### **COURSES OF INSTRUCTION**

This section of the catalog contains the course title and course description for each of the courses listed in the curriculum guides/academic pathways. At the end of each course description are printed three numbers, such as 3-2-4. The first number indicates the number of lecture hours for the course each week; the second number indicates the number of laboratory hours per week; and the third number indicates the semester hours of credit awarded for the successful completion of the course. Those courses that carry institutional credit and thus are not counted for graduation from SGSC are appropriately marked. Students are herein notified that institutional credit courses do not transfer to other postsecondary institutions. Students are cautioned to check semester class schedules carefully to determine times and places of class meetings.

## ACCOUNTING (ACCT)

**ACCT 2101**. Principles of Accounting I. A study of the underlying theory and application of financial accounting concepts. Prerequisite: MATH 1111. 3-0-3

**ACCT 2102**. Principles of Accounting II. A Study of the underlying theory and application of managerial accounting concepts. Prerequisite: ACCT 2101. 3-0-3

**ACCT 3102.** Cost Accounting. A study of the concepts and procedures underlying the development of a cost accounting system for managerial decisions, control, and performance reporting. The use of cost accounting information for costing products and services, budgeting and variance analysis, and pricing and product mix decisions. Prerequisites: ACCT 2101 and ACCT 2102 with a grade of C or better. 3-0-3

### ANTHROPOLOGY (ANTH)

**ANTH 1102**. Introduction to Anthropology. An introduction to the origins, evolution, and present-day adaptations of the world's peoples. Emphasis is on the study of fossils, archaeological remains, and culturally diverse life ways. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**ANTH 1104**. Introduction to Archaeology. An introduction to the methods, goals, and theoretical concepts of archaeology. Archeological interpretations of human societies using material remains are explored. Topics include the history of archaeology; developing a research design; field methods; laboratory analyses; chronology; exaction; and analytical techniques. Prerequisites: SOCI 1101 or ANTH 1102 and completing or exempting Support-level MATH. 3-0-3

#### ART (ARTS)

**ARTS 2205**. Understanding Art. Study of the underlying principles and understanding of the visual arts, including architecture, sculpture, and painting. Learning how to look at art in historical context. 3-0-3

**ARTS 3020.** Music for the Elementary Classroom Teacher. This course is designed to give students experiences in selecting and presenting musical activities which enhance and are, in turn, enhanced by other subject areas within a thematic unit framework. 2-0-2

**ARTS 3030.** Arts for the Elementary Classroom Teacher. This course is designed to give students experiences in selecting and presenting art activities which enhance and are, in turn, enhanced by other subject areas within a thematic unit framework. 2-0-2

## ASTRONOMY (ASTR)

**ASTR 1010**. Astronomy of the Solar System. Astronomy from early ideas of the cosmos to modern observational techniques. Topics include solar system planets, satellites, and minor bodies. The origin and evolution of the solar system. Prerequisites: MATH 1001 or 1111 and completing or exempting Support-level ENGL. 3-0-3

**ASTR 1010L**. Laboratory for Astronomy of the Solar System. A laboratory course to augment and support ASTR 1010. Corequisite: ASTR 1010. Astronomy of the Solar System. 0-2-1

**ASTR 1020**. Stellar and Galactic Astronomy. The study of the sun and stars, the physical properties and evolution, interstellar matter, star clusters, our galaxy and other galaxies, and the origin and evolution of the Universe. Prerequisites: MATH 1001 or 1111 and completing or exempting Support-level ENGL. 3-0-3

**ASTR 1020L**. Laboratory for Stellar and Galactic Astronomy. A laboratory course to augment and support ASTR 1020. Corequisite: ASTR 1020, Stellar and Galactic Astronomy. 0-2-1

### BIOLOGY (BIOL)

**BIOL 1010K**. Introduction to Biology I. Areas studied include the chemistry of life, the cell, respiration, photosynthesis, mitosis, meiosis, and genetics. Laboratory exercises supplement the lecture material. This course is intended for non-science majors only. Prerequisite: Completing or exempting Support-level ENGL. 3-2-4

**BIOL 1020K**. Introduction to Biology II. Areas covered are organisms in nature and include topics in the kingdoms of life, plant structure and function, systems of the body, evolution, and ecology. Laboratory exercises supplement the lecture material. This course is intended for non- science majors only. Prerequisite BIOL 1010K. 3-2-4

**BIOL 2000**. Introductory Botany. A course to acquaint students with plant structure and function. Emphasis will be placed upon the ecology and recognition of local flora. Corequisite: BIOL 2000L. Prerequisites: BIOL 2107K or permission of the instructor and completing or exempting Support-level ENGL. 3-0-3

**BIOL 2000L.** Laboratory for Introductory Botany. A laboratory course to augment and support BIOL 2000. Prerequisites or Corequisites: BIOL 2000, Introductory Botany. Completing or exempting Support-level ENGL. 0-2-1

**BIOL 2107K.** Principles of Biology I. The first course in a two-semester sequence addresses biological principles. This course covers topics from a molecular perspective. Area studies include the chemistry of life, the cell, respiration, photosynthesis, mitosis, meiosis, genetics, protein synthesis, and recombinant DNA technology. Some knowledge of chemistry is desirable. Prerequisite: Completing or exempting Support-level ENGL.3-2-4

**BIOL 2108K.** Principles of Biology II. This course provides an overview of life at the organismal level. Emphasis will be placed on systematic relationships, diagnostic characters, functional systems and reproduction. Topics covered include biotic evolution, phylogeny, taxonomy, evolutionary history, and biodiversity of life. Prerequisite: BIOL 2107K. 3-2-4

**BIOL 2210K.** Anatomy and Physiology I. An introduction to biological processes and anatomic terminology followed by an integrated study of the structure and function of the human body, includes study of tissues, organs, and the following systems: integumentary, skeletal, muscular, and nervous. Prerequisites: BIOL 2107K or divisional or school approval and completing or exempting Support-level ENGL. 3-2-4

**BIOL 2211K.** Anatomy and Physiology II. The course is a continuation of the study of the anatomy and physiology of the organ systems of humans. Animal dissection is included in laboratory work. Prerequisites: BIOL 2210K. Also, BIOL 2107K or divisional or school approval and completing or exempting Support-level ENGL. 3-2-4

**BIOL 2215K.** Microbiology. The course is the study of microscopic forms of life. Emphasis is placed on infectious diseases highlighting the nature of organisms, the interrelationships of microorganisms and human hosts and the prevention and control of infectious diseases of humans. Laboratory work includes studies of microscopy, aseptic technique, culturing, staining methods, disinfection and disease. Prerequisite: BIOL 2107K or BIOL 2210K.3-2-4

**BIOL 3100.** Biochemistry. This survey course deals with the structure and function of biological molecules, including proteins, carbohydrates, lipids, the fundamentals of enzymology, and the molecular basis of metabolism. Prerequisites: BIOL 2107K, BIOL 2108K and CHEM 2401, CHEM 2402.3-0-3

**BIOL 3130.** Principles of Genetics. Course focuses on the investigation of principles of heredity at the molecular and cellular level; genetic mechanisms in bacteria and eukaryotic cells with an emphasis on classical and modern experimentation; basis concepts for structure, expression, recombination and function of genetic material and principles. Prerequisites: BIOL 2107K and BIOL 2108K.3-0-3

**BIOL 3133.** Evolution and Ecology. This course addresses the principles of evolution and ecology, and the manifestation of evolution, as mediated by ecology and genetics. Prerequisites: BIOL 2107K and BIOL 2108K.3-0-3

**BIOL 3400.** Cell Biology. The course addresses the structure and function of cells, cell architecture and organization, cell cycle, membrane phenomena, energy transduction and cellular control mechanisms. Prerequisites: BIOL 2107K, BIOL 2108K, and BIOL 3130. 3-0-3

**BIOL 3440K.** Field Biology. This course examines field study of the basis natural history of plants and animals of the southeastern United States. Lectures and field trips emphasize the ability to locate, observe, collect, and identify organisms in the field, as well as manage field data. Prerequisites: BIOL 2107K, BIOL 2108K, and BIOL 3133. 3-2-4

**BIOL 3500K.** Ecology. This course covers the history of the field of ecology and the relationship between ecology and other fields of science. Topics will include applied ecological principles from individuals to ecosystems in connection with biogeochemical cycles, world biomes, and the economics and politics of pollution. The geographic history and ecology of the southeastern region of Georgia will serve as the local laboratory for this course. Prerequisites: BIOL 2107K, BIOL 2108K, and BIOL 3133.3-2-4

**BIOL 3545K.** Vertebrate Zoology. The course focus is the study of the classes of vertebrates in relation to taxonomy, life history, population, and evolution. Laboratory and field collections focus on vertebrates in Southeastern Georgia. Prerequisites: BIOL 2107K, BIOL 2108K, and BIOL 3133.3-2-4

**BIOL 3630K.** Freshwater Ecosystems. This course focuses on physical, chemical and biological processes occurring in lakes, streams and wetlands with special focus on the Okefenokee Swamp, the second largest freshwater ecosystem in Southeastern United States. Attention will be given to life cycles and adaptations of organisms and the impacts of human activity. Prerequisites: BIOL 2107K, BIOL 2108K, and BIOL 3133. 3-2-4

**BIOL 3910** Topics in Biology (variable). Variable credit topics will be offered and transcripted accordingly. Courses offered include areas of study outside the normal curriculum. Students may take one or two topics courses to meet degree requirements. Prerequisites: Biology major with junior standing; Completing or exempting Support-level ENGL. 3-0-3

**BIOL 3950K.** Ornithology. An examination of the classification, evolution, distribution, ecology, behavior, gross anatomy, migration, and life histories of birds. The laboratory emphasizes identification of avian species from Southeast Georgia based on external appearance and vocalization. Field trips are required. Prerequisites: BIOL 2107K and BIOL 2108K.3-2-4

**BIOL 4090.** Conservation Biology. The course focuses on the history of the conservation movement; research on populations of animals and plants relevant to man's impact on the environment; pollution in terrestrial and aquatic ecosystems; the management of endangered species; wildlife biology; government regulation; and sustainable ecosystems. Prerequisite: BIOL 3500K. 3-0-3

**BIOL 4400.** Internship in the Biological Sciences. Off-campus experience in cooperating health/scientific agency or industrial organization. Reports and specific assignments determined in consultation with faculty advisor and supervising professionals. May be retaken for up to 6 credit hours. Application required. Prerequisites: Biology major with senior standing and BIOL 4500 or permission from the Chair of Sciences and Mathematics. 3-0-3.

**BIOL 4500.** Introduction to Biological Research. This course introduces the student to research methodologies and the student's assessment of topics in biology, and their ability to assimilate and disseminate information in an organized and understandable fashion in both written and oral forms. Prerequisites: Biology major with senior standing, BIOL 3440K and MATH 1401 or permission of the instructor.3-0-3

**BIOL 4501.** Senior Seminar. Exploration of the nature of science, ethics in science, critical analysis, hypothesis testing and statistical analysis, peer review, and research skills define this capstone course. Students engage in an independent research project or analyze professional research papers and present their analyses orally and in writing. Prerequisites: Biology major with senior standing, BIOL 4500.3-0-3

## BUSINESS AND TECHNICAL WRITING (BTWR)

**BTWR 4100.** Internship for Business Writing. Supervised work as a writer and/or editor in a corporate, organizational (profit or non-profit), or publishing setting to gain workplace experience while earning academic credit. The course requires some classroom lecture attendance as well as a minimum of 4 hours per week for 12 weeks working in a writing field on or off campus. Requires keeping a reflective journal. Only seniors are eligible to enroll in this course. 1-4-3

**BTWR 4200.** Internship for Technical Writing. Supervised work as a writer and/or editor in a corporate, organizational (profit or non-profit), or publishing setting to gain workplace experience while earning academic credit. The course requires some classroom lecture attendance as well as a minimum of 4 hours per week for 12 weeks working in a writing field on or off campus. Requires keeping a reflective journal. Only seniors are eligible to enroll in this course. 1-4-3

**BTWR 4300.** Senior Project in Business or Technical Writing. A course providing advanced training in a particular area of writing, rhetoric, or digital studies. The course requires completion of a project agreed upon by instructor and student. 3-0-3

**BTWR 4700.** Advanced Topics in Document Design and Production. Students will develop and manage document design projects using research, visual and print rhetoric, design principles, project management, and client expectations. Prerequisite: ENGL 3000. 3-0-3

**BTWR 4900.** Senior Capstone Course. A course focusing on all student learning outcomes of the program, as well as on finalizing of the student portfolio of print and digital documents as the culmination of student learning throughout the program. This course serves as a transition from undergraduate study and preparation to employment in a professional career or to graduate study. Must be taken in the final semester of the program. 6-0-6

## **BUSINESS/BUSINESS ADMINISTRATION (BUSA)**

**BUSA 1105**. Introduction to Business. An integrative study of the functional areas of business (finance, operations, marketing, human resources, etc.) 3-0-3

**BUSA 2105**. Communicating in the Business Environment. A course emphasizing both interpersonal and organizational communications; to include written and oral exercises appropriate to business practice. Prerequisite: ENGL 1101 or permission of instructor. 3-0-3

**BUSA 2270**. Legal Environment of Business. An introductory course providing an examination of the legal environments of society and business with emphasis on constitutional law, administrative law, anti- trust law, securities regulations, the law of employment, labor law, environmental law, consumer protection, and the powers and functions of the judiciary in modern society. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**BUSA 3000**. Planning and Management. In today's world of work, it is critical that students understand the dynamics of the employment marketplace and the importance of self-direction. This course focuses on self- assessment, managing personal and professional change, enhancing work performance and maintaining a balance between work and family. Students will gain insight through self-assessment, networking, resume writing, interviewing, planning and directing their career. Students will develop a degree and career map that identifies learning outcomes essential to their academic and professional success. 3-0-3

**BUSA 3100**. Effective Communications Strategies. Effective communication skills are essential for personal and professional success. This course will explore the role of strategic communications within the professional context of contemporary organizations. Topics include strategic communications in business; interpersonal communications; team communications; electronic media and social media with a focus on best practices. Students will engage in assessing and creating strategic proposals, presentations and reports. 3-0-3

**BUSA 3300.** Negotiation. This course engages students in both the theory and practice of negotiation, comparing and contrasting different models and methods of negotiation, bargaining, and conflict resolution. Stages of negotiation, including pre-negotiation, negotiation itself, and finally post-settlement negotiation are emphasized, along with practical skills necessary to enable students to apply theory to cases. 3-0-3

**BUSA 3500.** Philanthropy and Fundraising. This course focuses on the theory and practice of philanthropy, as well as accessing and acquiring resources through fundraising and earned income. 3-0-3

# CHEMISTRY (CHEM)

**CHEM 1151K**. Survey of Chemistry I. First course in a two-semester sequence covering elementary principles of general, organic and biochemistry designed for allied health professions majors. Topics to be covered include elements and compounds, chemical equations, nomenclature, and molecular geometry. Laboratory exercises supplement the lecture material. Prerequisites: Completing or exempting Support-level ENGL; completing or exempting Support-level MATH courses. 3-2-4

**CHEM 1152K**. Survey of Chemistry II. Second course in a two-semester sequence covering elementary principles of general, organic and biochemistry designed for allied health professions majors. Laboratory exercises supplement the lecture material. Prerequisite: CHEM 1151K with a grade of "C" or better. 3-2-4

**CHEM 1211K**. Principles of Chemistry I. First course in a two-semester sequence covering the fundamental principles and applications of chemistry designed for science majors. Topics to be covered include composition of matter, stoichiometry, periodic relations, and nomenclature. Laboratory exercises supplement the lecture material. Prerequisites or Corequisite: MATH 1111 or MATH 1113; Completing or exempting Support-level ENGL.3-2-4

**CHEM 1212K**. Principles of Chemistry II. Second course in a two-semester sequence covering the fundamental principles and applications of chemistry designed for science majors. Laboratory exercises supplement the lecture material. Prerequisite: CHEM 1211K with a grade of "C" or better. 3-2-4

**CHEM 2401K.** Organic Chemistry I. The first course in a two-semester sequence covering the chemistry of carbon compounds. Emphasis is placed on synthesis, reactions and reaction mechanisms, and functional groups. Prerequisite: CHEM 1212K with a grade of "C" or better. 3-2-4

**CHEM 2402K**. Organic Chemistry II. The second course in a two-semester sequence covering the chemistry of carbon compounds. Emphasis is placed on compounds of biological interest including heterocyclic compounds, carbohydrates, amino acids and proteins, and nuclear acids. Prerequisite: CHEM 2401K. 3-2-4

### COMMUNICATIONS (COMM)

**COMM 1100**. Human Communication. An introductory course emphasizing a broad approach to oral communication skills, including intrapersonal, interpersonal, small group, public speaking, and mass communication. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**COMM 1110**. Public Speaking. An introductory course in fundamental principles and practices of oral communication with special emphasis on the organization, content, and delivery of public speeches. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**COMM 2000**. Introduction to Mass Communications. A course emphasizing the study of the processes, elements, uses and the impacts of mass communication, including the history, development, operation, and cultural effects of various forms of media (e.g., books, newspapers, magazines, motion pictures, radio, television, sound recordings, and computer media) on society. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**COMM 2010**. Interpersonal Communication. An introduction to human communication. This course will specifically address interactions between genders and among cultures in today's diverse environment, focusing on one-to-one and small-group communication practice. There is an emphasis on critical thinking, and building clarity in listening, speaking, reading and writing in areas of human social interactions. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

## COMPUTER INFORMATION SYSTEMS(CISY)

**CISY 1100**. Fundamentals of Computer Information Systems. An introduction to the principles of hardware and software; the current Windows environment, e-mail, the Internet, file management and word processing. No previous computer knowledge or experience is required. 1-0-1

**CISY 1101**. Computer Applications. A continuation of CISY 1100 including additional word processing features, an introduction to electronic spreadsheets, and a deeper analysis of the information processing cycle. Prerequisite: CISY 1100 or permission of instructor. 1-0-1

**CISY 1105.** Information Systems Technology. This course uses an introductory, hands-on approach to provide students with basic awareness, understanding, and skills in the educational and business utilization of microcomputers. Topics include introductions to word processing, databases, graphics, spreadsheets, communications, presentation software, and the Internet and electronic mail. A student with credit for CISY 1105 will not receive credit toward graduation for either CISY 1100 or 1101. 3-0-3

**CISY 2210**. Advanced Computer Applications. An intensive study of electronic spreadsheets, database applications, and their integration with word processors. Prerequisite: CISY 1100 and CISY 1101 or CISY 1105 or permission of instructor. 3-0-3

## COMPUTER SCIENCE (CSCI)

**CSCI 1301**. Computer Science I. This course includes an overview of computers and programming; problem-solving and algorithm development; simple data types; arithmetic and logical operators; selection structures; repetition structures; text files; arrays (one-and two-dimensional); procedural abstraction and software design; modular programming (including subprogram or the equivalent). Pre-requisites: Passing ENGL 1101 and Passing MATH 1113 with a grade of C or higher. 4-0-4

**CSCI 1302.** Computer Science II. This course includes an overview of abstract data types (ADTs); arrays (multi-dimensional) and records; sets and strings; binary files; searching and sorting; introductory algorithm analysis (including Big-O); recursion; pointers and linked lists; software engineering concepts; dynamic data structures (stacks, queues, trees). Prerequisite: CSCI 1301. 4-0-4

## CRIMINAL JUSTICE (CRJU)

**CRJU 1101**. Introduction to Criminal Justice. An orientation course designed to acquaint the student with the structural, functional, historical, and philosophical aspects of the criminal justice system that includes law enforcement, corrections, juvenile justice, and the courts. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**CRJU 2100**. Survey of Law Enforcement. An overview of law enforcement in a free society and the relationship of police to the criminal justice system as a whole. History, organization, administration, operations, and selected issues such as community-oriented policing are examined. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**CRJU 2200**. Introduction to Corrections. An introduction to the correctional system, examining the historical, philosophical, and theoretical aspects of the correctional system including incarceration, parole, and juvenile systems, as well as social interventions. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**CRJU 2300**. Judicial Process. A study of the jurisdiction, policies, and procedures of courts in the administration of criminal justice. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

## DIVERSITY (DVRS)

**DVRS 1101**. Topics in Diversity. A broad overview of the elements of cultural diversity. The course defines the concepts of "culture" and "diversity" and reinforces awareness as a strategy for success in a global society. Prerequisite: Completing or exempting Support-level ENGL. 1-0-1

## ECONOMICS (ECON)

**ECON 2105**. Principles of Macroeconomics. This course is intended to introduce students to the concepts that will enable them to understand and analyze economic aggregates and evaluate economic policies. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**ECON 2106**. Principles of Microeconomics. This principle of economics course is intended to introduce students to concepts that will enable them to understand and analyze structure and performance of the market economy. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

## EARLY CHILDHOOD/SPECIAL EDUCATION (ECSP)

**ECSP 3001.** Child Development. This course examines the roles played by heredity, maturation, culture, and experience in the development of social, intellectual, emotional, and physical and language development of children from birth through adolescence. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education program. 3-0-3

**ECSP 3002.** Educational Assessment. This course addresses theory and practice in the construction, administration, and interpretation of formative, curriculum-based, and standardized tests and outcomes for identifying instructional objectives. Introductory statistical concepts in measurement are addressed. The role of assessment in the RTI process is reviewed. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education program. 3-0-3

**ECSP 3003.** Classroom Organization & Management. This course is designed to provide classroom teachers with the knowledge and skills to organize physical environments and social climates that support the intellectual and social development of diverse groups of students, including second language learners. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education program. 3-0-3

**ECSP 3010.** Strategies for Supporting Children and Families from Diverse Communities. This course provides opportunities for teacher candidates to develop strategies to support the needs of students and families in diverse cultural, language and economic contexts. Clinical experience in the field required. Prerequisite: Admission to Teacher Education Program. 3-0-3

**ECSP 3030.** Language and Cognition. This course provides opportunities for teacher candidates to learn and understand the development and nature of language, language varieties, and the phonology, morphology, syntax, semantics, and discourse of English and to use this knowledge to bring all students including those learning English to higher levels of learning. Prerequisite: Admission to the Teacher Education Program. 3-0-3

**ECSP 3100.** Characteristics of Students with Special Needs. This course examines characteristics and needs of students with exceptionalities, as well as the role, and responsibilities of a special education teacher in RTI, instruction, evaluation and communication with families of students with special needs. Prerequisite: Admission to Teacher Education Program. 3-0-3

**ECSP 3300.** Teaching Social Studies. Study of basic techniques in the teaching of social studies and language arts learning in grades P-8 and the various instructional materials used at those levels is placed on multicultural literature and other interdisciplinary connections. Structured experiences in public schools is required. Prerequisite: Admission to Teacher Education Program. 3-0-3

**ECSP 3540.** Applied Data Analysis. This course requires preservice teachers in their final semester of training to demonstrate skills in data collection and analysis. Teacher candidates will demonstrate their ability to bring diverse groups of elementary school students to high levels of learning and communicate those outcomes through a variety of formal and informal oral and written modes. In addition, preservice teachers will be required to validate their own professional development through completion and presentation of professional portfolios. Prerequisite: Admission to Teacher Education Program. 1-0-1

**ECSP 4000.** Educational Assessment of Students with Special Needs. A course designed to develop skills in formal and informal psycho-educational evaluation of students from diverse backgrounds, including second language learners, for providing effective interventions. The role of assessment in the RTI process is reviewed. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education Program. 3-0-3

**ECSP 4001.** Applied Behavior Analysis. This course addresses the study and application of effective standards-based instruction for students in elementary schools. Intensive clinical experiences are required. Prerequisite: Admission to Teacher Education Program. 3-0-3

**ECSP 4002.** Curriculum, Methods, & Materials. This course examines applications of standardsbased curriculum and research based developmentally and culturally appropriate methodologies for working with diverse groups of students in grades P-5, including second language learners. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education Program. 3-0-3

**ECSP 4200.** Instruction of Students with Special Needs. This course addresses methodologies for supporting academic achievement in students with special needs including differentiation of instruction through co-teaching, direct instruction, content modifications, cooperative learning, and content enhancement, including second language learners. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education Program. 3-0-3

**ECSP 4403.** Education Internship – Planning. Internship for specific teaching fields. Effective instructional planning requires a deep understanding of content as well as the instructional needs and interests of the students. Efficient plans include appropriate instructional goals, alignment to the standards, differentiated instruction, variety of instructional methods and strategies, and assessment. Pre-service teachers are evaluated on their ability to plan effective and appropriate lessons for all students. Prerequisites: Admission to Teacher Education program, scholastic standing of at least 2.75, completion of all professional education courses with a grade of C or higher, enrollment at the University for at least two semesters, and written application two semesters in advance. 2-0-2

**ECSP 4404.** Early Childhood/Special Education Internship – Performance. Internship for specific teaching fields. The goal of student teaching internship is to learn about the teaching profession while under the careful guidance of a mentor teacher. The majority of the time in the classroom is spent working directly with students in small groups, 1-on-1 instruction, whole class, etc. It is expected that lesson plans and materials are prepared ahead of time, and the intern is ready to teach at their assigned times. Interns are to work with the mentor teacher to learn about the students in the class. They are to use anecdotal, informal, and formal data to analyze the needs of the students when developing lessons. Lessons are carefully planned to include effective instructional strategies, methods for meeting the needs of all students, and a thoughtful analysis of the lesson afterward. Performance in the classroom is evident when the intern is prepared, is knowledgeable of the content and pedagogy, provides feedback and assesses formally and informally throughout the instructional segment. Prerequisites: Admission to Teacher Education Program, scholastic standing of at least 2.75, completion of all professional education courses with a grade of C or higher, enrollment at the University for at least two semesters; and written application two semesters in advance. 2-0-2

**ECSP 4405.** Early Childhood/Special Education Internship – Professionalism. Internship for specific teaching fields. Professionalism is critical to a teacher's success. There are four key components to showing professional responsibility: (1) reflecting on lessons and knowing where improvements can be made, (2) maintaining accurate records and submitting tasks/ reports / assignments on time (3) communicating clearly and professionally with parents, colleagues, and teachers, and (4) contributing to the school, the district, and in coursework through professional relationships, service and participation in projects. Students will participate in activities, seminars, and discussions related to these four components. Evidence of professional growth is documented by personal dispositions, assessment commentary, attendance, reflections, and feedback from the mentor teacher and university supervisor. Prerequisites: Admission to Teacher Education Program, scholastic standing of at least 2.75, completion of all professional education courses with a grade of C or higher, enrollment at the University for at least two semesters, and written application two semesters in advance. 2-0-2

# EDUCATION (EDUC)

**EDUC 2110**. Investigating Critical and Contemporary Issues in Education. This course engages students in observations, interactions, and analyses of critical and contemporary educational issues. Students will investigate issues influencing the social and political contexts of educational settings in Georgia and the United States. Students will actively examine the teaching profession from multiple vantage points both within and outside the school. Against this backdrop, students will reflect on and interpret the meaning of education and schooling in a diverse culture and examine the moral and ethical responsibilities of teaching in a democracy. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**EDUC 2120**. Exploring Socio-Cultural Perspectives on Diversity. This course is designed for students to examine (a) the nature and function of culture; (b) the development of individual identities and group cultural identity; (c) systems of privilege, power, and oppression; (d) definitions and implications of diversity; (e) the influences of sociocultural factors on learning, development, and pedagogy; and (f) the foundations and applications of social justice education. A minimum of 20 hours of field experience in a setting chosen by the instructor is required. Prerequisites: Completing EDUC 2110 with grade of C or higher (an overall GPA of 2.5 is recommended). 3-0-3

**EDUC 2130**. Exploring Learning and Teaching. This course is intended to explore key aspects of educational psychology through an examination of learning, behavioral, and developmental theories and processes and an initial survey of the application of these theories to enhance the learning of students in a variety of educational settings and contexts. A minimum of 20 hours of field experience in a setting chosen by the instructor is required. Prerequisites: Completing EDUC 2110 with grade of C or higher (an overall GPA of 2.5 is recommended). 3-0-3

# ENGINEERING (ENGR)

**ENGR 1121.** Computing Applications in Mechanical Engineering Technology. This is an introductory-level computing and application course for Mechanical Engineering Technology students. It is intended for students to develop their technical computing skills using platforms that are current and widely used in the professional world. Standard mathematical functions and applications including logical expression, data input/output, arrays, and statistical functions will be introduced Specific mechanical engineering applications are utilized to introduce students to basic problem-solving logic, flow charting, and programming. Prerequisite: Prior or concurrent enrollment in MATH 1113. 1-2-2

**ENGR 2010.** Introduction to Engineering. Interpretation of the scope of engineering; introduction to engineering disciplines that form the basis for a variety of career opportunities; engineering design as creative problem solving; lessons from design failures; professionalism and ethics; introduction to problem solving using MATLAB. 2-0-2

**ENGR 2131.** Electronics and Circuit Analysis. This course introduces electric circuit elements, electronic devices, digital systems, and analysis of circuits containing such devices in order to provide students with the fundamental knowledge of electrical engineering principles and applications. Basic concepts of laboratory practice and instruments in the analysis of elementary electrical circuits will be covered in this course. Prerequisites: A minimum grade of "C" in PHYS 2212K and prior or concurrent enrollment in MENT 2139. 2-2-3

**ENGR 2139.** Numerical Methods in Engineering. Mathematical modeling and numerical solution of engineering-related problems with emphasis on solution of linear and nonlinear equations, matrices, vectors, statistical data analysis, curve fitting, ordinary and partial differential equations. Prerequisites: Completion of MATH 2253 with a minimum grade of "C" and completion of MATH 2150. 3-0-3

**ENGR 2231.** Engineering Mechanics I. Fundamental concepts of mechanics. Statics of particles. Moments and equivalent systems of forces on rigid bodies; equilibrium of rigid bodies. Distributed forces-centroids and centers of gravity. Analysis of trusses, frames and machines. Internal normal and shearing forces, bending moments, and torque. Shear and bending moment diagrams, relations between distributed load, shear, and bending moment. Friction. Distributed forces area moments of inertia. Prerequisites: A minimum grade of "C" in MATH 2253 and PHYS 2211K. 3-0-3

**ENGR 2232.** Dynamics of Rigid Bodies. Kinematics and dynamics of particles and rigid bodies in one, two-, and three-dimensions using Newton's Second Law Method, Work-Energy and Impulse-Momentum methods. Mass moments of inertia and products of inertia. Prerequisite: A minimum grade of "C" in ENGR 2231. 3-0-3

**ENGR 2500.** Engineering Graphics for Design. Introduction to engineering design and threedimensional visualization; geometric construction; graphical projection and sketching; introduction to descriptive geometry; computer graphics. 2-0-2

**ENGR 3233.** Mechanics of Materials. Definition and analysis of stress and strain, mechanical properties of materials, axially loaded members, torsion of circular sections, bending of beams, transformation of stress and strain, design of beams, and buckling of columns. Prerequisite: A minimum grade of "C" in ENGR 2231. 2-0-2

**ENGR 3235.** Fluid Mechanics. The course includes fundamentals of fluid statics and fluid dynamics for incompressible fluids, fluid properties, static and dynamic forces, Bernoulli's equation, pipe flow and losses, open channel flow and flow measurement. The course also includes methods, procedures and the use of equipment to measure standard fluid properties and phenomena. Prerequisites: MATH 2254 and MATH 3100 and a minimum grade of "C" in ENGR 2231. 3-0-3

**ENGR 3431.** Thermodynamics. Thermodynamic properties, state postulate, work interactions, steady-state and transient energy and mass conservation, entropy and the second law. First and Second Law analysis of thermodynamic systems. Gas cycles and vapor cycles. Prerequisites: A minimum grade of "C" or better in PHYS 2211K and MATH 2253. 3-0-3

**ENGR 4402.** Engineering Ethics. This course looks at the practice of engineering in the context of ethics and ethical theory. Issues of safety, liability, professional responsibility, legal obligations are considered in the context of case studies. Particular emphasis is given to the application of the Professional Engineering Code of Ethics published by the National Society of Professional Engineers. Students will consider the resolution of ethical dilemmas through the development and evaluation of various courses of action related to specific case studies. 3-0-3

### ENGLISH (ENGL)

**ENGL 0999.** Support for English Composition. This course is intended to provide corequisite support for students requiring remediation in English or reading while they are enrolled in ENGL 1101 – English Composition I. Corequisite: ENGL 1101. 2-0-2 (Institutional Credit.)

**ENGL 1101**. Composition I. 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. Corequisite: Completing or exempting Support-level ENGL. Students who have tested into ENGL 0999 must take ENGL 0999 as a corequisite to ENGL 1101. Minimum grade of "C" is required for graduation. 3-0-3

**ENGL 1102**. Composition II. A composition course that develops writing skills beyond the levels of proficiency required by ENGL 1101, that emphasizes interpretation and evaluation of works of various literary genres, and that incorporates a variety of more advanced research methods. Prerequisite: ENGL 1101 with a minimum grade of "C". Minimum grade of "C" in ENGL 1102 is required for graduation. 3-0-3

**ENGL 1111-1116**. Creative Writing. This course sequence offers practical writing experience in major literary genres, with special emphasis on short fiction and poetry. It includes inclass analysis and criticism of the works produced. 1-0-1 (Institutional credit)

**ENGL 2111**. World Literature I. A survey of important works of world literature from ancient times through the mid-seventeenth century. Prerequisite: ENGL 1102 with a grade of "C" or better. 3-0-3

**ENGL 2112**. World Literature II. A survey of important works of world literature from the mid-seventeenth century to the present. Prerequisite: ENGL 1102 with a grade of "C" or better. 3-0-3

**ENGL 2121**. British Literature I. A survey of important works of British literature from the Old English period through the neoclassical age. Prerequisite: ENGL 1102 with a grade of "C" or better. 3-0-3

**ENGL 2122**. British Literature II. A survey of important works of British literature from the Romantic era to the present. Prerequisite: ENGL 1102 with a grade of "C" or better. 3-0-3

**ENGL 2131**. American Literature I. A survey of American literature from the pre-colonial age to the mid-nineteenth century. Prerequisite: ENGL 1102 with a grade of "C" or better. 3-0-3

**ENGL 2132**. American Literature II. A survey of American literature from the mid-nineteenth century to present. Prerequisite: ENGL 1102 with a grade of "C" or better. 3-0-3

**ENGL 3000.** Introduction to Business and Technical Writing. An introduction to the variety of content, formats, purposes, audiences, and technologies associated with business and technical writing. Coursework includes student production of a variety of document types. Prerequisite: ENGL 1101 with a grade of C or better. 3-0-3

**ENGL 3050.** Written Communication, Law, and Ethics. This course surveys legalities and ethical considerations related to document publication. The course covers intellectual property issues with regard to protected subject matter, procedures involved in obtaining protection, ownership, illegal or unethical conduct, enforcement, and the difficult issue of content or expression similarity. Students will be introduced to patents, copyright, trademark, false advertisement, publicity rights-and, of course, plagiarism. 3-0-3

**ENGL 3100.** Research for Professional Writers. This course focuses on student development of basic research and related writing skills required in business and technical professions. Topics include assignment of a project, identifying points requiring research, conducting research using a variety of sources and source formats, using and citing sources, basic ethics and legalities, proofreading, and completing a final written product. Students will be engaged in a research project as a significant requirement of the course. Prerequisite: ENGL 3000. 3-0-3

**ENGL 3150.** Writing Grants, Proposals, and Reports. This course prepares students to define, plan, research, and write effective reports, grants, and other proposals with clearly stated goals, objectives, action and assessment/evaluation plans, and budget summaries. The course also focuses on finding grant opportunities and collaboration in information gathering, audience awareness, and document design. Prerequisite: ENGL 1101 with a grade of C or better. 3-0-3

**ENGL 3200.** Rhetorical and Critical Literary Theory. An introduction to the study of rhetoric and literary theory through exploration of the interrelationship among theory, practice, and criticism. Students will interpret, analyze, and evaluate strategies of persuasion in a variety of texts of social, cultural, or political interest and will construct their own original arguments. Prerequisite: ENGL 3000. 3-0-3

**ENGL 3300.** Advanced Rhetoric and Composition. This course provides advanced training in and practice of critical and analytical writing using a variety of traditional rhetorical organizational patterns. The course also emphasizes writing with a purpose and for particular audiences. Prerequisite: ENGL 1101 with a grade of C or better. 3-0-3

**ENGL 3400.** Introduction to Professional Editing. This course examines editing as a process extending from the initial writing assignment to the finished written product. The course includes the elements of style, usage, punctuation, grammar, and organization, as well as fundamentals of tone, purpose, audience, and occasion. Students will also examine the responsibilities and tasks of professional editors and the relationship between an editor and an author. Prerequisite: ENGL 1101 with a grade of C or better. 3-0-3

**ENGL 3500.** Writing for Digital Media. A basic course in web design syntaxes, critical evaluation and interpretation of online sources, management of social media, and composition for digital media. Prerequisite: ENGL 1101 with a grade of C or better. 3-0-3

**ENGL 3600.** Public Relations Writing. Because effective writing is a foundational skill of public relations, practitioners of public relations must be capable of producing diverse forms and styles of writing. In this course the student will learn the fundamentals of creating paper and electronic fact sheets, news releases, product pitch memos, brochures, position papers, RFPs, background studies, product development recommendation reports, blogs, and various other written communication media. Students will also consider the relationship between current local, state, national, and international events and public relations. Prerequisite: ENGL 3000. 3-0-3

**ENGL 3700.** Writing, Diversity, and Multiculturalism. A foundational course examining the influence of cultural, national, ethnic, and regional identity on professional communications interactions. Focuses on designing documents for diverse audiences. 3-0-3

**ENGL 4100.** Business Topics in Literature. A study of business communication-related themes and concerns as depicted in fiction and non-fiction literature in a variety of genres. Prerequisite: ENGL 1102 with a grade of C or better. 3-0-3

**ENGL 4200.** Technical Topics in Literature. A study of technical communication-related themes and concerns as depicted in fiction and non-fiction literature in a variety of genres. Prerequisite: ENGL 1102 with a grade of C or better. 3-0-3

**ENGL 4500.** Advanced Topics in Business Writing. This course provides intensive practice in the production of informative and persuasive writing for business through the creation of memos, reports, letters, abstracts, summaries, and case analyses and through critical evaluations of a variety of business communications. Prerequisite: ENGL 3000. 3-0-3

**ENGL 4600.** Advanced Topics in Technical Writing. This course is an exploration and practical application of the three characteristics of technical writing as defined by the Society for Technical Communication. Students will engage in (1) communicating about technical or specialized topics, such as computer applications, medical procedures, or environmental regulations; (2) communicating by using technology, such as web pages, help files, or social media sites; (3) providing instructions about how to do something, regardless of how technical the task is or even if technology is used to create or distribute that communication. Prerequisite: ENGL 3000. 3-0-3

**ENGL 4800.** Advanced Topics in Digital Communication. A course focusing on creating documents for on line environments while further developing skills learned in ENGL 3500, Writing for Digital Media. The course covers website creation, formatting layouts, and the interrelatedness of content, format design, and structure. Prerequisite: ENGL 3500. 3-0-3

## FINANCIAL MANAGEMENT (FINA)

**FINA 3103.** Financial Management. This course provides an overview of business financial management. Emphasis is on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. The course is intended to develop a basic understanding of financial concepts and techniques, and an ability to apply them in arriving at management decisions within the context of specific business situations. It covers the development and use of the basic tools and operational/ quality measures for financial administration, financial analysis, planning and control, investment decisions, and management of sources of funds. Prerequisites: ACCT 2101 and ACCT 2102. 3-0-3

## FINANCIAL TECHNOLOGY (FTA)

**FTA 4001.** Foundations of FinTech. The financial services industries are changing rapidly with the emergence of financial technology (FinTech). The objective of the course is to provide students with an overview of FinTech and introductions to its applications in financial services, such as commercial and investment banking, digital investing, financial advising, and insurance. Students are expected to develop a broad understanding of the recent FinTech development and its impact on different parts of the financial world. Students will also have hands-on problem-solving experiences that can be useful in FinTech applications and innovation. Topics may include but are not limited to: blockchain and cryptocurrencies, smart contracting, payments, digital banking, P2P lending, crowdfunding, robo-advising, and InsurTech. 3-0-3

**FTA 4002.** Financial Technologies. This course examines the information and communications tools, technologies, and standards integral to consumer, merchant, and enterprise services in the payments and financial service sectors. Explores technology's role in reshaping FinTech businesses. Technologies span messaging, communication networks and gateways, core processing, mobile and online software, and application program interfaces (APIs). Includes the challenges, standards, and techniques associated with securing systems and data. 3-0-3

**FTA 4003.** Commercial Banking and FinTech. The FinTech revolution is creating significant disruption to the traditional processes of managing and regulating financial institutions, especially banks. Understanding, assessing and forecasting FinTech's impact on banking is particularly important because proper management and oversight of financial institutions is essential to the efficient operation of the national, as well as global, economy. In this course, students will learn about the principles and practices of commercial bank management, bank regulation, and the tradeoffs between risk and return. Challenges presented by the FinTech evolution, including traditional and emergent competitors as well as demographic, social, and technology forces driving change in the industry, will be integrated throughout the entire course. 3-0-3

**FTA 4005.** Introduction to Financial Data Analytics. This course provides the foundation for financial data analytics used in business and FinTech applications. The objective of this course is for students to gain experience in analyzing financial data using modern machine learning techniques, statistical methods, and prediction models. Students will develop computational skills to perform data analysis using a modern statistical programming environment, and apply these skills to address a range of problems encountered by business firms, including those in the FinTech industry. The topics discussed include an introduction to R language, visualization of financial data, cluster analysis, simple and multiple linear regression, classification models, high dimension data analysis using Lasso, tree regression, and model assessment and selection using cross validation. Students will have hands-on experience in the development of data analytics applications to analyze real world financial problems. 3-0-3

**FTA 4100.** Introduction to Information Security for FinTech. The purpose of this course is to introduce the student to the rapidly evolving and critical international arenas of Privacy, Information Security, and Critical Infrastructure for FinTech. This course is designed to develop knowledge and skills for security of information and information systems within FinTech organizations. It focuses on concepts and methods associated with security across several systems platforms, including internal and Internet-facing systems. The course utilizes a world view to examine critical infrastructure concepts as well as techniques for assessing risk associated with accidental and intentional breaches of security in a FinTech network. It introduces the associated issues of ethical uses of information and of privacy considerations. 3-0-3

## FRENCH (FREN)

**FREN 1001**. Elementary French I. Grammar, reading, writing, simple listening and speaking skills. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**FREN 1002**. Elementary French II. Continuation of French 1001. Prerequisite: FREN 1001 or equivalent. 3-0-3

**FREN 2001**. Intermediate French I. A more advanced course which refines skills in grammar, reading, writing, and speaking. Prerequisite: FREN 1002 or equivalent. 3-0-3

**FREN 2002**. Intermediate French II. Application and refinement of basic skills with emphasis on reading, writing, and speaking. Prerequisite: FREN 2001 or equivalent. 3-0-3

# HEALTH (HLTH)

**HLTH 1103**. Contemporary Health Issues. This course is designed to introduce students to a wide range of health issues while stressing the concept of individual wellness. 2-0-2

### HEALTH & HUMAN PERFORMANCE(HLHP)

**HLHP 2010**. Foundations of Health and Physical Education. Through this course the student explores the history, principles, and philosophical bases of health and physical education. Career opportunities in health and physical education are examined and important leaders and literature reviewed. This course does not satisfy the core curriculum Physical Education requirement. 3-0-3

**HLHP 2015**. Fundamentals of Nutrition. This elective course is designed to examine diet and the role of nutrients in body function throughout the life cycle in order to promote changes to increase life expectancy, decrease cardiovascular disease, improve dietary patterns, and contribute to healthy quality of life. 2-0-2

**HLHP 2020**. Introduction to Athletic Training. The purpose of this required course is to introduce the student to the field of athletic training. Athletic trainers develop and implement strategies and programs to prevent the incidence and/or severity of injuries and illnesses and optimize their clients' overall health and quality of life. These strategies and programs also incorporate the importance of nutrition and physical activity in maintaining a healthy lifestyle and in preventing chronic disease. 3-0-3

**HLHP 2030**. Athletic Injuries. This elective course is designed to provide information on basic injury prevention, identification, and rehabilitation, as well as to examine overall healthcare for recreational and competitive athletes. 2-0-2

**HLHP 2040**, Strength and Conditioning. This elective course is designed to teach the theoretical basis and principles involved in strength and conditioning programs. Topics include testing, evaluation, effective exercise techniques, and programming to improve physical performance and health. 2-0-2

### HISTORY (HIST)

**HIST 1111**. World History I. A survey of World History to early modern times. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**HIST 1112**. World History II. A survey of World History from early modern times to the present. Prerequisite: Completing or exempting Support-level ENGL. 3-03

**HIST 1121**. Western Civilization I. A survey of Western Civilization to early modern times. Prerequisite: Completing or exempting Support-level ENGL. 3-03

**HIST 1122**. Western Civilization II. A survey of Western Civilization from early modern times to present. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**HIST 2100**. Introduction to the European Union. This course introduces the student to the historical origins and development of the European Union, the EU's governing institutions, the EU's policymaking processes, current EU policies and issues, and EU-US relations. The course also constitutes the core offering of the European Union Studies Certificate program. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3 (Cross-listed as POLS 2100.)

**HIST 2111**. American Civilization I. A survey of U. S. History to the post-Civil War period, with special emphasis on Georgia history. (Satisfies the Georgia Legislative in United States and Georgia history.) Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**HIST 2112**. American Civilization II. A survey U. S. History from the post-Civil War period to the present, with special emphasis on the State of Georgia. (Satisfies the Georgia Legislative in United States and Georgia history.) Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**HIST 2200**. Studies of the European Union. The purpose of the course is to provide an indepth analysis on a selected aspect of the study of European Union (EU). The course is intended as an Area E. elective for students interested in taking a course in the Online or Study Abroad catalogs of the University System's European Union Center for which the only prerequisite is POLS 1101. Prerequisites: Completing or exempting Support-level ENGL, prior approval of the instructor and successful completion of POLS 1101. 3-0-3 (Cross-listed as POLS 2200)

**HIST 2220**. African American History. A survey of the history of African Americans in the United States, emphasizing their unique heritage within, historical evolution in, and contributions to American society. The course analyzes the institutions, personalities, and trends that shaped the social, economic, political, and cultural developments of the United States. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

## HUMANITIES (HUMN)

**HUMN 2111.** A Survey of the Humanities in the West I. A literary comparative study of European philosophy, art, history, politics, and the sciences from the Classical Period through the Renaissance; includes a focus on the writings of the great artists, philosophers, and scientists who created and developed Western liberal learning. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**HUMN 2112.** A Survey of the Humanities in the West II. A literary comparative study of European and American philosophy, art, history, politics, and the sciences from the end of the Renaissance to the 21<sup>st</sup> Century; includes a focus on the writings of the great artists, philosophers, and scientists who created and developed Western liberal learning. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

# INTEGRATED SCIENCE (ISCI)

**ISCI 2001**. Earth and Life Science. This is a content-specific course for preservice teachers (grades K-5). The scientific content to be covered will encompass the concepts required for successful delivery and assessment of the Georgia Standards of Excellence (GSE) for grades K-5. Specifically, this content will be centered around the following unit topics: Solar System, Earth-Sun-Moon System, Earth's Changing Surface, Geology, Cells, Interdependence of Life and Weather. Three-dimensional learning as proposed in the Frameworks for K-12 Science Education (NAP, 2012) will be implemented with an emphasis on Science & Engineering Practices and Cross Cutting Concepts. While the accumulated body of knowledge is important and required to understand the modern world, science at its core is an active discipline that operates at the frontiers of knowledge. Science is one of the most radical academic disciplines with the power to fundamentally alter our understanding of and interaction with the natural world. This will be a rigorous science class where students will be expected to learn a wide range of scientific topics as well as learn to approach problems from the scientific perspective and develop testable solutions to problems. 2-2-3

**ISCI 2002**. Physical Science. ISCI 2002 is an Area F content-specific course for pre-service, early childhood education majors (K-5) that focuses on the most fundamental components of physics and chemistry. The scientific content to be covered will encompass the concepts required for successful delivery and assessment of the Georgia Standards for Excellence (GSE). Understanding through exploration, experimentation, and problem solving are to be employed to develop lasting connections to the varied subcomponents that present themselves in teaching the physical sciences. The course, as designed, is a fully integrated laboratory course with a flipped-classroom instructional model. This course is three semester hours of credit upon successful completion. Prerequisite: MATH 1111 highly recommended. 2-2-3

### JOURNALISM (JRNL)

**JRNL 1100-1105**. Practical Journalism. Primarily lab courses designed for students working on student publications. Some theory plus practical experience in writing, editing, and graphics. 0-2-1 for each course. (Institutional Credit)

## LONG-TERM HEALTHCARE MANAGEMENT (LTHM)

**LTHM 3000.** Introduction to Long-Term Healthcare Management. This course will provide an overview of long-term Healthcare Management in a variety of settings across the spectrum of the wellness and illness continuum. An interdisciplinary approach will be utilized to meet the biopsychosocial needs of the individuals and family systems. Theoretical concepts of aging and developmental disabilities will be explored, as well as cultural norms and attitudes toward aging and developmental disabilities. An overview of the care delivery systems and resources will be examined in order to deliver holistic care in a managed care environment. This course will examine long-term healthcare delivery in skilled nursing facilities, rehabilitation centers, assisted living facilities, senior housing, and community-based services. 6-0-6

**LTHM 3101.** Legal and Ethical Issues in Long-Term Healthcare Management. Legal and ethical issues associated with older adults and persons with developmental disabilities will be examined. Topics will include elder abuse, neglect, preservation of life with limits, organ donation, research, experimentation, research clinical trials, and end of life care issues. Durable power of attorney for health care, living wills, advanced directives and health care proxies will be examined. A case study approach will be utilized to explore deontological principles. 3-0-3

**LTHM 3102.** Healthy Aging: Safety and Optimal Wellness Strategies. This course will focus on developing healthy lifestyle strategies to promote a healthy mind, body, and spirit. It also will examine stages of development and hierarchy of needs as an individual transitions through the stages of life. Topics will include attitudes, emotions, loss, control, hope and family dynamics. Theories of aging will be explored, and emphasis will be placed on healthy lifestyle choices which will promote optimal wellness for individuals on the aging trajectory. 3-0-3

**LTHM 3103.** Medicare ABCD and Supplemental Insurance Coverage. This course will examine Medicare coverage and the role of supplemental insurance coverage related to long-term healthcare. This federal health insurance for people over the age of 65 and certain younger individuals with disabilities will be analyzed in order to gain an understanding of services covered and out of pocket expenses. Supplemental insurance coverages will also be explored as well as methods for financing long-term health care. 3-0-3

**LTHM 3200.** Economics of Healthcare Management. This course will provide an overview of the microeconomics of healthcare systems. Methods to expand delivery of care and improve quality in a cost-effective manner will be examined in the world of healthcare reform. Topics including private financing, Medicare prospective payment systems and value-based purchasing, Medicaid, fraud and abuse will be examined. Strategies will focus on equity, efficiency, cost minimization and output maximization with an emphasis on sustainability. 6-0-6

**LTHM 3201.** Interdisciplinary Rehabilitative and Restorative Care. This course will examine the methods of holistic rehabilitation and restoration process designed to assist individuals to regain their highest level of functioning following a life altering health care event. A combination of physical, occupational, and speech therapies, as well as assistive devices, are utilized to promote independence and assist them in achieving activities of daily living. 3-0-3

**LTHM 3202.** Self-Concept, Sexuality, and Intimacy. Individuals in long-term care maintain their desire for intimacy and sexuality. This course will explore cultural norms, myths, beliefs and attitudes related to sexuality and identify methods to prevent barriers to fulfilling this basic need. The normal aging process, physiologic and psychologic manifestations, pharmacologic interventions and risky behaviors will be examined in order to educate individuals and groups about the unique needs for fulfillment and adequate methods for expression. 3-0-3

**LTHM 3203.** Communication, Negotiation, and Conflict Resolution Skills. Communication is crucial in the field of Long-Term Healthcare Management in order to promote safety and establish healthy group dynamics among individuals and groups. This course will examine the theories of communication and methods to foster a culture of healthy informational dynamics. A case study approach will be utilized to equip individuals with skills for managing conflicts and resolving issues through negotiation. Students will develop a deeper self-awareness of their role in the resolution of conflicts among groups and individuals. 3-0-3

**LTHM 4000.** Behavioral Management of Dementia, Delirium, Depression and Dual-Diagnoses. This course will examine the biopsychosocial effects of dementia, delirium, depression and Dualdiagnoses in the older adult. The anatomical and pathophysiologic conditions will be reviewed and current treatment modalities will be explored in order to provide holistic care to the individual and family. An interdisciplinary approach will be utilized to formulate short term and long-term goals to improve the healthy wellbeing of the individual and family. Pharmacologic and behavioral therapies will be explored in order to promote health and improve cognitive functioning. 6-0-6

**LTHM 4100.** Lifestyle Management: Health Promotion, Nutrition and Exercise. The perceptions of health promotion, disease management, social connectivity, spirituality, healthy relationship boundaries, personal safety and injury prevention will be explored. An emphasis will be placed on developing a holistic health plan to promote optimal wellness through healthy behaviors, exercise, nutrition and positive lifestyle choices. 3-0-3

**LTHM 4102.** Human Resource Management Strategies. The course will examine strategic healthcare resource management and strategic planning with an emphasis on creating synergistic interdisciplinary teams. Topics will include the essential skills for recruitment, interviews, onboarding, and enculturation of employees into an organization. Performance appraisal and evaluation methodologies will be highlighted. The U.S. Department of Labor Laws, the National Labor Relations Act, Fair Labor Standards Act, Affirmative Action Laws and Civil Rights Act will be reviewed as well as the Family Medical Leave Act. Individuals will conduct a literature review of best practices from peer reviewed human resource management journals. 3-0-3

**LTHM 4103.** Long-Term Healthcare Marketing. Healthcare marketing is essential for establishing and sustaining long-term healthcare delivery. This course will analyze community demographics through a needs assessment in order to develop a targeted marketing strategy for organizations. An emphasis will be placed on building community partnerships which lead to referrals from healthcare partners and managed care case managers. Targeted internet marketing strategies will be examined in order to promote organizational quality and care delivery excellence in branding. 3-0-3

**LTHM 4200.** Capstone: Systematic Research Project in Long-Term Healthcare Management. Individuals will select a current topic in long-term Healthcare Management, write a PICO (Population, Intervention, Comparison or Condition, Outcome), complete a SWOT analysis and utilize peer-reviewed research articles to synthesize data from the literature to write a scholarly article for publication. An emphasis is placed on utilizing qualitative and quantitative research principles, practices, and applications involved with analysis, synthesis, and utilization of data. Prerequisite: Math 1401. 6-0-6 **LTHM 4201.** End of Life, Palliative and Hospice Care. This course will examine the concept of death as a normal life process and will equip individuals with guidelines and tools available for providing end of life care. Best practices in pain control and symptom management for complex disease processes and supportive care will be reviewed. A conceptual model for understanding the dying process will be the focus of this course. Withholding and withdrawing of treatment will be explored as related to the process of allowing a natural death in a facility or in the home environment. 3-0-3

**LTHM 4202.** Accreditation – A Culture of Excellence. Accreditation in healthcare is a standard of excellence that demonstrates a commitment to the principles of achieving quality outcomes rooted in best practices. Institutions complete a self-assessment of standards and criteria to assess their level of performance in order to meet and exceed industry standards. This voluntary process demonstrates an ability to meet standards and regulatory requirements and fosters a commitment to continuous quality improvement. This course will examine the accreditation standards and strategies which contribute to achievement of accreditation. 3-0-3

**LTHM 4203.** Complementary and Alternative Therapies. This course will provide an overview of complementary and alternative therapies which can be used to improve the quality of life and promote healing through self-care. Aromatherapy, acupuncture, acupressure art, Chiropractic, creative writing, dance therapy, hypnosis, meditation, massage, music therapy, poetry, transcutaneous electrical nerve stimulation (TENS), tai chi and yoga will be discussed. A review of evidence-based peer reviewed literature will be conducted to examine current trends in therapy. 3-0-3

## MANAGEMENT (MGMT)

**MGMT 3101**. Principles of Management. This survey course emphasizes the skills and knowledge needed to successfully manage an organization. Students will study the basic managerial functions of planning, organizing, leading and controlling resources to accomplish organizational goals. 3-0-3

**MGMT 3102**. Management and Supervision. Students will develop and demonstrate skills necessary for supervisory roles in business, including identifying and communicating performance objectives and standards, leading, motivating, and coaching teams and individuals, and developing strategies to improve on-the-job performance. Students will learn about effective delegation, performance management, and writing performance reviews and will be able to discuss the specifics of the supervisor's role and responsibilities, and strategies for improving their overall effectiveness as a leader. Prerequisite: MGMT 3101. 3-0-3

**MGMT 3104**. Quality Management. This course offers an introduction to the management of quality in organizations. Areas of study include statistical quality control. The design of quality management systems, implementation, measurement and management issues in quality program. Prerequisite: MGMT 3102. 3-0-3

**MGMT 3150.** Business Ethics. This seminar course will enable students to engage in critical thinking and analysis as they examine difficult moral and ethical problems that many arise in a variety of professional settings. Readings and discussion will focus on issues of personal decision-making and public policy in the context of their social, political, economic and legal parameters. Students will be engaged in discussions, case studies, and the development of a persuasive argument based on research from multiple sources. 3-0-3

**MGMT 3301**. Developing and Managing Teams. The ability of a group to function as a team to run things, to make things, or to provide recommendations about things is a powerful organizational dynamic. This course addresses teaming as a leadership tool to be used in appropriate situations to maximize individual talent through collective interactions. Students will learn what makes a group a team, how to build and lead a team, and how to facilitate team performance. Structured exercises and assessments carried out both in and outside of the classroom will provide students with teaming experiences that develop their team consultation and facilitation skills. The most recent body of research literature will be used to develop a realistic understanding of what teaming can and cannot do as a leadership tool. 3-0-3

**MGMT 3401**. Diversity in Business. This course presents the basic concepts, principles and techniques associated with leading cultural diversity in the global marketplace. Emphasis will be on the students developing and understanding of the interplay between leadership, cultural diversity and the global business model. 3-0-3

**MGMT 4100.** Applied Project. The Applied Project is intended to allow students interested in linking their studies with work by following a structured project pathway. Students develop a proposal, action plan and complete a project drawing upon appropriate research resources. Prerequisite: Completion of year one of program curriculum. 3-0-3

**MGMT 4101**. Project Management. This course develops a foundation of concepts and solutions that supports the planning, scheduling, controlling, resource allocation, and performance measurement activities required for successful completion of a project. The course includes major topics of strategy, priorities, organization, project tools and leadership. Primary class emphasis is on the project management process and the tools available to help ensure success. Prerequisite: MGMT 3104. 3-0-3

**MGMT 4102**. Entrepreneurship. This course provides an overview of the multiple elements associated with starting and operating a small business. The course covers a wide range of fundamentals including: identifying needs of the marketplace, researching and assessing market opportunities, identifying and analyzing risk, creating a value proposition, designing and introductory marketing platform, obtaining financing, cash flow strategies, operating a small business, growing a small business and relevant best practices. Prerequisites: MGMT 3101. 3-0-3

**MGMT 4200**.Sustainable Enterprise Planning. This course introduces students to the ecological and economic benefits of sustainability and green practices. Students will learn how product, process and service decisions affect sustainable enterprise concepts. The course examines social and environmental challenges, marketing, supply chain decisions, recycling, reusing, reconditioning and other product and service decisions in order to realize a competitive advantage. Prerequisites: MGMT 3101 and MGMT 3104. 3-0-3

**MGMT 4600.** Senior Seminar. The Senior Seminar allows students to engage in an independent research project or analyze professionally related research papers. The Senior Seminar serves as a capstone course validating student achievement of higher order learning outcomes. To be completed in final semester of program. 3-0-3

**MGMT 4700.** Management Internship. Under the direct supervision of a designated faculty member and organizational representative, students work within an organization (profit or non-profit) to gain workplace experience in the management arena while earning academic credit. The course requires some classroom lecture attendance as well as a minimum of 20 hours per week in the organization for eight weeks. Requires keeping a reflective journal to be turned in at the end of the semester. Only seniors are eligible to enroll in this course. 3-0-3

### MARKETING (MKTG)

**MKTG 3101**. Principles of Marketing. This course provides the fundamental principles in the marketing of goods, services, and ideas. The course includes planning, pricing, promotions, and distribution. The role of marketing management is to help companies better understand customer preferences, link that knowledge to designing appropriate products and services for selected customers, and determine appropriate methods to communicate, to deliver, and to capture value. The basic principles of marketing apply to both for-profit and not-for-profit organizations. 3-0-3

**MKTG 3102**. Consumer Behavior. This course explores the application of psychological and sociological theories and research findings to the decision-making process and their implications for consumer behavior decisions. Students will explore research findings and studies on purchasing patterns. 3-0-3

**MKTG 3103**. Marketing Research. This course introduces students to research methods and designs used in market research and the application of research findings. Students will engage in hands-on application of research methodology including planning, implementation and presentation of results. Prerequisite: MKTG3101. 3-0-3

**MKTG 3104**. Marketing Management. This course helps develop the marketing knowledge and skills necessary for the successful manager to address the intermediate marketing issues surrounding a complex demand management problem all organizations face. Students will gain an understanding of marketing concepts, including the development of a marketing strategy. The course will focus on consumer and business-to-business management. Prerequisite: MKTG 3101. 3-0-3

**MKTG 3105**. Marketing Information Systems. This course focuses on the concepts, tools, trends and organization of information systems. Topics include: e-commerce, social media, network technologies, enterprise resource management and digital technologies as well as emerging technologies influencing marketing and management. Prerequisite: MKTG 3101. 3-0-3

**MKTG 4102**. Integrated Marketing Communications. Processing relevant, effective marketing communications is critical to building brands, creating and maintaining relationships, managing expectations and delivering value. This course offers a broad introduction to integrated marketing communications (IMC). Prerequisite: MKTG 3101. 3-0-3

**MKTG 4700.** Marketing Internship. Under the direct supervision of a designated faculty member and organizational representative, students work within an organization (profit or non-profit) to gain workplace experience in the marketing arena while earning academic credit. The course requires some classroom lecture attendance as well as a minimum of 20 hours per week in the organization for eight weeks. Requires keeping a reflective journal to be turned in at the end of the semester. Only seniors are eligible to enroll in this course. 3-0-3

#### MATHEMATICS (MATH)

**MATH 0996**. Support for Elementary Statistics. This course is intended to provide corequisite support for students requiring remediation in mathematics while they are enrolled in MATH 1104 – Elementary Statistics. Corequisite: MATH 1401. 2-0-2 (Institutional Credit)

**MATH 0997**. Support for Quantitative Reasoning. This course is intended to provide corequisite support for students requiring remediation in mathematics while they are enrolled in MATH 1001 – Quantitative Reasoning. Corequisite: MATH 1001. 2-0-2 (Institutional Credit)

**MATH 0998**. Support for Mathematical Modeling. This course is intended to provide corequisite support for students requiring remediation in mathematics while they are enrolled in MATH 1101 – Introduction to Mathematical Modeling. Corequisite: MATH 1101. 2-0-2 (Institutional Credit)

**MATH 0999**. Support for College Algebra. This course is intended to provide corequisite support for students requiring remediation in mathematics while they are enrolled in MATH 1111 – College Algebra. Corequisite: MATH 1111. 2-0-2 (Institutional Credit)

**MATH 1001**. Quantitative Reasoning. 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. Prerequisite: Completing or exempting MATH 0997. A grade of "C" or better is required for graduation. 3-0-3

**MATH 1101**. Introduction to Mathematical Modeling. This course is an introduction to mathematical modeling using graphical, numerical, symbolic, and verbal techniques to describe and explore real-world data and phenomena. Emphasis is on the use of elementary functions to investigate and analyze applied problems and questions, supported by the use of appropriate technology, and on effective communication of quantitative concepts and results. Prerequisite: Completing or exempting MATH 0998. A grade of "C" or better is required for graduation. 3-0-3

**MATH 1111.** College Algebra. 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. Prerequisite: Completing or exempting MATH 0999. A grade of "C" or better is required for graduation. 3-0-3

**MATH 1113**. Pre-calculus. This course is an intensive study of the basic functions needed for the study of calculus. Topics include algebraic, functional and graphical techniques for solving problems with algebraic, exponential, logarithmic, and trigonometric functions and their inverses. Prerequisite: MATH 1111 or departmental permission. A grade of "C" or better is required for graduation if course is used in Area A or Area F. 4-0-4

**MATH 1401.** Elementary Statistics. This is a non-calculus-based introduction to statistics. Course content includes descriptive statistics, probability theory, confidence intervals, hypothesis testing, and other selected statistical topics. Prerequisite: Completing or exempting Support-level MATH courses. 3-0-3

**MATH 2008**. Foundations of Numbers and Operations for Teachers. This course is designed for K-8 pre-service teachers and emphasizes the understanding and use of the major concepts of number and operations. Topics include problem-solving strategies; inductive and deductive reasoning; numeration systems and place value; operations and algorithms; identity elements and inverse operations; rational and irrational numbers; integers and number theory; special sets of numbers; exponents and decimals; ratios, percent's, and proportional reasoning. Prerequisite: Three credits of college-level Mathematics with a grade of C or higher. 3-0-3

**MATH 2150.** Introduction to Linear Algebra. An introduction to linear algebra including systems of linear equations, determinants, vector spaces, subspaces, bases and linear independence, orthogonality, linear transformations, eigenvalues, eigenvectors and applications Prerequisite: MATH 2254 (with a grade of C or better) or Permission of Department. 3-0-3

**MATH 2253**. Calculus I. A course integrating basic ideas from analytic geometry with the introductory concepts of differential and integral calculus. Topics include limits, continuity, slope, tangent, rate of change, optimization, derivatives, and integrals. The Fundamental Theorem of Calculus is studied in detail. Applications are drawn from physics, engineering, business, and economics. A thorough knowledge of algebraic and trigonometric identities is necessary for success in this course. Prerequisite: A grade of "C" or better in MATH 1113. 4-0-4

**MATH 2254**. Calculus II. A continuation of Calculus I. Transcendental, logarithmic, exponential, and trigonometric functions are defined and their differential and integral properties are studied in detail. Techniques of integration, such as trigonometric substitution, integration by parts, and partial fractions are developed. Other topics studied include the theory of plane analytic geometry, the relationship between Cartesian and polar coordinates, conic sections, indeterminate forms, L'Hopital's rule, improper integrals, Taylor's formula, the theory of sequences and infinite series, tests for convergence, and the power series representation of elementary functions. Prerequisite: A grade of "C" or better in MATH 2253. 4-0-4

**MATH 2255**. Calculus III. A continuation of Calculus II. A study of vectors in the plane as well as vectors in three-space; lines, planes, and surfaces in space; real-valued functions of several variables, partial derivatives, multiple integrals, vector analysis, and applications. Prerequisite: MATH 2254. 4-0-4

**MATH 3100.** Differential Equations. This class 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. Prerequisite: MATH 2254. 3-0-3

**MATH 3110.** Informal Geometry. This course is designed for K-8 preservice teachers and focuses on topics such as plane figures, polygons and tessellations, space figures, symmetric figures, systems of measurement, area and perimeter, volume and surface area, and congruence and similarity mappings. Prerequisite: MATH 2008 with a grade of C or higher. 3-0-3

**MATH 3116.** Modeling and Algebra. This course is designed for elementary and middle grades preservice teachers and focuses on variables, expressions, equations, inequalities, systems of equations, matrices, and linear, non-linear, and inverse functions. Emphasis is on problem solving, active learning, appropriate communication, substantive connections, technology utilization, and multiple representations of algebraic structures. Prerequisite: MATH 2008 with a grade of C or higher. 3-0-3

# MECHANICAL ENGINEERING TECHNOLOGY (MENT)

**MENT 2110.** Mechanical Engineering Technology Case Studies in Design & Analysis. The course includes fundamental techniques for creating, analyzing, synthesizing, and implementing design solutions to open-ended problems through team and individual efforts utilizing flexibility, adaptability, and creativity. Prerequisite: A minimum grade of "C" in ENGR 2500. 0-2-1

**MENT 2139.** Numerical Methods in Engineering. Mathematical modeling and numerical solution of engineering-related problems with emphasis on solution of linear and nonlinear equations, matrices, vectors, statistical data analysis, curve fitting, ordinary and partial differential equations. Prerequisites: Completion of MATH 2253 with a minimum grade of "C" and completion of MATH 2150. 3-0-3

**MENT 3130.** Mechanism Design. This course covers detailed concepts, functions and knowledge of the components of mechanisms, machine components and design tools. Analytical, mathematical and computer techniques for kinematic and dynamic analysis of mechanisms and machine components are introduced. A comprehensive project covers the mechanism synthesis and design experience using analytical and computer simulation tools. Prerequisite: A minimum grade of "C" in ENGR 2232 or permission of instructor. 3-0-3

**MENT 3135.** Machine Design. The fundamentals of mechanical engineering design to analyze, design and /or select components which are commonly used in the design of complete mechanical systems for structural integrity, reliability, and cost considerations are detailed. The course focuses on static loading and fatigue failure of mechanical elements, including shafts and rolling-element bearings, bolted and permanent connections, springs, brakes, cylinders, gears and flexible elements. Prerequisites: A minimum grade of "C" in ENGR 3233 and MENT 2110 or permission of the department. 3-0-3

**MENT 3233.** Heat Transfer. This course will be an introduction to basic energy transport by conduction, convection, and radiation with applications to heat exchanger, extended surfaces etc. Prerequisites: A minimum grade of "C" in ENGR 3431 and ENGR 3235 or permission of instructor. 2-0-2

**MENT 3331.** Materials Science. The study of engineering materials such as metals, alloys, polymers, ceramics, and composites. Atomic structure and arrangement; control of the microstructure and mechanical properties, solidification, cooling curves and phase diagrams, mechanical testing, and strengthening mechanisms. Laboratory includes problem solving sessions and experiments on materials related to strengths, toughness, solidification, and metallography. Prerequisites: A minimum grade of "C" in CHEM 1212K and ENGR 3233. 2-2-3

**MENT 3333.** Materials Processing. The course covers the study of traditional and modern processing techniques. The course will cover applications and use of different materials and their processing; metal-casting processes and equipment; forming and shaping processes and equipment; joining processes and equipment; molding, extrusion and fabrication of polymers; and composites processing and techniques. Laboratory includes problem solving sessions, experiments, and hands-on processing of materials. Prerequisite: A minimum grade of "C" in MENT 3331 or permission of the department. 2-2-3

**MENT 3398.** Internship. A structured out-of-the-classroom experience in a supervised setting that is related to the student's major and career interests. Practical experience is combined with scholarly research under the guidance of faculty and the internship supervisor. Internship sites must be secured in advance of the semester of the placement and must be approved by the student's advisor and internship coordinator. Note: Students may enroll multiple times in this course for a total of four credit hours. Prerequisite: Senior standing and permission of the instructor. 3-0-3

**MENT 3531.** Introduction to Mechatronics. This course is an introduction to the theory and practice of engineering measurements, instrumentation, data acquisition, statistical analysis of data, controls and mechatronic systems and their applications integrated with computing. Topics include measurement fundamentals, applications of computing in measurement and mechatronic systems, sensors, analog signal processing, data acquisition and analysis, digital circuits, microcontroller programming and interfacing, actuators, and mechatronic system design. Prerequisites: A minimum grade of "C" in ENGR 2131, MENT 2139 and ENGR 3233. 2-2-3

**MENT 4210.** Heat Transfer and Thermodynamics Lab. This is a laboratory course designed to complement the thermodynamics and heat transfer lecture courses. The lab experiments are set up to provide practical experience in thermal sciences area including heat transfer modes, thermodynamics power and refrigeration cycles. Emphasis will also be placed on thermal measurements, data interpretation and report writing. Prerequisite: ENGR 3431. 0-2-1

**MENT 4430.** Engineering Quality Control and Project Management. The course will introduce students to basic tools of engineering economy such as interest rates, cash flow analysis, cost benefit analysis, and depreciation analysis that are used in comparing and evaluating multiple engineering projects on the basis of quantitative monetary parameters. Students will additionally be introduced to basic quality control techniques such as quality control charts and Six Sigma techniques for assuring product quality. Prerequisites: A minimum grade of "C" in MENT 2110, MENT 3135 and MENT 3333. 3-0-3

**MENT 4490.** Special Topics in Mechanical Engineering Technology. This course covers advanced level special topics of interest to faculty and students that are not in the regular course offerings. This course may be taken more than once. Prerequisite: approval of the instructor and department chair. 3-0-3

**MENT 4501.** Senior Design I. Part 1 of a two-course senior design capstone project for mechanical engineering technology. Students will form teams, define design projects, and write a proposal. Prerequisite: Senior Standing. 0-2-1

**MENT 4502.** Senior Design II. Part 2 of a two-course senior design capstone project for mechanical engineering technology. Synthesis and analysis of an open-ended mechanical engineering design project, including written and oral communication. Prerequisite: Senior Standing. 0-2-1

## MUSIC (MUSI)

**MUSI 1000, 1001, 1002, 1003, 1004, 1005**. College Chorus. This two-hour institutional credit lab course is for the purpose of organizing, instructing, and rehearsing a choral ensemble. The chorus will perform at College and community events, as well as by invitation outside of the local community. 0-4-2

**MUSI 1010, 1011, 1012, 1013**. This two-hour institutional credit lab course is for the purpose of organizing, instructing, and rehearsing a jazz band ensemble emphasizing a popular, jazz, blues and show tune repertoire. The jazz band will perform at college and community events, as well as by invitation outside of the local community. 0-4-2 (Institutional credit)

**MUSI 1100**. Music Appreciation. Designed to develop appreciation of music through listening and study. Topics include musical instruments, terms and symbols, forms, and characteristics/composers of the Medieval, Renaissance, Baroque, Classical, Romantic, and Modern periods. 3-0-3

## NURSING (NURS) ASN COURSES

**NURS 1100**. Introduction to Nursing. A four- semester-hour course placed in the first semester of the nursing sequence. This course will be taught during Fall Semester Term A. There are eight hours of class weekly. It is an introductory course designed to provide the student with fundamental knowledge upon which sequential study will be developed. Calculations of mathematical measurements and conversions essential to the administration of medications are stressed throughout this course. The concepts of adaptation, developmental stages, basic needs theory, critical thinking, health promotion, maintenance and restoration, and associate degree role functions are introduced as the framework of the nursing curriculum. Prerequisites: Completion of PSI background and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of all learning support requirements. Concurrent enrollment in or completion of BIOL 2210K and PSYC 1101 with grades of "C" or better. 4-0-4

**NURS 1101**. Fundamentals of Nursing. A four- semester-hour course taught during Fall Semester Term B of the nursing sequence. There are four hours of class and eight hours of lab experiences weekly. This course is designed to provide the student with basic skills and to facilitate the acquisition of fundamental knowledge upon which sequential study will be developed. Practical application and hands-on learning experiences for basic nursing skills, patient assessments, vital signs and medication administration are provided. Basic therapeutic skills are learned, practiced and demonstrated safely in the campus laboratory as simulated experiences. Prerequisites: Completion PSI background check and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of all learning support requirements and concurrent enrollment in or completion of BIOL 2210K and PSYC 1101 with grades of "C" or better. Completion of NURS 1100 Term A with a grade of "C" or better. 2-4-4

**NURS 1102.** Care of Adults I. A five-semester-hour course placed in the second semester of the nursing sequence. There are three hours of class and six hours of lab weekly. It is designed as a continuation of Nursing 1101 and facilitates use of the nursing process when caring for clients who are experiencing interferences with the basic physiologic needs of oxygenation, mobility, and nutrition and the basic safety, love and belonging, and self-esteem needs. Technical skills are refined, and new skills are learned in simulated and actual clinical experiences. Emphasis is placed on specific regulatory mechanisms, and physical and emotional maladaptive responses to stressors occurring with clients during the developmental stage of middle adulthood. Prerequisites: Completion of PSI background check and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of NURS 1100 and 1101, PSYC 1101, BIOL 2210K, and concurrent enrollment in or completion of BIOL 2211K with grades of "C" or better. 3-6-5

NURS 1103. Mental Health Nursing. A five- semester- hour course placed in the second semester of the nursing sequence. It includes three hours of class and six hours of clinical each week. The course is intended to provide basic knowledge and skills necessary to meet the needs of mental health clients. Emphasis is placed on the students' use of oral communication with clients in both one-to-one and group settings. Dynamics of adaptive and maladaptive behaviors are considered. Knowledge of Maslow's Hierarchy of Needs and Erikson's Stages of Development are utilized to assess client needs. Students are expected to use critical thinking in essential nursing roles to provide care for clients in community health settings. Clinical experiences will be with mental health clients in acute, residential and community agencies including day treatment centers and substance abuse centers. Prerequisites: Completion of PSI background check and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of NURS 1100 and 1101, BIOL 2210K and PSYC 1101 with grades of "C" or better. Completion of or concurrent enrollment in BIOL 2211K. 3-6-5

**NURS 1104**. Career Mobility for LPNs to RNs. A 10- semester- hour course placed in the summer semester of the nursing sequence. There are eight hours of class and six hours of laboratory experience weekly. The course provides for advanced placement of the licensed practical nurse in the associate degree nursing program and builds upon the previous knowledge and skills obtained in the licensed practical nurse education. New concepts and skills will be introduced upon which sequential study will be developed. The concepts of Adaptation; Developmental Stages; Basic Needs Theory; Critical Thinking; Health-Illness Environment; Promotion, Maintenance, and Restoration of Health; and the Role Functions of

the Associate Degree Nurse are introduced as the framework of the curriculum. Emphasis is placed on the use of critical thinking to meet the needs of clients in the practice of mental health nursing and medical-surgical nursing. Emphasis is placed on the students' use of verbal communications with adult clients in both one-to-one and group settings. Clinical experiences will be with mental health clients in acute, residential and community agencies including day treatment centers and substance abuse centers. Other clinical experiences will utilize campus labs, case studies and simulated learning experiences. Prerequisites: Completion of PSI background check and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of all learning support requirements. Completion of BIOL 2210K, BIOL 2211K, and PSYC 1101 with grades of "C" or better. Completion of, with grades of "C" or better, or concurrent enrollment in BIOL 2215K and PSYC 2103. Completion of a minimum of 27 semester credit hours of required general education courses with grades of "C" or better. 8-6-I0

NURS 2211. Care of Adults II. A ten-semester-hour course placed in the third or fourth semester of the nursing sequence. There are six hours of class and twelve hours of lab weekly. It is designed as a continuation of Care of Adults I and facilitates use of critical thinking when caring for clients who are experiencing interferences with the basic physiologic needs of nutrition, mobility, elimination, and sexuality. Technical skills are refined and new skills are learned in simulated and actual clinical experiences. Attention is given to specific maladaptive responses to stressors occurring in adult clients. Roles and responsibilities of the nurse in caring for clients with common recurring health problems will be explored and defined. Rehabilitative aspects of care expand to include provider and teacher roles. Students are expected to apply knowledge of developmental theory, anatomy and physiology, nursing concepts, and skills previously acquired in providing nursing care for the adult client. This course provides in-depth exploration of client responses to complex multi system disorders. Maslow's hierarchy is utilized to prioritize needs for clients in all stages of development throughout the life span. NURS 2211 utilizes various community resources to afford the nursing student opportunities for selected clinical laboratory and observation experiences. Experience as manager of care for small groups of clients is provided. Prerequisites: Completion of PSI background check and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of NURS 1100, 1101, 1102, 1103 or 1104, BIOL 2210K, BIOL 2211K, BIOL 2215K, PSYC 1101, and PSYC 2103 with grades of "C" or better. 7-9-10

NURS 2213. Women's Health. A six-semester-hour course placed in the third or fourth semester of the nursing sequence. There are four hours of class and six hours of clinical laboratory each week. This course focuses on the study of issues related to women's health. Women's health will be examined from conception through menopause with particular emphasis being placed on the woman and her family during the childbearing period. Nursing 2213 is designed to assist the student in utilizing critical thinking to provide care for women through all phases of their lives and for the newborn during the first month of life. The familycentered approach emphasizes care of the family as well as identification of those stressors which interfere with adaptation to normal pregnancy, childbirth, and the neonatal period as well as other time periods in a woman's life. Health and wellness for women will be presented so that the student can begin to incorporate assessment as well as teaching strategies to assist women in maintaining optimal health. Gynecologic issues for women will be identified and nursing care for women and their families experiencing crisis will be discussed. Students are expected to apply knowledge of developmental theory, anatomy and physiology and nursing concepts and skills previously acquired in providing nursing care in the hospital and selected community settings. Prerequisites: Completion of PSI background check and drug screening.

Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of NURS 1100, 101, 1102, 1103 or NURS 1104; BIOL 2210K and BIOL 2211K, BIOL 2215K; PSYC 1101 and PSYC 2103 with grades of "C" or better. 4-6-6

**NURS 2214.** Nursing of Children. A six-semester-hour course placed in the third or fourth semester of the nursing sequence. There are four hours of class and six hours of clinical laboratory weekly. Emphasis is on a family-centered approach to the nursing care of children. Consideration is given to the well child and to the child who has special adaptation needs due to the stress of illness. Use of critical thinking to provide care for children from infancy through adolescence who are operating on the first four levels of Maslow's Hierarchy will be explored. Students utilize previously acquired nursing principles and skills as well as knowledge of growth and development and anatomy and physiology in providing care in the hospital and selected community settings. Age appropriate oral and written communication techniques will be utilized in interpersonal, small group, and one-to-one presentations. Prerequisites: Completion of PSI background check and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of NURS 1100, II01, 1102, 1103 or NURS I104; BIOL 2210K, BIOL 2211K, BIOL 2215K, PSYC 1101, and PSYC 2103 with grades of "C" or better. 4-6-6

NURS 2215. Management and Health Care Issues. A one-semester-hour course placed in the second year of the nursing sequence. This course may be taken concurrently with any second level nursing course. It is designed to bridge the gap between theory and practice and to increase the relevance of nursing leadership and management. Transition from the role of student nurse to graduate nurse is emphasized by explaining how theory translates into behaviors appropriate to contemporary nursing care management. Conflict resolution, interpersonal relationships, and oral and written communication skills are emphasized as tools for leadership and management. The use of computer searches on the world wide web provides the student with a broad base of knowledge. This course serves to differentiate traditional leadership and management perspectives and to relate them in an integrated way with contemporary nursing trends and practice applications. Prerequisites: Completion of PSI background check and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. Completion of BIOL 2210K, BIOL 2211K, BIOL 2215K, PSYC 1101, and PSYC 2103 with grades of "C" or better. I-0-I

## NURSING (NURS, \*NURS) RN-BSN COURSES

**NURS 3105.** Nursing Pathophysiology. The influence of mechanisms upon structure and function of the body's adaptive and compensatory mechanisms will be explored. The interaction of life-style, culture, gender differences, and intrinsic and extrinsic environmental factors will be examined. Emphasis is placed upon the pathophysiological concepts for understanding the rationale for prevention of disease and promotion of health and wellness through therapeutic nursing interventions. Prerequisite is completion of Anatomy and Physiology I and II with the grade of 'C' or better. 3-0-3

\*NURS 3197. Professional Nursing Practice. This course is designed to enhance and facilitate the development of the RN student to the role of a BSN prepared professional nurse. The focus is on developing personal and professional growth of the student to promote better advocacy, critical thinking, educator skills, effective communication, and leadership abilities in a complex healthcare environment. The content of the course includes a wide range of concepts from historical

contributions and theories that have guided the profession, to promoting professional philosophies, visions, and practices to help prepare for future trends in healthcare. The course will include topics related to culture and diversity, professional ethics, political and legal issues in nursing, and technology. Students will apply knowledge of the standards of practice, evidence-based practice, and caring science to these topics. Prerequisites: Current RN Licensure in Georgia. Completion of PSI background check and drug screening. Current health insurance and current physical examination, PPD and immunizations. Current CPR certification or concurrent enrollment in a CPR class approved by the American Heart Association or American Red Cross including infant, child and adult. 3-0-3

\*NURS 3297. Nursing Research Application. This course is designed to provide the registered nurse with an overview of the major research concepts as applied to the profession of nursing, to scholarship, and to clinical practice. Analysis, critique, and interpretation of qualitative and quantitative research approaches, including ethical implications, for evidence-based nursing practice will be examined. Emphasis is placed on how to critique, analyze, and apply published and empirical research findings to evidence-based nursing practice. Prerequisite: Completion of MATH 1401 with a grade of "C" or better. 3-0-3

**\*NURS 3397.** Health Assessment. This course is a study of the advanced knowledge and skills beyond the Associate degree in Nursing, designed to enhance health assessment for nursing intervention and practice of individuals across the lifespan. Theory and skills essential to completing a comprehensive and holistic health history and physical examination are emphasized. In addition, the holistic delivery of care will include cultural, spiritual, nutritional, alternative, complementary therapies, and health promotion for the delivery of safe and person-centered care. The importance of comprehensive and accurate documentation as a tool for effective communication amongst the interdisciplinary team is reviewed. 3-0-3

**NURS PLE 3397.** Health Assessment Practice Learning Experience. This practice learning experience enhances assessment skills for clients across the life span. The interview process will be explored, emphasizing the health history. The clinical hours will allow the practice of new assessment techniques and offer opportunities to develop interview skills. 0-6-3

**NURS 4110.** Informatics. This course provides an introduction to healthcare informatics and electronic medical records. In this course, general computer office applications and healthcare-specific information technology applications are presented and used. The major product for this course will focus on information systems as related to healthcare safety, quality improvement, resource utilization, and data management to improve patient outcome. Ethical and legal issues impacting the use of technology in healthcare are explored. 3-0-3

**NURS 4111.** Ethics in Nursing. This course explores current models for ethical decisionmaking. Selected ethical dilemmas in nursing practice are analyzed. There is an emphasis on the self-evaluation of personal and professional values. 3-0-3

\*NURS 4497. Community Health Nursing. This course is designed to examine the concepts and principles of community and population health nursing. The course will provide an overview of health issues that transcend borders, class, race, ethnicity, and culture. Emphasis is placed on roles, levels of prevention, principles of epidemiology, public health policy, and disaster preparedness. 3-0-3

\*NURS 4597. Leadership and Management. This course introduces the leadership roles and management functions of professional registered nurses within the structure of an organization. The management process provides the foundational structure for the course, while the theoretical framework for this course is established through exploration of leadership styles, organizational theory, and management theory. Quality assurance and the provision of evidence-based, patient-centered care and collaborative relationships are emphasized. The impact of political and legislative processes, the integration of informatics, and the legal and ethical issues in management are also discussed. 3-0-3

**NURS PLE 4597.** Leadership and Management Practice Learning Experience. This practice learning experience enhances clinical skills in nursing leadership and management in the acute care and community settings. Within the practice learning environment, the student will examine and appraise current trends in nursing leadership and management in order to improve care delivery in a cost-effective manner. The practice learning experience will also embrace concepts of healthcare delivery to individuals, families, and groups found in the community. 0-6-3

### \*NURS = USG RN to BSN shared collaborative course delivered through eMajor in an 8week session.

## PHILOSOPHY (PHIL)

**PHIL 2010.** Introduction to Philosophy. This course engages students in opportunities for analysis and critical thinking as they examine a variety of positions and arguments that are central in the history of philosophy. Course topics include, but are not limited to, time, the existence of God or gods, free will personal identity, the nature of morality and knowledge. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**PHIL 3150.** Professional Ethics. This course will enable the students to engage in critical thinking and analysis as they examine difficult moral problems that may arise in a variety of professional settings. Readings and discussion will focus on issues of personal decision-making, and public policy in the context of their social, political, economic and legal parameters. Prerequisites: Junior standing or permission of the instructor; Completing or exempting Support-level ENGL. 3-0-3

## PHYSICAL EDUCATION (PHED)

**PHED 1000**. Fitness for Life. A lecture-laboratory course designed to provide the student with physiological, psychological, and sociological evidence of why humans should exercise. Each student develops and implements an individualized fitness program. 1-2-2

**PHED 1001**. First Aid. A basic first aid course which covers care given to a person who has been injured or suddenly taken ill. 2-0-2

**PHED 1002**. CPR (Cardio Pulmonary Resuscitation). An American Heart Association curriculum dealing with respiratory and cardiac emergencies. Completion of this course certifies one as a Healthcare Provider (nurses) or a Heart Saver Provider (lay people). \$30.00 lab fee. 1-1-1

**PHED 1003**. CPR Recertification Test for Health Care Professionals. Students are expected to show up for the recertification ready for both a written and skills test in health care CPR. Prerequisites: Proof of previous American Heart Health Care Provider certification. \$30.00 lab fee. 1-1-1

**PHED 1004**, First Aid/CPR. This required course combines instruction in first aid and CPR to provide the student with the basics of care given to a person who has been injured or suddenly taken ill or who has suffered a respiratory or cardiac emergency. \$30.00 lab fee. 2-0-2

**PHED 1100**. Personal Fitness I. Emphasizes an individualized fitness program which includes aerobic, flexibility, strength, and cardiovascular endurance activities. 0-2-1

**PHED 1101**. Personal Fitness II. Course II will allow a student to continue the personalized fitness program for an additional semester. 0-2-1

**PHED 1102**. Weight Training. Emphasizes weight lifting, circuit training, and cardiovascular endurance. 0-2-1

**PHED 1104**. Fitness Walking/Aerobics. A course designed to increase fitness, reduce stress, and improve health through the use of aerobics and graded walking techniques. 0-2-1

**PHED 1120.** Baseball/Softball Techniques and Strategy. Practical experience in fundamental skills and techniques, team play & strategy. 0-2-1

PHED 1200. Tennis/Golf. Emphasizes fundamental skills of tennis and golf. 0-2-1

PHED 1201. Tennis/Badminton. Emphasizes fundamental skills of tennis and badminton. 0-2-1

PHED 1202. Bowling. Emphasizes fundamental skills of bowling. \$40.00 lab fee. 0-2-1

**PHED 1210**. Badminton. An introduction to badminton stressing the basic skills, rules and strategies of play needed to participate in the sport successfully. 0-2-1

**PHED 1230**. Golf. Designed primarily for beginners; emphasis on teaching the basics of the game of golf. Instruction focuses on the grip, stance, and the basic swing pattern. There may be an additional golf fee. 0-2-1

**PHED 1240**. Racquetball. A course designed to provide instruction in the rules, strategies, and basic skills necessary to play the sport of racquetball. 0-2-1

**PHED 1250**. Beginning Tennis. An introduction to tennis stressing the rules, court etiquette, skill development and the language of the sport. 0-2-1

**PHED 1280**. Introduction to Yoga. This course promotes the connection of breath and movement through a dynamic flow of asanas, building strength and flexibility. Classes will generally begin with sun salutations and progress through standing and balancing postures, forward folding, lateral opening, twists, backbends, and inversions. This physical practice helps us to go within ourselves and create a deep, peaceful awareness of body and mind. By learning and practicing physically challenging flow sequences, your body will begin to rid itself of physical and mental blocks that dwell within. The result is improved circulation, a light and strong body, and a calm mind. This course will also promote the use of yoga for relaxation and meditation. 0- 2-1

**PHED 1290** Soccer. An introductory course designed to present the fundamental skills, strategies, and team concepts of soccer. Attention is given to the skills of dribbling, passing, shooting, trapping, heading and tackling. 0-2-1

**PHED 1300**. Softball/Volleyball. Emphasizes fundamental skills and team concepts of softball and volleyball. 0-2-1

**PHED 1301**. Volleyball/Basketball. Emphasizes fundamental skills and team concepts of volleyball and basketball. 0-2-1

**PHED 1400**. Firearm Safety. An introduction to the rules of safety and operation of the B.B. gun, rifle and hand gun. Successful completion of the course certifies students in Hunter Safety. 0-2-1

**PHED 1410**. Canoeing. An introduction to basic solo and tandem navigational and canoeing fundamentals. Prerequisite: basic swimming ability, comfortable in deep water, self-rescue skills. 0-2-1

**PHED 1500**. Beginning Swimming. For non-swimmers or swimmers who can swim less than 40 yards. 0-2-1

PHED 1501. Swimming. For swimmers who can swim 40 yards or more. 0-2-1

**PHED 1502**. Life guarding. Students must pass the American Red Cross entrance requirement of swimming 500 yards to enroll in class. 1-2-2

**PHED 1600**. Dance/Aerobics. Emphasizes the improvement of cardiovascular efficiency and muscle tone through aerobics and dance. 0-2-1

**PHED 3024.** Kinesthetic Integration. This course provides opportunities for teacher candidates to study and apply strategies and methods of kinesthetic integration to the academic subjects. Fundamental health and physical education concepts are covered as well. Students must be admitted in the Teacher Education/Elementary and Special Education (ELE/SPED) program in order to enroll in this class. Prerequisite: Admission to the Elementary and Special Education (ELE/SPED) program. 2-0-2

# PHYSICAL SCIENCE (PHSC)

**PHSC 1011**. Foundations of Physical Science. A survey of basic principles underlying physical phenomena. Topics studied include motion, energy, work, wave phenomena, and modern science. Prerequisites: MATH 1001 or 1111, Completing or exempting Support-level ENGL. 3-0-3

**PHSC 1011L**. Laboratory for Foundations of Physical Science. A laboratory course to augment and support PHSC 1011. Prerequisite: Completing or exempting Support-level ENGL. Prerequisite or Corequisite: PHSC 1011. 0-2-1

## PHYSICS (PHYS)

**PHYS 1111K**. Introductory Physics I. An introductory course which will include mechanics (kinematics, dynamics, work and energy, momentum and collisions, and rotational motion and statics), and may also include thermodynamics and waves. Elementary algebra and trigonometry will be used. Prerequisites: MATH 1113 and Completing or exempting Support-level ENGL. 3-2-4

**PHYS 1112K**. Introductory Physics II. An introductory course which will include electrostatics, electric current and circuits, and electromagnetism, and may also include optics and modern physics. Elementary algebra and trigonometry will be used. Prerequisite: PHYS 1111K. 3-2-4

**PHYS 2211K**. Principles of Physics. An introductory course which will include mechanics (kinematics, dynamics, work and energy, momentum and collisions, and rotational motion and statics), and may also include thermodynamics and waves. Elementary calculus will be used. Prerequisite or Corequisite: MATH 2253. Prerequisite: Completing or exempting Support-level ENGL. 3-2-4

**PHYS 2212K**. Principles of Physics II. An introductory course which will include electrostatics, electric current and circuits, and electromagnetism, and may also include optics and modern physics. Elementary calculus will be used. Prerequisite: PHYS 2211K. Prerequisite or Corequisite: MATH 2254. 3-2-4

## POLITICAL SCIENCE(POLS)

**POLS 1100**. American and Georgia History and Constitution. This course is designed to provide students with the essential knowledge of American Constitution/History and Georgia Constitution/History in order to meet the Georgia legislative requirements. 1-0-1

**POLS 1101**. American Government. Designed to give the student a general knowledge of the structure and functions of the government of the United States and Georgia with some time devoted to the study of current events and problems. Successful completion of this course satisfies the Georgia legislative requirements for proficiency in United States and Georgia government. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**POLS 2100**. Introduction to the European Union. This course introduces the student to the historical origins and development of the European Union, the EU's governing institutions, the EU's policymaking processes, current EU policies and issues, and EU-US relations. The course also constitutes the core offering of the European Union Studies Certificate program. Prerequisite: Completing or exempting Support-level ENGL. (See HIST 2100.) 3-0-3

**POLS 2200**. Studies of the European Union. The purpose of the course is to provide an indepth analysis on a selected aspect of the study of European Union (EU). The course is intended as an Area E. elective for students interested in taking a course in the Online or Study Abroad catalogs of the University System's European Union Center for which the only prerequisite is POLS 1101. Prerequisites: Completing or exempting Support-level ENGL; prior approval of the instructor and successful completion of POLS 1101. (See HIST 2200) 3-0-3

**POLS 2401.** Global Issues. Examines how and why states act as they do in their contemporary relations. Continuing factors such as power, war, ideology, and governmental organizations, and recently emerging influence including supranational organizations, multinational corporations and natural resource allocation are examined. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

## PSYCHOLOGY (PSYC)

**PSYC 1101**. Introduction to General Psychology. A broad survey of the major topics in psychology including, but not limited to, research methodology, biological and social factors influencing behavior, development, learning, memory, personality, and abnormal. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**PSYC 2101**. Introduction to the Psychology of Adjustment. An introductory examination of the applied psychological theory and research concerning mental health and well-being. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**PSYC 2103**. Introduction to Human Development. An introductory, non-laboratory-based examination of human development across the lifespan with an emphasis on normal patterns of physical, cognitive, and social development. Prerequisite: PSYC 1101. 3-0-3

**PSYC 2201**. Abnormal Psychology. An introduction to the concept of abnormal psychology. The course will provide an overview of definitions of abnormality, issues of diagnosis and treatment, including a general introduction to the DSM-IV, theories of abnormal behavior and preventative issues, with a focus on community psychology. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**PSYC 3101**. Human Behavior in Organizations. This course deals with human behavior in organizations. Conceptual frameworks, case discussions, and skill-oriented activities are applied to course topics which include motivation, learning and development, group dynamics, leadership, communication, power and influence, change, diversity, organizational design, and culture. Class sessions and assignments are intended to help participants acquire skills and analytic concepts to improve organizational relationships and effectiveness. 3-0-3

**PSYC 3200**. Leadership Development. The course is designed to improve personal awareness in the areas of self-management, professionalism, work attitudes and motivation, personality, innovation and creativity, communication, diversity, and ethical decision making. In addition, students will gain an appreciation and understanding of the diverse individual differences that leaders encounter in a global workforce. Students can apply concepts from this class to their own professional development and also use concepts to promote and sustain a diverse working environment. Upon completion of this course, students will recognize their strengths and weaknesses and create a professional development plan that emphasizes self-management practices. 3-0-3

**PSYC 3201**. Industrial/Organizational Psychology. This course focuses on both research and the application of research findings to practical problems in the workplace. Topics include the recruitment, selection, training, motivation and job performance of individuals at work. 3-0-3

## PUBLIC ADMINISTRATION (PADM)

**PADM 3000.** Public Administration. This course touches on the history and focuses on the practice of public administration in the U. S. from the national, state, and local points of view. Course topics such as public policy, organization, finance, human and fiscal resources, the scope of public and nonprofit services, governmental/political relations, and public policy planning and management will be considered. 3-0-3

**PADM 3200.** Managing Nonprofit Organizations. This course focuses on organizational administration, structure, decision making, communication, human resource interaction, program delivery, and evaluation. 3-0-3

## PUBLIC SERVICE LEADERSHIP (PSLP)

**PSLP 4300.** Public Service – Nonprofit Internship I. Supervised intern work in a public/governmental service or nonprofit organizational setting to gain workplace experience while earning academic credit. The course requires some classroom lecture attendance as well as a minimum of 4 hours per week for 12 weeks working on-or off-campus. Requires keeping a reflective journal. Only seniors are eligible to enroll in this course. 1-4-3

**PSLP 4400.** Public Service – Nonprofit Internship II. Supervised intern work in a public/governmental service or nonprofit organizational setting to gain workplace experience while earning academic credit. The course requires some classroom lecture attendance as well as a minimum of 4 hours per week for 12 weeks working on-or off-campus. Requires keeping a reflective journal. Only seniors are eligible to enroll in this course. 1-4-3

**PSLP 4500.** Nonprofit Program Planning and Evaluation. This course focuses on mission and vision creation, strategic action plan development, strength and weakness assessment, reporting requirements for stakeholders, outcomes-based evaluation, and analysis of assessment data to drive change and improvement. 3-0-3

**PSLP 4600.** Service and Leadership Capstone Course. A course focusing on all student learning outcomes of the program, as well as on finalizing a student portfolio of documents as the culmination of student learning throughout the program. This course serves as a transition from undergraduate study and preparation to employment in a professional career or to graduate study. Must be taken in the final semester of the program. 3-0-3

**PSLP 4700.** Senior Project. A course providing advanced training in a particular area of public service/nonprofit leadership. The course requires completion of a project agreed upon by instructor and student. Only seniors are eligible to enroll in this course. 3-0-3

## READING (READ)

**READ 3005.** Teaching Reading and Writing in Elementary Schools. An intensive study of theory and practice in standards-based reading, literacy, and language arts instruction in elementary classrooms with diverse populations, including second language learners. Phonological awareness, phonics, word recognition, fluency, and comprehension are addressed. This course provides a basis for development of research-based pedagogy in standards-based reading/language arts instruction in elementary school classrooms with diverse populations. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education program. 3-0-3

**READ 3006.** Reading in the Content Areas. This course provides opportunities for teacher candidates to study and apply strategies and methods that support comprehension, vocabulary, study skills, and critical reading and writing in the content areas. Content reading for second language learners is also addressed. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education program. 3-0-3

**READ 3007.** Assessing Literacy in Early Childhood Education. An intensive study of theory and practice for preventing, assessing, and intervening with reading problems in classrooms with diverse student populations, including second language learners. There is focus on utilization of formal and informal data collection and analysis of the literacy development of groups and individuals for the purposes of developing responsive instruction. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education program. 3-0-3

**READ 3090.** Children's Literature and Language Arts. This course focuses on the integration of multicultural children's literature in curriculum supporting the development of speaking, reading, writing, and thinking critically in elementary level classrooms with diverse student populations, including second language learners. Clinical experiences in the field required. Prerequisite: Admission to Teacher Education program. 3-0-3

## **RECREATION (RECR)**

**RECR 2201**. Introduction to Recreation Services. This course is designed to introduce students to the concepts and principles of leisure and recreation. Opportunity is offered for each student to observe the recreation services of a number of agencies in operation. 3-0-3

**RECR 2202**. Social Recreation. Social recreation is designed to offer students the materials, information, and experience necessary to adequately conduct social recreation programs. 2-2-3

**RECR 2203**. Outdoor Recreation. Presents an overview of the scope of outdoor recreation. The history and development of outdoor recreation, conservation, and organized camping is presented. 2-2-3

**RECR 2204**. Recreation Leadership. This course is designed to give students experience and knowledge of leadership principles and procedures in recreation. 2-2-3

# SCIENCE (SCIE)

**SCIE 1111**. Environmental Science-Energy, Air, and Water Resources. An interdisciplinary course that uses scientific principles to examine environmental issues. The inter-relatedness between humans and nature as well as the earth's limited resources will be studied. Specific topics include human population, traditional energy sources, alternative energy sources, air pollution, formation of the ozone hole, global warming, and water pollution. Prerequisite: Completing or exempting Support-level ENGL.3-0-3

**SCIE 1111L**. Laboratory for Environmental Science–Energy, Air, and Water Resources. A laboratory course to augment and support SCIE 1111. Prerequisite or Corequisite: SCIE 1111. 0-2-1

**SCIE 1121**. Environmental Science–Earth and Biological Resources. An interdisciplinary course covering environmental issues relating to Earth's terrestrial and aquatic ecosystems, weather, agricultural issues, waste and waste management and geology. The environmental science courses SCIE 1111 and SCIE 1121 are totally independent. You may take SCIE 1121 without taking SCIE 1111. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**SCIE 1121L**. Laboratory for Environmental Science—Earth and Biological Resources. A laboratory course to augment and support SCIE 1121. Prerequisite or Corequisite: SCIE 1121. 0-2-1

#### SCIENCE EDUCATION (SIED)

**SIED 4184.** Elementary Science Methods. This course is designed to prepare K-5 pre-service teachers to deliver hands-on, content rich science instruction and to help students understand core ideas and practices in science. This course provides opportunities for teacher candidates to learn and understand how to teach the cross-cutting concepts and core ideas, and scientific practices of earth, physical, and life sciences that are aligned to the Georgia Standards for Excellence (GSE) and the Next Generation Science Standards (NGSS). The course will also examine psychological underpinnings of science learning, elementary science curricula and standards, classroom layout and safety, assessment, and science in popular literature. Guided field experience required. 3-0-3

## SOCIOLOGY (SOCI)

**SOCI 1101**. Introductory Sociology. A study of the discipline of sociology. Topics will include sociological theory, methods and selected substantive areas. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**SOCI 1160**. Introduction to Social Problems. A theoretical and empirical analysis of selected major problems confronting American society. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**SOCI 2293**. Introduction to Marriage and the Family. An introduction to the structure, processes, problems, and adjustments of contemporary marriage and family life. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**SOCI 2501**. The Multiple Aspects of Diversity. An introduction to the sociology of race and ethnic relations, examining selected racial and ethnic subcultures with respect to past and present history, past and present patterns of participation, minority-majority relations, maintenance patterns and consequences of prejudice and discrimination for American life. A multicultural perspective and an analysis of minority groups in American society will be included. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**SOCI 3501**. Gender in Work. Students will examine the differences in the work experiences of men and women within organization. Topics include gender-role attitudes, occupational segregation, gender and leadership, sexual behavior in the workplace, career mobility and workforce diversity. 3-0-3

## SPANISH (SPAN)

**SPAN 1001**. Elementary Spanish I. Grammar, reading, writing, simple listening and speaking skills. Prerequisite: Completing or exempting Support-level ENGL. 3-0-3

**SPAN 1002**. Elementary Spanish II. Continuation of SPAN 1001. Prerequisite: SPAN 1001 or equivalent. 3-0-3

**SPAN 1101**. Elementary Spanish Conversation and Culture I. Students will develop the cultural understandings, attitudes and performance skills needed to function appropriately within a society of the target language and to communicate with the culture bearer. Prerequisite or Corequisite: passing or exempting SPAN 1001, or instructor's permission. 0-2-1 (Institutional Credit.) (May not be used to satisfy core curriculum requirements.)

**SPAN 1102**. Elementary Spanish Conversation and Culture II. Students will develop the cultural understandings, attitudes and performance skills needed to function appropriately within a society of the target language and to communicate with the culture bearer. Prerequisite or Corequisite: Passing or exempting SPAN 1002, or instructor's permission. 0-2-1 (Institutional Credit.) (May not be used to satisfy core curriculum requirements.)

**SPAN 2001**. Intermediate Spanish I. A more advanced course which refines skills in grammar, reading, writing, and speaking with emphasis on imperatives, present subjunctive, and description and narration in simple tenses (past, present and future). Culture lessons focus on Spain, Mexico and Central America. Prerequisite: SPAN 1002 or permission of instructor. 3-0-3 Prerequisite: SPAN 1002 or equivalent. 3-0-3

**SPAN 2002**. Intermediate Spanish II. Application and refinement of basic skills with emphasis on reading, writing, and speaking with emphasis on conditional, past subjunctive and compound tenses. Culture lessons focus on Spanish-speaking countries in South America and the Caribbean. Prerequisite: SPAN 2001 or equivalent. 3-0-3

**SPAN 2101**. Intermediate Spanish Conversation and Culture I. Students will develop the cultural understandings, attitudes and performance skills needed to function appropriately within a society of the target language and to communicate with the culture bearer. Prerequisite or Corequisite: passing or exempting SPAN 2001, or instructor's permission. 0-2-1 (Institutional Credit.) (May not be used to satisfy core curriculum requirements.)

**SPAN 2102**. Intermediate Spanish Conversation and Culture II. Students will develop the cultural understandings, attitudes and performance skills needed to function appropriately within a society of the target language and to communicate with the culture bearer. Prerequisite of Corequisite: passing or exempting SPAN 2002, or instructor's permission. 0-2-1 (Institutional Credit.) (May not be used to satisfy core curriculum requirements.)

## COLLEGE ORIENTATION AND SUCCESS (SGSC)

**SGSC 1000.** South Georgia State College Orientation and Success. This course is designed to help students learn skills that will make them better college students, not only academically, but also socially. The course will focus on helping students identify strengths and offer services, resources and opportunities to build upon these strengths. Also, the course will provide specific knowledge, tips, skills and shortcuts for excelling in a student's academic and occupational endeavors. Topics covered in this course will be college issues, services available to students, tips for better communication with classmates and instructors, time management and studyskills. 1-0-1 (This course is required for all first-time, full-time students.)

## STUDY ABROAD (SABR)

**SABR 1000, 1001, 1002, 1003, 1004**. Study Abroad. Organized academic study outside the United States. Study normally focuses on the culture, language, history, or economics of a nation or region. May be repeated for credit when topics vary. 0-2-1 (Institutional credit)

**SABR 2001-2005**. Study Abroad. An interdisciplinary course of selected areas of history, political science, economics, arts, and literature. Awareness and understanding of cultural, ethnic, racial, and gender diversity will be addressed. [SABR 2001 – United Kingdom; 2002 – South Pacific & Asia; 2003 – European Union; 2004 – Africa; 2005 - Latin America]. 3-0-3

## THEATRE (THEA)

**THEA 1000, 1001, 1002, 1003.** Theatre Practicum. A lab course for students participating in a theatre production as actors and/or technical crew. 0-2-1 (Institutional Credit)

**THEA 1100**. Theatre Appreciation. A study of the theatre as a collaborative art form, from script to performance. Includes historical background, the roles of the various persons involved both on and off stage, and the importance of both the performance space and the audience. 3-0-3

**THEA 2210**. Voice and Diction. An introduction to vocal training for the production of Standard American Speech, with an emphasis on resonance, breath control, vocal relaxation, and posture using the International Phonetic Alphabet (IPA) and a variety of approaches to contemporary vocal training. Prerequisites: Completing or exempting Support-level ENGL. 3-0-3

**THEA 2800**. Fundamentals of Acting. An introduction to the principles of acting, including proper preparation for acting, physical and vocal control and flexibility, and the analysis and creation of character. Instruction includes class lectures, exercises, and scene study. 3-0-3

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