socio-cognitive, socio-emotional, environmental, culture, and societal influences on human development. Of particular interest will be the associations between biopsychosocial risk factors and the development of resilience and psychopathology in children and adolescents. The class will devote considerable attention to family functioning and other interpersonal relationships as sources of risk. Within this developmental psychopathology framework, this course covers several psychological disorders that often first appear in childhood and adolescence, including developmental, behavioral, and emotional disorders. Treatment issues are also discussed.

## PSYC 4490 - Special Topics in Clinical/Personality Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2400; PSYC 3020; and PSYC 3030; or by permission of instructor for non-psychology majors.
This course is an in-depth examination of a special topic in the area of Clinical/Personality Psychology, not normally covered in other psychology courses. Course content varies by semester and instructor but students will be notified before registration. Possible topics include: Personality Disorders, Infant Mental Health, and Relationships Seminar: Interpersonal Theories \& Therapies.

## PSYC 4500 - Social and Moral Development (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2500; PSYC 3020; PSYC 3030
In this course, students will be introduced to theory and research in social and moral development. We will examine the various processes of social, emotional, personality, and moral development in children and adolescents. The ways in which biology, culture, and the social context with these processes will also be examined.

## PSYC 4510 - Culture and Ethnic Diversity (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301 or PSYC 2500; PSYC 3020; PSYC 3030 Social and behavioral science approach to understanding forces and ideas that have shaped the individual and collective experience of people of various ethnic and cultural backgrounds. Several topics will be discussed including issues of race consciousness, identity, self-concept, language, public policy, and family relations.

## PSYC 4525 - School Psychology

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2400 or PSYC 2500; PSYC 3020, PSYC 3030; or permission of instructor for non-psychology majors
School Psychology is the application of psychological theory to addressing the social, emotional, behavioral, and academic needs of students in schools (K-12). This course embraces a systematic study of the field of school psychology, including topics related to the history of school psychology, current topics in special education, the many roles of the school psychologist (pertaining to assessment, prevention/intervention, consultation, and research), ethics and legal matters, diversity, and the training and employment of school psychologists.

## PSYC 4530 - Marriage and Family (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2300 or PSYC 3301 or PSYC 2500; PSYC 3020; PSYC 3030 This Course will specifically examine the major challenges and changing trends facing families and marriages. Families and marriages will be studied as dynamic systems. The course will explore the changing nature of family patterns and marriages in the U.S., as well as some comparisons to non-Western cultures. Areas of study include the family in historical perspective, family life course, socialization within families, gender roles, parent-child relations, non- traditional families, alternative unions, marital interaction and power and reconstituted families.

## PSYC 4560 - Trauma Across the Lifespan (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2400; PSYC 3020; PSYC 3030
This course delineates a theoretical and practical integration of eco-developmental approaches to psychological trauma.
The consequences of early traumatic experience will be mapped in the context of psychosocial developmental processes,
Georgia Gwinnett College 2015-16 Catalog
including attachment, social interaction, emotional expression and cognitive construction of worldview. The impact of repeated trauma in the lives of children and adolescents will be explored in the context of developmental transformations and in relationship to psychopathology, gender and bio-physiology. The course will emphasize the nature of childhood trauma and the developmental consequences in later childhood, adolescence and adulthood. The concepts of risk, psychopathology and resilience will be examined in the context of traumatic exposure and the transformation of developmental processes and alternate developmental pathways. Examples of childhood victimization and trauma will include child maltreatment, family violence, illness, loss and war. Although the primary focus of the course is on individual developmental consequences of trauma, socially and culturally related trauma will be discussed in the context of the eco-developmental framework. Applications of trauma research and theory from a multidisciplinary perspective will be considered as they relate to parenting roles and larger cultural contexts. Intervention and advocacy as well as the institutional and community responses to traumatized children and families will be addressed.

## PSYC 4590 - Special Topics in Developmental Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 2500, PSYC 3020; and PSYC 3030; or by permission of instructor for non-psychology majors
This course is an in-depth examination of a special topic in the area of developmental psychology, not normally covered in other psychology courses. Course content varies by semester and instructor by students will be notified before registration. Possible topics include but are not limited to, Black Psychology, Language Development, Infancy, Geriatric Studies, and Exceptional Youth.

## PSYC 4600 - History \& Systems of Psychology (4)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 3020; PSYC 3030
The purpose of this course is to explore the historical roots of the questions psychologists have chosen to investigate the evolution of the methods of psychological research, the development of applied psychology and provide you with a framework that explains the relationships between the various sub-disciplines of psychology. By examining the history and basic concepts that have shaped psychology it will become possible to see the relationships between seemingly disparate areas of psychology and gain an understanding of the philosophical and scientific significance of many of the questions that psychologists have chosen to examine.

## PSYC 4602 - Senior Thesis (3)

Prerequisites: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 3020; PSYC 3030 and permission of instructor directing the project
The implementation and completion of a project developed in conjunction with the instructor. The project can take the form of an in-depth literature review, an intervention, or an empirical research project. The student will work closely with an instructor who will assist him or her in the development of ideas, finding requisite research literature and execution of project goals. A formal written report and oral presentation will be required.

## PSYC 4604 - Directed Readings in Psychology (1-9)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 3020; PSYC 3030; and permission of the faculty member supervising the study.
Individual study under the direction of a faculty member. A written product will be required. Available as a variable credit course for a maximum of 9 credit hours.

## PSYC 4605 - Psychology Internship (3)

Prerequisites: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 3020; PSYC 3030 and consent of the internship coordinator.
Students completing an internship are required to participate in a structured field experience applying psychological principles, theory, and research. The internship options include placement at a community facility, placement in an office on campus, shadowing a practicing professional, or participating in a research lab. Student must complete a final term project at the end of their internship. The internship option may be repeated once for additional credit.

## PSYC 4690 - Special Topics in General Psychology (3)

Prerequisite: PSYC 1102; PSYC 2000 or PSYC 2010; PSYC 3020; PSYC 3030 or by permission of instructor for nonpsychology majors
This course is an in-depth examination of a special topic in the area of, not normally covered in other psychology courses. Course content varies by semester and instructor but students will be notified before registration. Possible
topics will most frequently be focused in research methodology and practice including intermediate/advanced behavioral statistics and advanced research methods.

## READING (READ)

## READ 3200 - Literacy Foundations (4)

Prerequisite: Admission to Teacher Education
This course introduces candidates to classroom approaches to literacy instruction through the examination of early literacy development, including reading, writing, listening, speaking, viewing and graphical representation. Candidates will explore the reading and writing workshop models for delivering early literacy instruction, as well as the role of specific strategies in developing phonological and phonemic awareness and proficiency, fluency, comprehension and vocabulary in first- and second-language learners. Literature for beginning readers in a variety of formats and genres will be integrated throughout the course. Candidates will develop the background needed to develop a comprehensive literacy curriculum for first- and second-language learners which builds upon the diverse cultural and linguistic backgrounds and needs of beginning readers. Includes field experience in a P-2 classroom.

## READ 3600 - Literacy Assessment (4)

Prerequisite: Admission to Teacher Education and READ 3200
This course will provide candidates with a foundation in literacy assessment. Methods for identifying the strengths and meeting the needs of first- and second-language learners will be examined. Candidates will gain experience using informal classroom assessment techniques such as informal reading inventories, running records, kid-watching and portfolio assessments. Candidates will also learn to interpret standardized test data related to reading assessment and academic language development (including assessments for English language learners). Candidates will use formal and informal assessment data to design, implement and reflect upon an individualized plan to support a struggling reader. Includes field experience in a P-5 classroom.

## READ 4000 - Literacy Integration (4)

Prerequisite: Admission to Teacher Education; READ 3200
Co-requisite: ECED 4100 or SPED 4100
This course focuses on the creation of an integrated and comprehensive curriculum for intermediate and accomplished readers and second language learners. Continuing to build on the foundation provided in Literacy Foundations (READ 3200), candidates will explore critical literacy, literacy across the content areas and multimodal and new literacies, as well as consider the implications of these foundational concepts for literacy instruction for first- and second-language learners. Literature for intermediate and accomplished readers in a variety of genres and formats will be integrated throughout the course. Includes field experience in a 3-5 classroom.

## RELIGION (RELN)

## RELN 1100 - World Religions (3)

Prerequisite: ENGL 0989
An introductory course designed to provide an analytical, critical and comparative study of the major world religious traditions.

## RELN 3100 - Religion and Social Justice (3)

ENGL 1102 with a grade of "C" or higher; RELN 1100; or permission of instructor
This course examines the relationship between issues of social justice and the role of religion (socio-cultural ideas on and practices related to the sacred) in guiding social groups toward more just and humane societies. Social justice issues such as peace, poverty, oppression, discrimination and the environment are considered through religious responses to these issues.

## RELN 3410 - Conceptions of Selfhood in Religion (3)

Prerequisite: ENGL 1102 with a grade of "C" or higher; RELN 1100 with a grade of "C" or higher This course considers the understanding of "selfhood" or in Western discourses, "subjectivities," in religious traditions around the world. A writing-intensive course, this exploration will include spiritual resources from Hindu, Buddhist, Christian, New Age, and Indigenous/Shamanic traditions as they inform the notions of selfhood. Topics such as mind/body theories of interaction, the nature of awareness, theories of the sub/unconscious, monistic and nondualistic
philosophies, enlightenment and Buddhist metaphysics will help students become familiar with complex and multivalent constructions of Selfhood.

## RELN 4001 - History and Literature of the Hebrew Bible/Old Testament (3)

Prerequisites: RELN 1100 and ENGL 1102 with a grade of "C" or higher.
This course addresses the nature, content, and problems of the Hebrew Bible/Old Testament with attention given to: 1.
The uses of the text by communities who revere or appreciate its content (e.g. Jews, Christians, and Muslims): 2. The
relevant historical data which shape the text (e.g. the relationship between text and material culture in historiography); 3 .
The literary forms of the ancient world (e.g. history, epic, myth, law, prophecy, poetry, wisdom literature, etc.); and 4.
The ancient Near Eastern literary and cultural backgrounds of the text.

## RELN 4700 Special Topics in Religious Studies (3)

Prerequisite: RELN 1100 and ENGL 1102 with a grade of "C" or higher and sophomore status or permission of instructor
This course offers a focused study of a particular area of Religious Studies. May be repeated for credit if the topic varies.

## SCIENCE AND TECHNOLOGY (STEC)

## STEC 2500 - Introduction to Undergraduate Research for SST (3)

Prerequisite: ENGL 1101 with a grade of C or better and Permission of faculty research supervisor Co-Requisite: MATH 1113
Students may conduct research in any of the disciplines in the School of Science and Technology. Through this research experience, students will: 1) Have a better understanding of the research process and the opportunities available to students interested in undergraduate research. 2) Effectively implement the scientific method to investigate a question of interest. 3) Collect and analyze data and present results. 4) Communicate in-depth scientific information effectively in oral and/or written form using appropriate terminology. Course can be repeated up to three times for credit.

## STEC 4200 - Directed Readings Seminar (1)

Prerequisite: MATH 0099; ENGL 0989; ENGL 0099
Discussion and written evaluations of primary literature in selected fields. Course may offer disciplinary sections or may be interdisciplinary. Course is tailored each semester based on student interest and faculty expertise. At the completion of this course students will be able to: (1) critically analyze primary literature from a field or fields of Science and Technology; (2) describe major attributes of the technologies employed in the research paper study; (3) summarize results from primary literature and place them in the larger context of the field; (4) communicate detailed scientific information in oral and written forms.

## STEC 4500 - Undergraduate Research Project (3)

Prerequisite: Completion of Area F in the student's major and permission of the faculty research supervisor. Students may conduct research in any of the disciplines in the School of Science and Technology. Through this research project, students will: (1) gather accurate information about a possible career path; (2) effectively use the steps of the scientific method; (3) communicate in-depth scientific information effectively in oral and written form using appropriate terminology and charts/graphs; (4) collect and analyze data and present results in appropriate formats including chart, graph and oral/written form.

## STEC 4800 Internship in Service Learning (3)

Prerequisite: Permission of Instructor, completion of application, acceptance to the program, a background check and insurance.
Upon completing this course, students will: 1. Apply Science, Technology, Engineering or Math (STEM) content knowledge and skills to develop engaging active learning enrichment activities within the local community. 2. Apply STEM skills in a service-learning context, such as ability to communicate science to the public, time management, and productive teamwork. 3. Exhibit professional behavior, and enthusiasm for STEM learning, consistent with modeling pursuit of higher education, college completion, and STEM career entry. Student will choose one of the following: Internship with $5^{\text {th }}$ Grade Science: Student will develop and conduct inquiry based labs with $5^{\text {th }}$ graders at a local elementary school to help increase elementary students' interest in science and STEM. You will spend half your time at the elementary school implementing science labs, and the rest of your time at GGC preparing the lesson plan, labs and course delivery with the help of GGC faculty. Technology Ambassador Program: Students will develop educational

Georgia Gwinnett College 2015-16 Catalog
technology tutorial or demonstration suitable for outreach to $\mathrm{K}-12$ students. You will prepare and conduct workshops and demonstrations at outreach events such as the Super Saturday Series (S3) and GGC Technology Camp. Students will assess the effectiveness of their workshop, reflect on the experiences, and summarize the results for a community of their peers.

## SOCIOLOGY (SOCI)

## SOCI 1101 - Introduction to Sociology (3)

Prerequisite: ENGL 0989
A survey of the discipline of sociology. Topics will include sociological theory, methods and selected substantive area.

## SOCI 1160 - Introduction to Social Problems (3)

Prerequisite: ENGL 0989
A theoretical and empirical analysis of selected major social problems confronting American society.

## SOCI 2293 - Introduction to Marriage and Family (3)

Prerequisite: SOCI 1101.
An introduction to the structure, processes, problems and adjustments of contemporary marriage and family life.

## SOCI 3201 - Social Inequality (3)

Prerequisites: ENGL 1102; and either SOCI 1101 OR SOCI 1160, or permission of the instructor Social Inequality examines stratification based on class, gender, race/ethnicity, age, and sexual orientation. Study will focus on explanatory theories of inequality and contemporary empirical work related to inequality. Dynamics of inequality within the United States and within global context will be explores.

## SOCI 3500 - Social Change and Social Movements (3)

Prerequisite: ENGL 1102 and either SOCI 1100, SOCI 1160 or consent of instructor
This course examines the role of social change in societal development. The focus of the course is on collective behavior and social movements. Collective behavior will be explored as a type of change in which the usual social conventions no longer guide social action and institutional patterns of behavior are bypassed as new norms develop. The examination of social movements will include those movements that have been important to American history and continue to influence change in a global context.

## SOCI 4000 Special Topics in Sociology (3)

Prerequisite: SOCI 1101, SOCI 1160, or permission of Instructor
This course proposes a focused study of a particular area of Sociology such as Gender and Sexuality, the Sociology of Family, Deviance, Sociology in Global Perspective, Aging and Life course, Immigration, Urban Sociology, or the Sociology of Sport*. This course may be repeated for credit when the topic varies. * The expectation is that the selected topics will shift as one or more of these topics eventually become standalone sociology courses as we develop a minor and eventual major. Students cannot receive credit for both a selected topic class and the eventual standalone course of the same topic. Students can receive credit for more than one selected topics course as long as the topic is different.

## SPANISH (SPAN)

SPAN 1001 - Elementary Spanish I (3)
Introduction to listening, speaking, reading and writing in Spanish and to the culture of Spanish-speaking regions.

## SPAN 1002 - Elementary Spanish II (3)

Prerequisite: SPAN 1001 or Permission of Instructor
Continued listening, speaking, reading and writing in Spanish with further study of the culture of Spanish-speaking regions.

## SPAN 2001 - Intermediate Spanish I (3)

Prerequisite: SPAN 1002 or Permission of Instructor
This course is a continuation of the beginning Spanish language courses (SPAN 1001 and 1002). This course consists of listening, speaking, reading and writing in Spanish with advanced study of culture of Spanish-speaking regions

Georgia Gwinnett College 2015-16 Catalog

SPAN 2002 - Intermediate Spanish II (3)
Prerequisite: SPAN 2001 or Permission of Instructor
Review of Spanish grammar with emphasis on speaking, reading and writing. Although a review of the grammar is part of this course, emphasis will be on communicating in Spanish. Classes will be conducted entirely in Spanish.

## SPAN 3010 - Spanish Conversation and Composition (3)

Prerequisite: SPAN 2002 or Permission of Instructor
This course will improve the student's command of the Spanish language through advanced study of grammar, syntax and vocabulary. Students will be required to speak Spanish during class, make presentations in Spanish and write various compositions in Spanish throughout the semester. This course is taught entirely in Spanish.

## SPAN 4020 - Survey of Latin American Literature (3)

Prerequisite: SPAN 3010 or Permission of Instructor
This course consists of a survey of Latin American literature. Literature from the colonial period through the $20_{\text {th }}$ century will be covered. Texts will include examples of poetry, prose and drama. This course is taught in Spanish.

## SPECIAL EDUCATION (SPED)

## SPED 3100 - Characteristics of Learners with Exceptionalities (4)

Prerequisite: Admission to Teacher Education
Co-requisite: SPED 3300
This course presents a comprehensive examination of the cognitive, physical, socio-emotional, socio-economic, cultural, racial, linguistic and gender characteristics of students with and without exceptionalities from developmental and ecological perspectives. Candidates will explore family and socio-cultural systems and their impact on typical and atypical human growth and development. Physical and mental health, safety, other risk factors and the role of supportive relationships in the development of resiliency will be explored. The course will provide a comprehensive overview of the historical, social, political, economic, cultural and legal foundations of special education and services to students with special needs, including the labeling, terminology, identification and categorization of these students. Comparisons and contrasts between students with and without disability issues will also be examined. Field experiences will focus on students in the context of the classroom and will include focused observations and case studies of individual students with exceptionalities in the context of the full continuum of services.

## SPED 3300 - Instructional Foundations for Special Education (4)

Prerequisite: Admission to Teacher Education
Co-requisite: SPED 3100
Designed to build a comprehensive understanding of the interaction among the school, the curriculum and the student, this course provides candidates with an in-depth examination of what makes special education "special." Through a review of policy, law and court decisions, the candidate will develop an understanding of the rights of students and parents of students with disabilities as well as the duties and responsibilities of teachers in meeting the needs of these students. Discussion and study will also encompass the concepts of Free and Appropriate Education (FAPE), Least Restrictive Environment (LRE), English Language Learners (ELL) and policies and procedures as they relate to classroom management. Various models, theories and philosophies as they relate to special education will be investigated. Candidates will learn about current educational trends, issues, policies and practices and their relationships to program planning, curriculum, instruction and assessment of students with disabilities. Candidates will examine national, state and local content standards to gain an overview of learning expectations for students and will trace the expectations for development of concepts in language arts, reading, mathematics, science and social studies. In the field, candidates will observe the process of curriculum and unit development and the use of educational frameworks, such as the Universal Design for Learning (UDL), that promote multiple approaches to meeting the needs of diverse students.

## SPED 3500 - Instructional Design and Delivery in Special Education (8)

Prerequisite: Admission to Teacher Education SPED 3300
Largely field-based, this course focuses on the design and delivery of developmentally appropriate instruction in language arts, mathematics, science, social studies, the arts, health and physical education in grades P-12 for students with exceptionalities. This includes meeting the student's physical, medical, social, emotional and communication needs as well as their academic requirements. Topics to be addressed include group and individual learning environments, behavior management techniques, appropriate utilization of technology, placement options and alternatives and instructional strategies. Working in coordination and collaboration with the home, general education teachers, related
Georgia Gwinnett College 2015-16 Catalog
service providers and community organizations and agencies will be a focus in terms of identifying, designing and delivering appropriate academic and non-academic accommodations and interventions for students of all backgrounds. Under the supervision of a qualified classroom teacher, candidates will learn to plan and implement developmentally appropriate and culturally inclusive instruction based on knowledge of individual students, the community and the curriculum goals. Candidates will demonstrate an understanding of the fundamental concepts of each discipline as well as a developing ability to translate this knowledge into meaningful learning experiences for exceptional students through the design, delivery and evaluation of lessons. This course will also explore the roles and responsibilities of other professionals in classroom instruction and prepare candidates to plan and direct collaborative instruction.

## SPED 4100 - Instructional Assessment and Adaptation (8)

Prerequisite: Admission to Teacher Education and SPED 3500
This course focuses on adapting instruction to meet individual student needs. Adaptation of instruction includes addressing student variations in achievement, developmental level, intelligences, learning styles, cultures, social/emotional characteristics and interests. This course will equip candidates with the basic skills requisite to identify, select and administer appropriate assessment instruments for identifying students' specific academic and nonacademic strengths and weaknesses. Candidates will learn to analyze and interpret assessment results as related to students with suspected or identified special needs. Candidates will learn to interpret and analyze student permanent records as well as assessment data and will develop appropriate adaptations of instruction and assessment that will allow all students to demonstrate progress toward achievement of instructional goals. In addition to surveying the principles and methods of educational measurement and test construction, this course will also focus on the use of assessment data to guide the adaptation of instruction to address students' learning needs and to document their achievement. Candidates will develop corrective techniques and institute preventative measures as they adapt the learning environment and instruction for all students regardless of background. The embedded field experience for this course will include development and evaluation of plans for differentiating instruction to meet individual students' need.

## THEATRE (THEA)

THEA 1100 - Theatre Appreciation (3)
Survey and critical appreciation of theatre.


[^0]:    AREA F - Courses Related to the Program of Study (18 semester hours)(18semester hours)

[^1]:    Two hours from areas A \& D

[^2]:    AREA F - Courses Related to the Program of Study (18 semester hours)
    MGMT 3000 (Principles of Management)
    ITEC 2140 (Programming Fundamentals)
    ITEC 2201 (Introduction to Information Systems)
    MATH 2000 (Statistics)
    MATH 2300 (Discrete Math)
    MATH 2300 (Discrete Math) 3 (Discre Math

[^3]:    AREA F - Courses Related to the Program of Study (18 semester hours)
    MGMT 3000 (Principles of Management) 3
    ITEC 2201 (Introduction to Information Systems) 3
    ITEC 2140 (Programming Fundamentals) 4
    MATH 2000 (Statistics) 3
    MATH 2300 (Discrete Math) 3

