ACCOUNTING COURSES (ACT)

- ACT 2291 Principles of Accounting I (3) Modern financial accounting theory and practices applied to sole proprietorships, partner ships, and corporations.
- ACT 2292 Principles of Accounting II (3) Modern financial and managerial accounting theory and practices applied to an organization's liabilities, cash flows, planning, budgeting, and control. *Prerequisite: ACT 2291.*
- ACT 3391 Intermediate Accounting I (3) Theory and applications of assets, liabilities, and owners' equity, revenues, expenses, and analytical process. *Prerequisite: ACT 2292.*
- ACT 3392 Intermediate Accounting II (3) Theory and applications of assets, liabilities, and owners' equity, pensions, leases, earnings per share, and analytical process. *Prerequisite: ACT 3391.*
- ACT 3394 Governmental Accounting (3) Municipal and governmental accounting; preparation and use of budgets, records, and statements. *Prerequisite: ACT 2292.*
- ACT 3395 Managerial/Cost Accounting I (3) Manufacturing and distribution cost accounting, material, labor and overhead costs in job order and process cost accounting. These courses must be taken in sequence. *Prerequisite: ACT 2292.*
- ACT 3396 Accounting Information Systems (3) Principles underlying establishment of complete accounting systems; applications to typical business organization; emphasis on the functions of control and protection. *Prerequisite: ACT 2292.*
- ACT 4435 International Accounting (3) An overview of emerging issues related to international accounting and reporting of financial information across national boundaries. The course will address topics such as accounting and auditing standards, disclosure practices, and financial reporting in a global business environment. *Prerequisite: ACT 3392.*
- ACT 4491 Advanced Accounting (3) Theory and applications of accounting for business combinations, branches and segments, partnerships, and foreign currency transactions and translations. *Prerequisite: ACT 3392.*

- ACT 4493 Guided Independent Study (1-3 credit hours per course per semester) Supervised study. Additional information is indexed under Guided Independent Research and Study.
- ACT 4494 Income Tax Accounting I (3) Principals and dictates of individual capital and taxation of individual income. *Prerequisite: ACT* 2292.
- ACT 4495 Income Tax Accounting II (3) Tax laws and regulations for partnership, corporations, estates and fiduciaries. *Prerequisite: ACT* 4494.
- ACT 4496 Managerial/Cost Accounting II (3)

level courses in anthropology. This course does not count toward the 36-hour major.

ANT 3370

- ANT 3305 Introduction to Archaeology (3) An examination of the methods and theory of traditional and contemporary approaches to archaeological research.
- ANT 3310 Cultural Anthropology (3) An anthropological examination of human cultural development and a survey of both contemporary and past human cultures. May be taken for sociology credit.
- ANT 3311 Physical Anthropology (3) An examination of human biological development from the beginning of mankind through the Pleistocene age using evidence from archaeology, paleontology, biology, genetics and osteology.
- ANT 3312 Field Techniques in Archaeology (3) Instruction in survey and excavation methods and techniques used in the discipline of archaeology.
- ANT 3313 Labor ator y Techniques in Archaeology (3) Instruction in the methods and techniques used in the curation and analysis of cultural materials recovered from archaeological investigations.
- ANT 3320 Prehistory of North American Indians (3) An examination of the aboriginal cultures of North American prior to the period of European contact based upon archaeological evidence.
- ANT 3321 North American Indians Since Contact (3) An examination of aboriginal cultures of North America from the period of European exploration, colonization, and settlement to the present using archaeological, ethnographic, and ethnological studies.
- ANT 3325 Selected Topics in Anthropology (3) Anthropological examination of a designated topic of special and/or current interest and importance that is generally not covered in regularly offered courses in the department.
- ANT 3330 Historical Archaeology (3) An examination of the historical research methods and archaeological techniques used to investigate and interpret archaeological sites dating from the historic period.
- ANT 3340 Language in Culture and Society (3-3) A sociological and anthropological examination of language from a descriptive, historical and social perspective.
- ANT 3360 Magic, Witchcr aft and Religion (3) An anthropological examination of the role of religion and the supernatural among traditional peoples.

Native American Religions (3) An introduction to Native American religions. Focused on basic concepts of Native religions, the course familiarizes students with various aspects of religion and world views drastically different from their own. Special attention is pai004 Tr0e3sed calAn introduction achievement of specific skills. Prerequisites: Junior or senior standing, with a minimum overall GPA of 3.0, permission of guiding professor, approval of department chair or dean. A written request is to be submitted to the department chairperson at least two weeks in advance of the term in which the study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the office of University Records.

- ART 3322 18th and 19th Century Art (3-3) Classical, Realism, Romanticism, and Impressionism.
- ART 3323 20th Century Art (3-3) Post-Impressionism to the present.

requisite: IED 4454 Internship Seminar for Interdisciplinary Education.

- ART 4481 Methods and Materials for the Art Teacher (3-3) Teaching methods, selection, organization, and use of art materials. *Prerequisite: ART 3361 and admission to TEP.*
- ART 4491 Guided Independent Research (1 to 3 credits per course per semester) Additional information is indexed under Guided Independent Research and Study.
- ART 4492 Guided Independent Research (1 to 3 credits per course per semester) Additional information is indexed under Guided Independent Research and Study.

AT 4402 Athletic Training Field Experience (12-12) Acquaints the entry-level athletic training student with the opportunity to gain practical experience within a clinical and or traditional setting. The student will apply didactic academic preparation at their chosen professional setting. *Prerequisite: AT* 4401.

BIOLOGY COURSES (BIO)

- BIO 1100 Principles of Biology (3) Biological principles including chemistry of life, cell structure and function, bioenergetics, cell reproduction, heredity, and ecology. Credit for this course cannot be applied toward any curriculum in biology. *Co-requisite: BIO L100.*
- BIO L 100 Principles of Biology Lab (1-2) Measurements, microscopy, ecology, cell structure, bioenergetics, cell reproduction, and heredity. *Corequisite: BIO 1100.*
- BIO 1101 Organismal Biology (3) Biological concepts and life processes of protists, fungi, plants, and animals. *Prerequisites: BIO 1100, L100. Co-requisite: BIO L101.*
- BIOL101 Organismal Biology Lab (1-2) Survey of organisms from selected phyla, including anatomy, phylogeny, and life histories. *Prerequisites: BIO 1100, L100. Co-requisite: BIO 1101.*
- BIO 1110 Survey of the Human Body (3) Biological principles related to the role of humans in an ecosystem, with emphasis on the structure and function of the human body. Credit for this course cannot be applied toward

- BIO L325 Plant Form and Function Lab (1-3) The development, structure, and function of plant tissues and organs, with the primary emphasis on structures. Prerequisites: BIO 1101, L101. Corequisite: BIO 3325.
- BIO 3326 Plant Diversity (3) Taxonomy, structures, reproduction, and life cycles of fungi, algae, bryophytes, and vascular plants. Prerequisites: BIO 1101, L101. Co-requisite: BIO L326.

BIOL326 Plant Diversity Lab (1-3) Taxonomy, structures, reproduction, and life cycles of fungi, algae, bryophytes, and vascular plants. Prerequisites: BIO 1101, L101. Co-requisite: BIO 3326.

BIO 3347 Human Anatomy and Physiology I (3) Anatomical terminology, a survey of cell types and tissues, and detailed coverage of the integumentary, skeletal, muscular, and nervous systems of humans. *Prerequisites: BIO 1100, L100 or BIO 1110, L110* and CHM 1142, L142 or CHM 1115, L115. Co-

- BIO L413 Limnology Lab (1-3)
 Field and laboratory exercises in lake and stream science, including instrumentation, measurement, sampling, and analysis. Prerequisites: BIO 2229, L229, CHM 1143, L143. Co-requisite: BIO 4413.
- BIO 4414 Food Microbiology (3) Food spoilage, food preservation, food-borne pathogens, microbial metabolism, and molecular techniques. *Prerequisites: BIO 3372, L372, CHM 3342, L342. Co-requisite: BIO L414.*

BIO L414 Food Microbiology Lab (1-3) Advanced microbiological laboratory techniques including enumeration and analysis of bacteria in food, water, and dairy products. *Prerequisites: BIO 3372, L372, CHM 3342, L342. Co-requisite: BIO 4414.*

- BIO 4416 Environmental Microbiology (3) The taxonomy, diversity, and ecology of microbial populations in ecosystems, with the emphasis on the roles that they play in biogeochemical cycles, their contributions to metabolic diversity, their interactions with animals and plants, their niches and bioremediation. *Prerequisites: BIO 3372, L372, CHM 3342, L342. Co-requisite: BIO L416.*
- BIO L416 Environmental Microbiology Lab (1-3) Environmental microbiological laboratory techniques including isolation, identification, and enumeration of microorganisms from aquatic and terrestrial environments. *Prerequisites: BIO 3372, L372, CHM 3342, L342. Co-requisite: BIO 4416.*
- BIO 4420 Field Vertebrate Zoology (4-7) The basics of vertebrate identification, with emphasis on phylogeny, anatomy, morphology, life histories, habitats, distributions, and conservation. *Prerequisites: BIO 1101, L101, CHM 1143, L143.*

 BIO 4421 Population Ecology (3)
 Animal and plant populations, food supply, competition, disease, fecundity, distribution, and other environmental factors. Management of endangered species and protected ecosystems are included. *Prerequisites: BIO 2229, L229, 3320, L320, CHM 1143, L143, and MTH 2210. Co-requisite: BIO L421.*

BIO L421 Population Ecology Lab (1-3) Field exercises in identifying ecological problems, formulating and testing hypotheses, and evaluating data using standard statistical methods. Prerequisites: BIO 2229, L229, 3320, L320, CHM 1143, L143, and MTH 2210. Co-requisite: BIO 4421.

BIO 4425 Field Botany (4-7) Survey of vascular plants from different habitats in southeast Alabama. Principles of plant taxonomy, including history and systems of classification and

of ions, states of matter, chemical equilibrium, and chemical bonding, and will incorporate examples from the biological sciences. *Co-requisite: CHM L115.*

- CHM L115 Survey of Chemistry Lab (1 2) The laboratory sessions will provide an overview of some of the basic concepts and techniques of general chemistry experiments. The students will conduct experiments that illustrate the concepts and principles learned in the Survey of Chemistry course lectures. *Co-requisite: CHM 1115.*
- CHM 1142 General Chemistry I (3) Emphasis is placed on the periodic table and stoichiometry, including chemical properties, physical states, and structure. Prerequisite: Pass MTH 1112 with at least a C (or a score of 0, 1, or 5 on the math placement exam). *Co-requisite: CHM L142.*
- CHM L142 General Chemistry I Laboratory (1-3) Experiments dealing with the periodic table, atomic structure, the gas laws, and stoichiometry. *Corequisite: CHM 1142.*
- CHM 1143 General Chemistry II (3) Acid-base theory, solutions, chemical equilibria, thermodynamics, kinetics, and electrochemistry. *Prerequisites: CHM 1142 and L142. Co-requisite: CHM L143.*
- CHM L143 General Chemistry II Laboratory (1 3) Experiments in acid-base theory, solutions, chemical equilibria, thermodynamics, kinetics, and electrochemistry. *Co-requisite: CHM 1143.*
- CHM 2242 Analytical Chemistry (3) The theoretical principles of modern quantitative wet-chemical methods for determining composition and concentration with rigorous treatment of solution equilibria. *Prerequisites: CHM 1143 and L143. Co-requisite: CHM L242.*
- CHM L242 Analytical Chemistry Laboratory (1 3) The practice of modern quantitative wet-chemical techniques in analytical chemistry. *Co-requisite: CHM 2242.*
- CHM 3342 Organic Chemistry I (3) An introduction to the chemistry of carbon compounds that develops the theoretical principles underlying organic materials. *Prerequisites: CHM 1143 and L143. Co-requisite: CHM L342.*
- CHM L342 Organic Chemistry I Laboratory (1 3) Experimental techniques and skills for preparing, manipulating, and reacting organic molecules. *Corequisite: CHM 3342.*

- CHM 3343 Organic Chemistry II (3) A continuation of CHM 3342 with emphasis on modern organic synthesis. Prerequisites: CHM 3342 and L342. Co-requisite: CHM L343.
- CHM L343 Organic Chemistry II Laboratory (1 3) Experimental techniques and skills for preparing, manipulating, and reacting organic molecules. *Corequisite: CHM 3343.*
- CHM 3350 Principles of Physical Chemistry (3) An introduction to the principles of chemical thermodynamics, reaction kinetics and chemical equilibrium. Prerequisites: CHM 3343; PHY 2253 and PHY L253, or PHY 2263 and PHY L263. Corequisite: CHM L350.
- CHM L350 Principles of Physical Chemistry Laboratory (1-3) Practical applications of thermochemistry, colligative properties, and reaction kinetics. *Co-requisite: CHM 3350.*
- CHM 3357 Biochemistry I (3) Physical and chemical properties of proteins, nucleic acids, fatty acids, and carbohydrates with emphasis on the relationship between chemical structure and biological function. *Prerequisite: CHM 3343. Co-requisite: CHM L357.*
- CHM L357 Biochemistry Laboratory (1 3) Laboratory experiments emphasizing the biochemical techniques used in isolation and characterization of macromolecules. *Co-requisite: CHM 3357.*
- CHM 3358 Biochemistry II (3) Introduction to the structure, function and metabolism of proteins, carbohydrates, lipids and nucleic acids; intermediary metabolism and bioenergetics; enzyme structure, function and kinetics; and storage and expression of genetic information. *Prerequisite: CHM 3357.*
- CHM 3381 Physical Chemistry I (3) Theory and applications of thermodynamics, reaction kinetics, and transport properties with an emphasis on the description of ideal/non-ideal gases and solutions.

- CHM L382 Physical Chemistry II Laboratory (1-3) A continuation of CHM L381 with an introduction to methods and techniques in computational chemistry and spectroscopy. *Co-requisite or prerequisite: CHM 3382.*
- CHM 4400 Special Topics in Chemistry (3) A study of topics of special interest, such as advanced physical chemistry, advanced analytical chemistry, advanced organic, group theory, surface chemistry, and colloid chemistry. *Prerequisites: CHM 2242 and CHM 3343.*
- CHM 4403 Advanced Organic Chemistry (3) A more in-depth study of many of the topics studied in Organic Chemistry I and II. Topics include reaction mechanisms, synthetic methods, structure determination using spectroscopic techniques, and stereochemistry.

management, legal aspects of administration, financial management, and organizational change.

CJ 3310 Psychology for Criminal Justice Officials (3) Behavior of subjects and police officers in normal and unusual conditions, arrest, interrogation, detention, incarceration, protest, demonstrations, riots, public calamities, reactions of special interest groups, minorities, and specialized tests.

CJ 3325 Juvenile Justice (3) Provides a basic overview of the American juvenile justice system, beginning with the development of the juvenile court and addressing the jurisdiction, role, responsibilities, administration, and organization of the juvenile justice system. Also examined are the interfaces between police, schools, and the court, the issues of child abuse, and the operation of treatment programs.

- CJ 3335 Private and Public Security Administration (3) An introduction to the administration of private security, the analog to the police in the public sector. Issues in private security concerning ethics, law, and policy, as well as administration, are considered.
- CJ 3345 Criminology (3) An examination of crime, overall and by category, cia4 TDc, categiti 6(of crimes)**T**J1918333 0 T-0.0002 T-c0.0035 Tw5(c. T(the)-6.6rff)6.5riminoleril4()**T**J-1918330 -1.04 TD0.0016 Tc0

naJ0 7.3(y)-3((s.)]TJ6-2 -1.26 TD0 Tw()Tj/TT4 1 T0-2 -1.2467 TD0.0002 Tc0.0103 Tw[(CJ 5

operations and administrations. Special emphasis is attached to current problems surfacing in law enforcement.

- CJ 4446 Current Issues in Correctional Operations and Administration (3) A detailed examination of applied concepts of leadership and problem solving in corrections and administration. Special emphasis is attached to current problems surfacing in corrections.
- CJ 4447 Current Issues in Legal Systems Operation and Administration (3) A study of the critical issues and concepts involved in modern court administration, including the law governing the presentation of evidence in the trial of criminal cases, analysis of the role of law, and the courts in American Society.
- CJ 4462 Polygraph: History and Investigative Applications (3) An historical perspective of the polygraph and an overview of legal issues concerning clinical polygraph examinations, criminal specific examinations, and the limitations of polygraphs.
- CJ 4470 Homeland Security (3) An examination of the political and social complexities and dilemmas associated with state and local law enforcement and federal agencies roles in the defense of our nation subsequent to September 11, 2001.
- CJ 4472 Cyber Crime (3) This course will introduce the topics of computer crime and computer forensics. Students will be required to learn different aspects of computer crime and ways to uncover, protect, and exploit digital evidence. Students will be exposed to different types of tools, both software and hardware, and an exploration of the legal issues affected by online and computer-related criminal conduct. The course will examine the evm-ciciamp.S6ographiAnt me andsu enfofepec7nfofeogrnfoexa cTJ0 -1.16.7TD0 Tc0Ant ,pations e1746.6.7.165

- CLA 4493 Guided Independent Study (1 to 3 credit hours per course per semester) Additional information is indexed under Guided Independent Research and Study.
- CLA 4494 Guided Independent Study (1 to 3 credit hours per course per semester) Additional information is indexed under Guided Independent Research and Study.

COMMUNICATION COURSE (COM)

COM 1110 Effective Communication (3) Practice in both oral and written communications. Focuses on improvement and development of pre-

- CS 3347 Advanced Programming II (3) Provides student the opportunity to gain experience and training in an additional high level language. Topics include interactive techniques, arrays, multiple forms, data files and databases, grids, graphics, OLE, DLL's and custom objects. Emphasis is on finding creative solutions to application problems. *Prerequisite: CS 2260.*
- CS 3357 Logical Structures of Computer Design(3) Boolean algebra and design and minimization of combinatorial and sequential circuits. This course includes laboratories that demonstrate how simple circuits are designed and what problems may be encountered in design, such as hazards and race conditions. *Prerequisites: CS 2261, MTH 2215.*
- CS 3365 Introduction to Computer Organization and Architecture (3) Organization and operation of computer systems. Topics include hardware components of digital computers, micro-programming, memory management, interrupt organization, addressing modes, and instruction formats. *Prerequisite: CS 3357.*
- CS 3370 Nature of Programming Languages (3) Basic principles and concepts of programming languages including what a programming language is, various paradigms that a language can follow, and how its syntactical and semantic structures can be specified. The traditional object-oriented paradigm will be presented as well as non-traditional paradigms based on symbolic logic (logic programming) and on functions in lambda calculus (functional programming). *Prerequisite: CS 3323* or 3330.
- CS 3372 For mal Languages and the Theory of Computation (3) Formal language theory, including the Chomsky hierarchy, is presented. Emphasis is placed on regular and context free grammars, finite state automata, and translators. *Prerequisite: CS 3370.*
- CS 4401 Special Topics in Artificial Intelligence (3) A continuation of Fundamentals of AI. A topic of research including logic programming, fuzzy sets genetic algorithms, artificial neural networks, or pattern analysis is included. *Prerequisite: CS* 3331.
- CS 4420 Introduction to Database Systems (3)

CS 4462 Special Topics in

- DRA 3352 Sound Techniques (2-2) A study of digital and analog recording techniques, recording equipment, and application.
- DRA 3354 Rendering Techniques for the Theatre (2-2) A study and application of traditional and experimental techniques for theatrical rendering, including watercolor, markers, pastels, pencils, and other media.
- DRA 4443 Theatre History I (3-3) Through the study of literature and dramaturgy, this course traces the history of theatre from the origins of drama to English Restoration drama of the 18th century. *Prerequisite: Completion of ENG 2205.*
- DRA 4444 Theatre History II (3-3) Through the study of literature and dramaturgy, this course traces the history of the theatre from the 19th century to the present. *Prerequisite: Completion of ENG 2206*
- DRA 4451 Directing I (3-3) Script analysis and directing principles with studies in the direction of scenes from contemporary plays. *Prerequisite: DRA 3301.*
- DRA 4452 Directing II (2-3) Advanced study of directing, extending to period styles and culminating with the production of a one-act play. *Prerequisites: DRA 3301 and DRA* 4451.
- DRA 4455 Theatre Senior Capstone (2) Comprehensive exit assessment of student competencies in theatre. The student will develop a major field-related project, pass an exit exam, and complete a program assessment. Project proposals must be submitted prior to the semester in wh.3(3(o)0.8(r to)6.6(the)4.6(sem)52:h)6.6(the)4.6(1h6(Cap c0.0029 Tw[sty)-12.9(1ud)7.3(y)16.1(

- ECE 4401 The Integrated Program (3) This course is designed as a culminating course for Early Childhood Education students to examine the integrated nature of the ECE program. This course includes extensive laboratory experiences where students interact with diverse learners as they plan, implement, and evaluate integrated curriculum, including technology, and the total ECE program. *Prerequisite: Admission to TEP and completion of a minimum of 15 hours in the teaching field.*
- ECE 4454 Internship Seminar for Early Childhood Education (3) This course provides seniors an opportunity during internship to examine broad educational issues and concerns, topics on the state and local levels and those of personal interest. The scope of the course ranges from juvenile law, classroom management professionalism, professional development for teachers and other course topics. *Prerequisite: Admission to TEP; Co-requisite: ECE Internship.*
- ECE 4465 Early Childhood Education Internship (1-3) Experiences in internship, i.e., observation, participating and teaching with supervision. Twenty-five clock hours for each credit hour. *Prerequisite: Completion of all courses required by the State Department of Education and the approval of the Director of Professional Laboratory Experiences.*

ECE 4466 Early Childhood Education Internship (6) Half-day observing and teaching under supervision. Prerequisite: Holder of an Alabama Class B Teacher Certificate; successful completion of two years teaching experience in grades P-3; completion of all courses required for certification in Early Childhood Education and approval of the Director of the Professional Internship Program.

ECE 4474 Internship in Early Childhood Education (9) The Professional Internship Program is the culminating clinical field-based experience for students seeking certification in a teaching field. The Professional Internship Program provides the student with the opportunity to conduct classes and assume the role of a teacher while receiving supervision from a classroom teacher and a university supervisor for a period of one full semester. The student will demonstrate skills of the informed, reflective decision maker throughout the internship experience. *Prerequisite: Admission to TEP; Corequisite: ECE 4454.*

ECE 4491–4492 Guided Independent Research(1-3)

0039 Tw[Tcomple)5.4(-)**T**Jroval efectivi0.i.1(c)4.4(a)0.6(t2.8(du)7r0 Tc0 T4)**T**uTJe Twen9)

EDU 3310 The Professional Educator (3)

ELE 4474 Internship in Elementary Education (9) The Professional Internship Program is the culminating clinical field-based experience for students seeking certification in a teaching field. The Professional Internship Program provides the student

- ENG 3353 Advanced Creative Writing II (3) Practice in writing poetry, short fiction, or plays for class and instructor evaluation. Prerequisite: 6 semester hours of 2000-level English courses; ENG 3351 or permission of instructor
- ENG 3354 Advanced Nonfiction Writing (3) The literature of fact. Emphasis on student writing and analysis of nonfiction forms, such as personal narrative, autobiography, lyric in prose, and New0029 Tw0.7e Presrequisite 6Wsemester hours of 20WEn(lisp)#//mcpo

ENG 3354 iting3)

f quesc **th**n practice of y, incudtingexpreissionthroungym,rs,rhry(t)-24(hm(, magetr)615(y)-69((,)319()6.6moerapor,(and curs oflm.rn m;mis ofeG nt**RyM()6jtfisstinfiktseymand0020(Tr9.8ff23%/1(EA/IEP)/9.00036TR:0f))938oTins(d**iscuission ofnfictio (fo

ENG 337 4 an (Th o)6.9(yn ofN(onfiction97)7hLsitrat(ure (3)) JJ/TT2 1 Tf6 -1.20 TD0.0015 Tc0.0018 onfictionIsitrat(ur, whethet)6.5, a(tobiograph)6.9(y)-6.5(()) JJ 0 -1.04 TD0.0003 Tc0.003 Twpbiograph)9(y)-645((thn)(en) 6.6eisla Iparnctiunari (form)615. Lstn odvillrith

Pr rn q.quisit e 6 (s)-414(ms)-414(str)-414(rn)0.9w0029 T8.927 -1.04 TD-0.0001 Tc0.0043 Tw[hours of 2000-level(En(lisg

ENG 4410 Studies in Eighteenth-Century British Literature (3)

- ENG 4443 Southern Literature (3) Study of works by writers from the American South from colonial times to the present. *Prerequisite: 6 semester hours of 2000-level English courses*
- ENG 4452 Medieval and Renaissance English Drama (3) Survey of drama from the middle ages and Renaissance, excluding Shakespeare. Begins with brief

FINANCE COURSES (FIN)

FIN 3331 Managerial Finance I (3) Analysis, planning and control of internal and external finance decisions of a firm with emphasis on corporate structure. *Prerequisite: ACT 2292.*

FRENCH COURSES (FRN)

Note: For additional information, see Placement in Academic Courses.

- FRN 1101 Introductory French I (3) Introduction to the French language and culture.
- FRN 1102 Introductory French II (3) Introduction to the French language and culture.
- FRN 2201 Intermediate French I (3) Reinforcement of fundamental skills, study of sophisticated language structures and reading of simple French prose and poetry. *Prerequisite: FRN* 1102 or equivalent.
- FRN 2202 Intermediate French II (3) Reinforcement of grammatical skills, reading of simple French prose and poetry, composition and conversation. *Prerequisite: FRN 2201 or equivalent.*
- FRN 3301 Advanced French I (3) Advanced-level reading, intensive work on composition, comprehensive treatment of French phonetics. *Prerequisite: FRN 2202 or equivalent.*
- FRN 3302 Advanced French II (3) Advanced-level reading, intensive work on composition, aural comprehension, and practical conversation facility. *Prerequisite: FRN 2202 or equivalent.*
- FRN 3303 French Culture and Civilization (3) A survey of the geography, history, cultural achievements, institutions and daily life of the French. *Prerequisite: FRN 3301 or equivalent.*
- FRN 3310 French Culture on Location I (3-TBA)

GEM 3310 Land Survey Practice (3) The issues of boundary location and retracement are central to this course. Focuses on Alabama survey history, the practice of surveying in Alabama, professional ethics, and the Standards of Practice for Surveying in Alabama. *Prerequisite: GEM 3309.*

GEM L310 Boundary Retracement Seminar (1) The student gains practical field experience in an off-campus field boundary retracement project provided as a joint effort of Troy University, the Alabama Society of Professional Land Surveyors, and the Federal Bureau of Land Management. *Prerequisite: GEM 3310.*

GEM 3330 Advanced Measurement Analysis (3) Survey equipment calibration, survey astronomy, topographic mapping, control leveling, instrumentation error, and the propagation of error through survey calculations. This course is the second course of a one-year study of survey fundamentals. *Prerequisite: GEM 2220. Co-requisite: GEM L330.*

GEM L330 Advanced Measurement Analysis Lab (1) Field laboratory experience gaining astronomic observations for azimuth, using EDMI calibration baselines, conducting topographic mapping projects and control level loops, and testing for instrument errors. The student is introduced to the field use of data collectors. *Co-requisite: GEM 3330.*

```
GEM 3366 Photogrammetry and Remote Sensing (3)
,491.06(tiottio-6.3()6.amm/TT2 h.00orge-6.3(6Tors.)4.5()TJ/10.0ctr6.5()T12()TJ9(an)s.)4te/TT2 h,06.7(6 Tc-3 TD0.0012 Tc0.0021 Ty
Simagg 0.43 topuseea-2.5(ls )6.6(isnvnt r)6.76yof gi-TTJ0 -1.04 TD0.00117.0021 Ty Tw[A)al6.2(r im6.2(rag)s4.92)anvai6.2(rla-5.(cblefo
```

- GEM L391 Applications of GISLab (1) This laboratory provides the student the opportunity to learn and use ArcInfo GIS to accomplish a full range of GIS applications.
- GEM 4405 Route and Construction Surveying (2) Explores the theoretical foundations of route and construction surveying. Course topics are coordinate geometry (COGO), horizontal and vertical curve models, spirals, alignments, stationing, cross sections, areas, volumes, and route design elements. *Prerequisites: GEM 1100 or the equivalent, and GEM 3330. Co-requisite: GEM L405.*
- GEM L405 Route and Construction Surveying Lab (1) This field laboratory applies the principles of route and construction surveying, the use of civil design software, and the use of data collectors for practical design and field layout. *Co-requisite: GEM 4405.*
- GEM 4407 Land Development (1) Explores the concepts and problem/TT2 1p0/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(s)gn a6.6(and problem)/TT2 1/TT2 1l wi5.9(th) JJ0 -1.0333 TD0.0006 Tc0.0027 Tw[Ghe)d7.3(te-2.3(te-

- GEO 3350 Weather and Climate (3) A study of the physical properties of weather and climate. Prerequisite: Twelve hours of science or social science.
- GEO 4402 Political Geography (3) Analysis of the reciprocal effects of geography and political organization on the behavior of states including boundaries and frontiers, national resources, spatial strategy, and maritime power.
- GEO 4403 Conservation (3) The conservation of natural and human resources with emphasis on population expansion as the major element in changing ecology.
- GEO 4404 Economic Geography (3) Spatial patterns of economic activities including production, distribution, consumption, and the environmental consequences of these activities. *Prerequisite: Twelve hours of social science.*
- GEO 4406 Urbanism (3) Historical, physical, economic, and societal evolution of the urban area. American metropolitan

GREEK COURSES (GRK)

Note: For additional information, see Placement in Academic Courses.

- GRK 1111 Introductory Græk I (3) Introduction to the ancient Greek language with emphasis on pronunciation, basic vocabulary, fundamentals of grammar, and graded readings.
- GRK 1112 Introductory Greek II (3) Continuation of GRK 1111. Prerequisite: GRK 1111.

Note: The study of Greek may be continued under the headings of CLA 4400 Special Topics in Classics and CLA 4493-4494 Guided Independent Study. Also see index for "Independent Study and Research."

HISTORY COURSES (HIS)

- HIS 1101 Western Civilization I (3) Survey of developments in Western history from the pre-historic era to early modern times, including classical antiquity, Middle Ages, and Renaissance and Reformation.
- HIS 1102 Western Civilization II (3) Survey of developments in Western history from modern times to the contemporary era, including the Scientific Revolution, Enlightenment, French Revolution and Napoleon,

strations, and Vietnamization and withdrawal under President Nixon. Prerequisites: HIS 1111 and 1112 or permission of instructor. *May be used for political science credit.

HIS 3316 History of Alabama (3) A study of the demographic, political, social, economic, and religious aspects of Alabama's history, emphasizing the role of the state within the nation. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*

HIS 3318 History of American Women (3) An introduction to the history of women in America from the 17th century to the present, exploring the major economic, religious, social, and political ideas and developments which have shaped their status and role in American history. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*

- HIS 3330 Historical Archeology (3) An examination of the historical research methods and archaeological techniques used to investigate and interpret archaeological sites dating from the prehistoric period.
- HIS 3341 Medieval Europe (3) Western Europe from the fall of Rome to the Renaissance, including religious and intellectual traditions and the revival of governmental institutions. *Prerequisites: HIS 1101 and 1102 or permission of instructor.*
- HIS 3342 Renaissance and Reformation (3) Historical review of the transitional centuries bridging the medieval and the modern eras, including the rebirth of art and literature, the Protestant and Catholic reform movements, and the role of kings and states. *Prerequisites: HIS 1101 and 1102 or permission of instructor.*
- HIS 3343 Age of Absolutism (3) Survey of political and religious controversies that shaped affairs in Europe during the 16th and 17th centuries, emphasizing the flowering of monarchy and aristocracy. *Prerequisites: HIS 1101 and 1102* or permission of instructor.

HIS 3344 Age of Reason (3)

- HIS 4406 New South (3)
 An examination of the political, social, racial and religious trends and policies that defined the New South. Topics include reconstruction, redemption, agrarian unrest, Jim Crow, industrialization, Progressive Movement, World War I, the Great Depression, World War II, and the Civil Rights Movement. Prerequisites: HIS 1111 and 1112 or permission of instructor.
- HIS 4411 Colonial America (3) Study of the colonial period from European discovery to the end of the French and Indian War, with emphasis on the political, economic, and social developments that set the stage for the American Revolution. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*
- HIS 4412 The American Revolution and the New Nation, 1763-1815 (3)
 Ideas and institutions which led to American independence, the creation of the American union, and the development of a distinctive American culture in the Early National Era. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*
- HIS 4413 Antebellum, Civil War and Reconstruction, 1815-1877 (3)
 Examines nationalism, Jacksonian democracy, territorial expansion, slavery and sectional strife, and the resulting Civil War and Reconstruction. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*
- HIS 4414 Emergence of Modern America, 1877-1919 (3) Includes agricultural decline and crisis, industrialization and urbanization, Progressive reform era, World War I, and America as a world power. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*
- HIS 4415 Contemporary America (3) Includes America in the Great Depression, World War II and the Cold War, Civil Rights Movement, Johnson's Great Society, and America as a superpower. Prerequisites: HIS 1111 and 1112 or permission of instructor.
- HIS 4420 History of American Minorities (3) Study of selected ethnic, racial, cultural, social, and religious minorities, their treatment within and their contributions to American society. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*
- HIS 4423 American Foreign Policy to 1920 (3) A study of the factors, forces, and functions in the making of American foreign policy from the 1760s to 1920. Prerequisites: HIS 1111 and 1112 or permission of instructor. May be used for political science credit.
- HIS 4430 Civil Rights Movement (3) Study of the origins of the Civil Rights Movement in the late nineteenth and twentieth centuries, beginnings of change in the 1930s and the World War

II era, and the movement itself as defined by legal, political, and social conflict and change from the latter 1940s to the present. *Prerequisites: HIS 4414 and 4415 or permission of instructor.*

- HIS 4432 Russia to 1861 (3) A study of the history of the Eastern Slavic people from the prehistoric period through the Kievan, Appanage, Muscovite, and Imperial periods, from Peter the Great to the emancipation of the serfs in 1861. Prerequisites: HIS 1101 and 1102 or permission of instructor.
- HIS 4433 Russia Since 1861 (3) The development of the revolutionary movements and tsarist reform attempts, World War I, revolutions of 1917 and Bolshevik victory, establishment of the Stalinist state, World War II, Cold War, Soviet domestic problems, and the disintegration of the USSR. *Prerequisites: HIS 1101 and 1102 or permission of instructor.*
- HIS 4434 Major Personalities in the Development of Civil Rights in America (3) Study of important civil rights personages and their writings from Frederick Douglass and other pre-Civil War activists and thinkers to the present. *Prerequisite: HIS 4430.*
- HIS 4435 Historical Geography of North America (3) An analysis of the physical and cultural factors in the development of North America from early

- HIS 4450 Environmental History of the U.S. (3)
 An introduction to environmental history of the United States from the 18th century to the late 20th century, emphasizing the post-World War II period. The course will focus on the historical development of the science of ecology, the origins of environmental problems and solutions attempted by government and experts, as well as responses by grassroots activists over time. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*
- HIS 4451 The Far East (3) Study of the development and interaction of Chinese, Japanese, and Korean civilizations, the impact of Western cultures, twentieth century conflicts, resolutions and accommodations. *Prerequisites: HIS 1101 and 1102 or permission of instructor.*
- HIS 4454 Western Thought since the 17th Century (3) Principal ideas and political thinking from the Age of the Enlightenment to the present. *Prerequisites: HIS 1101 and 1102 or permission of instructor.*
- HIS 4470 Or al History (3) An introduction to the met

HIS 4499 Internship in History (1-3) Supervised work in an agency that can provide practical experience in the field of study. *Prerequisites: Senior standing, at least 2.5 GPA, 12 hours in upper-division courses in the field, and permission of supervising instructor, department chair and/or dean.*

UNIVERSITY HONORS PROGRAM COURSES (HON)

Please see the index for additional information regarding the University Honors Program.

HON 1101 Freshman Honors Colloquium (3) The first in a series of interdisciplinary seminars for University Honors Program candidates, combining class work with focus on the humanities, social sciences, natural sciences, attendance at campus and community events, and University Honors Program student activities. *Prerequisite: admission as a candidate for University Honors Program in fall semester of the freshman or sophomore year.*

HPR 1138	Clog Dance Techniques I (1) Physical education activity course.
HPR 1139	Aerobic Dance I (1) Physical education activity course.
HPR 1141	Jogging (1) Physical education activity course.
HPR 1142	Weight Training (1) Physical education activity course.
HPR 1144	Step Aerobics (1) Physical education activity course.
HPR 1145	Slide Aerobics (1) Physical education activity course.
HPR 1146	Physical Defense for Women (1) Physical education activity course.
HPR 2200	Health Concepts (1-1) A study of health concepts that characterizes a process in the life cycle that is typical of every individual.
HPR 2201	Camping and Outdoor Education (1-1) Camping, leadership and program planning.
HPR 2202	First Aid and Safety and CPRO (2-2) Community first aid and safety instruction and CPRO for the professional following American Red Cross techniques.
HPR 2204	Intermediate Golf (1) Physical education activity course.
HPR 2208	Intermediate Tennis (1) Physical education activity course.
HPR 2223	Advanced Synchronized Swimming (1) Physical education activity course.
HPR 2230	Rhythmic Activities for Special Populations (1) Physical education activity course.
HPR 2231	Folk Dance II (1) Physical education activity course.
HPR 2232	Modern Dance Techniques II (1) Physical education activity course.
HPR 2235	Ballet II (1) Physical education activity course.
HPR 2236	Jazz Techniques II (1) Physical education activity course.

	HPR 2238	Clog Dance Techniques II (1) Physical education activity course.
	HPR 2239	Aerobic Dance II (1) Physical education activity course.
	HPR 2240	Personal Health (2-2) Personal health as it applies to practices, knowledge and behavior.
	HPR 2241	Intermediate Jogging (1) Physical education activity course.
	HPR 2242	Intermediate Weight Training (1) Physical education activity course.
	HPR 2250	Foundations of Health Science (1-1) A study of the historical, philosophical and theo- retical foundations of health education and health promotion, including the current status and pro- jected trends in health education and promotion.
	HPR 2251	Foundations of Physical Education and SFM (2- 2) A study of the history and principles of health edu- cation and physical education with particular em- phasis placed on present practices and trends.
d	HPR 2252	Methods of Teaching Dance (2-2) Social, folk and square dancing, including basic rhythmic activities which can be taught in elemen- tary, middle and high schools.
	HPR 2260	Applied Fitness Concepts (2-2) Personal conditioning-based course focusing on training principles, modes of exercise, training tools, performance enhancers, measurement con- cepts and exercise prescription.
	HPR 2263	Lifeguard Training (3-3) Organization and teaching of the fundamental skills for water safety and the prevention of drowning. <i>Prerequisites: Advanced swimming or permission</i> <i>of instructor.</i>
	HPR 3330	Physical Skills Proficiency (2-2) This course covers the rules, regulations, terms, origin, development, safety, equipment, and per- formance of skills of the physical sport skills re- lated to HPR 4485/4486.
	HPR 3331	Physical Skills Proficiency II (2-2) Traces the historical development of fitness, condi- tioning, and wellness concepts for life. Identifies rules, regulations, and terminology of specified sport activities. Students are expected to perform specified skill tests in golf, soccer, swimming, ten- nis, and track and field with a proficiency level of 80%.

- HPR 3332 Modern Dance Techniques III (1) Physical education activity course.
- HPR 3340 Principles of Recreation (3-3) Overview of recreation on federal, state and local

courage the undergraduate student in sport and fitness management to remain current with contemporary developments in the sports industry. *Prerequisite: HPR 3355.*

HPR 4440 Governing Agencies in Sport (3)

- HPR 4475 Exercise Testing and Prescription (3-3) Course will examine the criteria for evaluation of health status of persons wishing to begin an exercise program, guidelines of establishing current fitness level, and the basic principles of exercise prescription. Levels of certification and criteria by ASSM will also be discussed. *Prerequisite: HPR* 4474.
- HPR 4476 Labor atory Practicum in Exercise Physiology (2-2)
 Students will be introduced to some of the measurement techniques routinely used in exercise physiology and will gain practical experience in administration of these tests. Emphasis will be placed on how to avoid measurement errors. *Prerequisite:* HPR 4474.
- HPR 4477 Theory and Techniques of Coaching Football (2-2) Offensive and defensive techniques, purchase and case of equipment, budgeting, ethics, rules, scouting and team conditioning.

- HS 2231 Peer Education-Drug Abuse Prevention (2) Introduction to peer education as a preventive procedure in working with campus drug and alcohol abuse. Techniques of peer teaching and peer counseling.
- HS 2232 Peer Education Practicum (1)
 - Supervised experience in the Campus Peer Education -Drug Abuse Prevention Program. Prerequisite: HS 2231 (May be repeated for a total of three hours credit).
- HS 3310 Human Behavior In the Social Environment I (3) The biopsychosocial aspects of human growth and development throughout the life cycle. Emphasis is placed on understanding the individual in interaction with ma-

IED 4493-4494 Guided Independent Study (1-3) Supervised study through field or laboratory projects, guided readings, creative endeavors or achievement of specific skills. *Prerequisites: junior or senior status, permission of guiding professor, approval of department chairperson and the dean. A written request is to be submitted to the department* IS 4460 E-Commerce Design (3)

This course introduces the basic concepts and language of e-commerce. Coverage includes the planning and development of an e-commerce site, including such issues as security, customer service, payment, and marketing. The course is designed to teach students to explore and evaluate e-commerce technologies, sites, and issues. *Prerequisite: IS 4447.*

JOURNALISM COURSES (JRN)

- JRN 3326 Advising Student Publications (3-3) Students successfully completing this class will have the ability to teach journalism, including how to produce magazine and newspaper layout; develop copy and/or storyboard for radio and television production; apply techniques of advertising, reporting and editing; and use current and emerging technology in the production of print and non-print journalism. *NOTE: For current or prospective* advisers of high school or college newspapers and yearbooks.
- JRN 3327 Sports Broadcasting (3-3) Advanced methods, techniques and performance styles for broadcast sports news and information. *Prerequisite: JRN 2201.*
- JRN 3330 Journalism Practicum (variable credit 1-3 hours) Supervised journalism-related experiences focusing on gathering information, writing, editing, photography, design, online journalism, electronic journalism, broadcast journalism, advertising and/or public relations.
- JRN 3350 Advertising Sales (3-3) Discussion of and practical experience in servicing accounts and selling advertisements. May require selling ads for the Tropolitan. *Prerequisite: JRN* 2220.
- JRN 3365 TV Studio Techniques and Producing (3-4) An introduction to the production elements, theories and procedures of producing news broadcasts for television. Lighting, set design, preparation, operation of equipment, graphics, editing, responsibilities of those members involved in the production, electronic news gathering (ENG), operation of remote equipment and interviewing are topics discussed in this class.
- JRN 4400 Special Topics in Journalism (1 to 3) Lecture, discussion, and research course designed to acquaint students with special topics in the fields of broadcast and print journalism. May be taken for a maximum of six hours.

- JRN 4440 Advanced Technologies in Journalism (3-4) An introduction to using advanced technologies and on-line reporting techniques in journalism and public relations.
- JRN 4489 Internship (5) Full-time work experience as a regular staff member of a print publication, electronic media, public relations setting, advertising office, sports information operation, etc. Student will work under the supervision of an on-the-job supervisor and report to a Troy University faculty adviser who will monitor the work experience. Student will also prepare written and oral reports. *Prerequisite: Approval of the academic adviser and director of the School of Journalism, a minimum of 75 hours of course work, and successful completion of the journalism internship workshop prior to registering for JRN 4489.*
- JRN 4490 Internship/Field Experience (variable credit 1-7 hours. Only one credit hour may be applied to a major in journalism or broadcast journalism.) Full-time work experience as a regular staff member of a print publication, electronic media, public relations setting, advertising office, or sports information operation. Student will work under the supervision of an on-the-job supervisor and report to a Troy University faculty adviser who will monitor the work experience. Student will also be required to prepare written and oral reports during the internship/field experience. Prerequisites: Approval of the academic adviser and director of

them. Prerequisites: BIO 1101, L101, CHM 1143, L143.

MB 4402 Marine Invertebrate Zoology (4)

MGT 3375 Human Resource Management (3) A survey of the major activities of human resource management function including recruiting, selection, placement, training, compensation, employee representation, and current issues. A prerequisite for 4000-level HRM courses. *Prerequisite: MGT* 3371.

MGT 4451 Supply Chain Management (3) This course presents an overview of supply operations of the organization and management of the distribution process from supplier to end user. Topics covered include: materials procurement policies and procedures, supply and distribution processes, development of materials specifications and statements of work, procedures for materials sourcing on a global scale, competitive bidding, price/cost and promotion in organizational settings. *Prerequisite:* MGT 3371.

- MGT 4482 Managing Health, Safety and Diversity (3) This course addresses the theory, practice and legal requirements in managing employee health, safety, and cultural diversity in organizational settings. *Prerequisite: MGT 3371.*
- MGT 4483 Human Resource Development (3) Theory and practice in human resource training and development applied to organizational settings. *Prerequisite: MGT 3371.*
- MGT 4485 Performance Appraisal and Compensation (3) Addresses theory, principles, practices, and legal requirements linking effective performance management and compensation and benefit systems in organizational settings. *Prerequisite: MGT 3371.*
- MGT 4490 Total Quality Management (3) An overview of the strategies and means used by leading companies throughout the world to obtain outstanding quality results and strong competitive positions. Focuses on the continuous improvement of quality of product and service, and the resulting benefits in reduced costs, increased productivity, and higher levels of customer satisfaction. *Prerequisites: MGT 3373 and QM 3341.*
- MGT 4496 Selected Topics in HR (3) An in-depth study of a broad range of human resource management topics. Individual investigations and reporting are emphasized in semi60.0032ol3(man)human73 and bE.0001 9(i)-cs. Indivi re-

dures and practices learned. Vehicles to deepen this

MSL 4401 Leadership and Management (3) This course builds on the experience gained at the MTH 1100 Fundamentals of Algebra (3)

Topics include integer and rational arithmetic, linear equations, inequalities, integer exponents, polynomials and factoring, rational expression. *Prerequisite: Placement or a grade of C or better in MTH* 096. Note: This course is for institutional credit

- MTH 2251 Mathematical Concepts for K-6 Teachers I (3) An examination of some of the major topics encountered in the teaching of elementary mathematics with emphasis on number theory, order of operations, definitions of and operations with rational and irrational numbers, estimation, definitions and algorithms of the four operations, numeration systems, bases other than ten, and problem solving. *Prerequisite: MTH 1110 or 1112. Note: Credit will not count toward any major or minor in mathematics.*
- MTH 2252 Mathematical Concepts for K-6 Teachers II (3) An examination of some of the major topics encountered in the teaching of elementary school geometry with emphasis on measurement, area, volume, congruence, polygons, circles, constructions, motion geometry, polyhedra, and similarity. *Prerequisite: MTH 1110 or 1112. Note: Credit*

MTH 4460 Topology (3) An introduction to metric and topological spaces and associated topics, separation axioms, compactness, and connectedness. *Prerequisites: MTH 2227* and 3318.

- MTH 4474 Internship in Mathematics Education (9) The Professional Internship Program is the culminating clinical field-based experience for students seeking certification in a teaching field. The Professional Internship Program provides the student with the opportunity to conduct classes and assume the role of a teacher while receiving supervision from a classroom teacher and a university supervisor for a period of one full semester. The student will demonstrate skills of the informed, reflective decision maker throughout the internship experience. Prerequisite: Admission to TEP. Corequisite: SED 4454.
- MTH 4481 Methods and Materials for the Secondary Teacher (3)

MUS 1102 Music Theory I (3-3) Study of fundamental characteristics of tonal music. Prerequisite: Grade of C in MUS 1100 or acceptable score on placement test. Students must take placement test before enrolling in this sequence. Co-requisites for music majors: MUS 1105 and 1107.

MUS 1103 Music Theory II (3-3) Study of modulation, secondary dominants, seventh chord resolution, two- and three-part forms, and

evaluation for music in grades P-67u0 techniques suit-26thonsd-(c)

Continuation of improvisation techniques. *Prerequisite:* MUS 1108.

- MUS 2230 Survey of Music Industry An introduction to practices and inter-relationships of the music industry, such as retail, recording, distribution, legal aspects, publishing media and employment.
- MUS 3300 History of Jazz (2-2) History of jazz and pop styles from 1900 to the present. Analysis of harmonic principles and common practices of each major period.
- MUS 3301 Music History I (2-2) Evolution of music, stylistic characteristics of major movements and their relationship to literary, artistic and social trends. This course includes the pre-Christian, Romanesque, Gothic and Renaissance periods. *Prerequisite: MUS 1103.*
- MUS 3302 Music History II (2-2) Includes composers, music literature, style characteristics and societal influences of the Baroque, Classic, Romantic and Post-Romantic periods. *Prerequisite: MUS 1103.*
- MUS 3303 Music History III (2-2) Composers and musical works from Impressionism through the late 20th century, and the non-musical events that influenced them. Additional focus on world music. *Prerequisite: MUS 1103.*
- MUS 3305 Music Technologies (3-3) Study of the applications of the microcomputer to music teaching and to the management, planning, and record-keeping tasks of the music educator.
- MUS 3306 Conducting (3-3) Basic conducting techniques for instrumental and choral groups. Includes score study, rehearsal techniques and interpretation of various styles. *Prerequisite:* MUS 1103.
- MUS 3346 Educational Assessment in Fine Arts (3-3) This course provides a broad foundation in all aspects of assessment as it is applied to the P-12 music and art classroom, from learning theory to practical application of assessment techniques, data management, critical thinking, progress reporting and portfolio building. Assessment task design in the artistic response modes is covered, and a series of assessments that can be implemented in the music/art classroom are developed. *Prerequisite: Admission to TEP.*
- MUS 3351 Class Brass (1-2) Group instruction in techniques of playing and teaching brass instruments.
- MUS 3352 Class Woodwinds (1-2) Introduction to each of the principal woodwind instruments, emphasizing teaching techniques suitable for band classes.

MUS 3353	Class Percussion (1-2) Group instruction in playing and teaching the prin- cipal pitched and non-pitched percussion instru- ments.
MUS 3354	Class Strings (1-2) Group instruction in techniques of playing and teaching stringed instruments.
MUS 3356	Class Voice (1-2) Introduction to the use of the singing voice for non- voice principals in music education.
MUS 3358	Beginning Folk Guitar (1-2) Basic introduction to guitar chording and accompa- nying songs in the classroom or in informal set- tings.
MUS 3361	Integrating Music into the Curriculum (3-3) Basic skills and methods of presentation and

MUS 4400, 4401, 4402 Selected Topics (1-3 credit hours per course)

ments of patients through the life span. Provides opportunities for students to develop health assessment skills by performing health assessments of essentially well individuals at various levels through the life span. Includes communication of findings. *Prerequisites: Admission to the ASN Program, ENG 1101, BIO 3347, L347, MTH 1112, PSY 2200. Prerequisite or corequisites: BIO 3348, L348.*

- NSG 1140 Basic Nursing Concepts II (3-3) Builds on the concept of human-environment interaction throughout the life span. Focuses on the use of the nursing process to explore adaptive strategies of individuals to common and altered health states. *Prerequisites: NSG 1130, 1131, 1135, 1151, 2213, BIO 3348, L348, PSY 3300, and TROY 1101. Corequisites: NSG 1141 or 1110.*
- NSG 1141 Basic Nursing Practicum II (3-6) Focuses on the role of the registered nurse in application of the nursing process to assist individuals in adapting to common and altered health states. *Prerequisites: NSG 1130, 1131, 1151, 1135, 2213, BIO 3348, L348, PSY 3300 and TROY 1101. Corequisites: NSG 1140.*
- NSG 1151 Hospital Measurements (1-1) A practical approach to using mathematical computations in health-related situations. Focuses on mathematics computations as applied in selected health care settings. Mastery of the use of different systems of measurement will be a priority. Includes an exam on computation of dosages and solutions, requiring completion with 85% accuracy. *Prerequisites: Admission to the ASN Program, ENG 1101, MTH 1112, PSY 2200, BIO 3347, L347.*
- NSG 2202 Pharmacology (2-2) Focuses on the general classification of drugs, pharmacological actions, clinical usage, methods of administration, usual dosage, side effects, contraindications, toxic reactions, and related nursing implications. *Prerequisites: NSG 1140, NSG 1141 or 1110, and BIO 3372, L372.*
- NSG 2213 Nutrition (2-2) Introduces the concept of nutrition and its importance to health throughout the life span. Focuses on Introduces (health)7.1(througho)6.6(classificauses)0.09tfocuses healysual dosar-st0.0cuses of fses4(m)5.97id**d**or

2202, 2253, 2256, 2266, 2282, 2283. Co-requisite: NSG 2280.

- NSG 2282 Gerontological Nursing Concepts (2-2) Focuses on the adaptive responses of older adults with multi-system stressors within the human environment interactive system. Emphasizes the interrelatedness of internal and external dimensions. Discusses the use of the nursing process to maintain or improve quality of life for older adults. Prerequisites: NSG 1140, NSG 1141 or 1110, NSG 2271, NSG 2272, BIO 3372, L372. Co-requisite: NSG 2283.
- NSG 2283 Gerontological Nursing Practicum (2-4) Focuses on the role of the registered nurse in the application of the nursing process to assist older adults with multi-system stressors in a variety of settings. *Prerequisites: NSG 1140, NSG 1141 or 1110, NSG 2271, NSG 2272, BIO 3372, L372. Corequisite: NSG 2282.*

(BSN Program)

- NSG 1101 Health Concepts (1) Provides opportunity for exploration of individual health values, beliefs, and behaviors. Examines impact of exercise, nutrition, and stress on health. Explores beliefs of time management, relaxation, and play in promoting and maintaining health. Open to all majors.
- NSG 1105 Medical Terminology (1) Develops the use of Latin and Greek prefixes, root words, and suffixes to understand medical terminology. Open to all majors.
- NSG 1150 First Responder (1-2) Provides the learner with cognitive and psychomotor skills to act in emergency situations. Topics include CPR, patient head-to-toe evaluation, bleeding and shock, internal and external body injuries, splinting, poisons, bites, burns, and drownings. May audit for recertification. Open to all majors.

NSG 1160 Introduction to Technology in Nursing Education (1) Provides a foundation for using computer technology in learning; addresses digital communication, resources and research. General topics include communication through electronic mail and course discussion using the World Wide Web as an information tool, online scholarly research, and digital presentations. Course focus is the application of technology skills in learning. Open to all majors.

NSG 2201 Dosage Calculations (1) Calculations of medication dosages including conversions from one measuring system to another, symbols used in medication administration, and arithmetic computations. *Prerequisite: Admission* to BSN Program or permission of instructor.

- NSG 2204 Nutrition (2) A study of the nutrients, their utilization in the body, and their importance in the health of individuals throughout the life cycle. Examines dietary patterns of various cultural, ethnic, and religious groups. Explores food safety and nutrition research. Open to all majors.
- NSG 2205 Human Growth and Development (3) Examines developmental theories and internal and external dimensions of growth and development. Emphasizes tasks, stressors, common health alterations, and anticipatory guidance specific to developmental stages throughout the life span. Open to all majors.
- NSG 2211 Human Nutrition (3) Explores the relationship between nutrition and health. Emphasizes the roles of nutrients, their utilization in the human system and their contributions to the health of individuals throughout the life span. Includes dietary patterns of various cultural, ethnic, and religious groups, nutritional assessments and food safety. Open to all majors.
- NSG 2220 Health Science Informatics (3) Provides a foundation for the study of information and its utilization through computer technology; encompasses access, dissemination, and management of health science information and Internet communication. General topics include communication through electronic mail, using the World Wide Web as an information tool, online scholarly research, and digital presentations and publishing. Course focus is the application of technology skills in health science fields. Open to all majors. Prerequisite: Sophomore standing.
- NSG 2240 Spanish for Healthcare Providers (2) Elementary-level instruction in Spanish language and culture, all oriented to the practice of medicine with Spanish-speaking patients. No prior knowledge of Spanish is required. Students develop basic listening, speaking, reading and writing skills to successfully perform linguistic tasks allowing them to communicate in everyday situations (e.g. greeting, narrating present and past events, describing, ordering, comparing and contrasting). *Prerequisite: Permission of instructor.*
- NSG 2285 Perspectives of Aging (2) Provides a psychological, physiological and sociological knowledge base for interacting with the aging client. Identifies senescence and alterations associated with the aging process. Examines the role of the older person within the human environment interactive system. Open to all majors.
- NSG 3301 Pharmacology (2) Acquaints the student with the historical aspects of pharmacology, pharmacological terms, standards and controls, characteristics of various drug classi-

3348, and L348. Prerequisite or co-requisite: NSG 3325/3326.

- NSG 3302 Essentials of Operating Room (OR) Nursing (1) Focuses on the functions of the registered nurse in the peri-operative setting. *Prerequisites: NSG 3325, 3326.*
- NSG 3303 Essentials of Operating Room (OR) Nursing Practicum (1-2) Focuses on clinical experience for preparation for the role of the registered nurse for meeting the emergency preventive and restorative health needs of patients in hospital operating rooms and outpatient surgery centers. *Prerequisites: NSG 3325, 3326.*
- NSG 3306 Perspectives of Professional Nursing (2) Introduces students to the principles, values and standards implicit in the profession of nursing. Explores past, present and emerging roles of professional nurses. Presents a practical approach to the development of critical thinking, testing and therapeutic communication skills. *Prerequisite: Admission to BSN Program or permission of instructor.*
- NSG 3309 Health Assessment (2) Focuses on the assessment phase of the nursing process as a means of collecting data for use in making nursing decisions. Emphasizes acquisition

NSG 3332 Child Health Nursing (3)

Provides theoretical foundation for the nursing care of children. Examines the relationship between growth and development and the adaptive responses of children within the human-environment interactive system. Emphasizes the nurse's role in and group responses to complex, multi-system stressors across the life span. *Prerequisites: Successful completion of all nursing courses in semesters I, II, and III of the BSN clinical nursing sequence. Co-requisite: NSG 4414.*

- NSG 4414 Nursing Concepts III Practicum (2-4) Provides clinical learning opportunities for students to examine individual and group responses to complex, multi-system stressors, within the humanenvironment interactive system. Emphasizes use of the nursing process in diagnosing and treating individual and group responses to complex, multisystem stressors across the life span. Prerequisites: Successful completion of all nursing courses in semesters I, II and III of the BSN clinical nursing sequence. Co-requisite: NSG 4413.
- NSG 4415 Nursing Leadership/Management (2) Provides the theoretical foundation for implementation of the leadership/management role of the professional nurse. Explores leadership/management theories and principles and the nature of organizations. Emphasizes strategies for utilizing leadership/management skills in various dimensions of the human-environment interactive system. Prerequisites: Successful completion of all 3300-level nursing courses.
- NSG 4417 Senior Seminar (1) Explores past, present, and emerging roles of professional nurses and examines internal and external dimensions affecting the nursing profession. *Prerequisites: Successful completion of all 3300 level nursing courses.*
- NSG 4419 Research Process in Nursing (2) Explores the steps in the research process and the legal and ethical considerations in the conduct of nursing research. Examines variation in research designs, types of measurement tools, validity, and reliability. The course concludes with application of existing research to nursing practice. Prerequisite: Successful completion of all nursing courses in semesters I and II of the BSN clinical nursing sequence.
- NSG 4421 Senior Clinical Preceptor ship (3-9) Facilitates transition into the nurse generalist role by providing opportunities for students to refine nursing practice and leadership/management skills and develop more in-depth knowledge in a selected clinical area under the guidance of an approved preceptor. Prerequisites: Successful completion of 3300 level nursing courses.
- NSG 4430 Advanced Nursing Theory (3) Examines individuals and group responses to complex, multi-system stressors within the human environment. Explores complex multi-system processes. Emphasizes the nurse's role in diagnosing and treating individuals and groups in complex, multi-system stressors in acute care environments. *Prerequisites: Successful completion of all general studies requirements, NSG 3370, NSG 3309, NSG 3310, NSG 4405, NSG 4406, and NSG 4407. Corequisite: NSG 4431.*

- NSG 4431 Advanced Nursing Preceptorship (2-6) Provides clinical learning opportunities for students to examine individual and group responses to complex, multi-system disease processes. Emphasizes diagnosing and treating individuals and groups in a variety of settings. Prerequisites: Successful completion of all general studies requirements, NSG 3370, NSG 3309, NSG 3310, NSG 4405, 4406, and 4407. Co-requisite: NSG 4430.
- NSG 4493-4494 Guided Independent Study (1-3) Additional information is indexed under Academic Regulations. Prerequisite: Permission of instructor. Also see index for "Independent Study and Research."

PHILOSOPHY COURSES (PHI)

- PHI 2201 Introduction to Political Philosophy (3) Major Classical sources of political thought and the application of these sources to contemporary political issues.
- PHI 2203 Introduction to Philosophy (3) Brief history of philosophical ideas and the basics of Aristotelian logic.
- PHI 2204 Ethics and the Modern World (3) An introduction to basic ethics and to contemporary ethical issues.
- PHI 3301 Western Philosophy (3) Survey of philosophical ideas from the ancient Greeks through the 20th century.

PHYSICS COURSES (PHY)

- PHY 2252 General Physics I (3) An introduction to the laws of mechanics and thermodynamics. *Prerequisite: MTH 1114 or 1115. Co-requisite: PHY L252.*
- PHY L252 General Physics I Laboratory (1) Laboratory work emphasizes basic principles of mechanics and thermodynamics, the use of measuring instruments, and the interpretation of data. *Corequisite: PHY 2252.*
- PHY 2253 General Physics II (3) An introduction to the laws of optics, electricity and magnetism. *Prerequisite: PHY 2252, L252. Co-requisite: PHY L253.*
- PHY L253 General Physics II Laboratory (1) Laboratory work emphasizes basic principles of electricity, magnetism and optics, the use of measuring instruments, and the interpretation of data. *Co-requisite: PHY 2253.*

- PHY 2262 Physics I with Calculus (3) Principles and laws of mechanics and thermodynamics, utilizing the methods of calculus. Prerequisite: MTH 1125. Co-requisite: PHY L262.
- PHY L262 Physics I with Calculus Laboratory (1) Laboratory work emphasizes basic principles of thermodynamics and mechanics, the use of measuring instruments, and the interpretation of data. *Corequisite: PHY 2262.*
- PHY 2263 Physics II with Calculus (3) Principles of electricity, magnetism and optics, utilizing the methods of calculus. *Prerequisite: PHY 2262, L262. Co-requisite: PHY L263.*

PHY L263 Physics II with Calculus Laboratory (1) Laboratory work emphasizes basic principles of electricity, magnetism and optics, the use of measuring instruments, and the interpretation of data. *Co-requisite: PHY 2263.*

- PHY 4410 Modern Physics (3) Special relativity, quantum mechanics, and many electron systems. Prerequisites: MTH 1125 and PHY 2253, L253 or PHY 2263, L263. Co-requisite: PHY L410.
- PHY L410 Modern Physics Laboratory (1) Selected experiments in modern physics. Corequisite: PHY 4410.
- PHY 4411 Advanced Modern Physics (3) Foundations of statistical physics, solid state physics, nuclear physics, elementary particles, astrophysics, and cosmology. *Prerequisite: PHY 4410*
- PHY 4420 Mechanics (3) Kinematics and dynamics of particles and systems of particles. Prerequisite: MTH 2227 and PHY 2253, L253 or PHY 2263, L263.
- PHY 4430 Electromagnetic Fields (3) Vector fields, dielectric and magnetic media, fields in conductors, electric and magnetic circuit elements. Maxwell's equations and boundary condition problems in one, two and three dimensions. *Prerequisite: MTH 2227 and PHY 2253, L253 or PHY 2263, L263.*
- PHY 4459 Optics (3)
 The principles of geometrical and physical optics. Image formation, refraction, diffraction, origin of spectra, polarized light, and optical activity. Prerequisite: PHY 2253 and L253 or PHY 2263 and L263. Co-requisite: PHY L459.
- PHY L 459 Optics Laboratory (1)
 Selected experiments in geometric and physical optics. Laboratory work emphasizes the basic principles of optics, the use of measuring instruments, and the interpretation of data. *Co-requisite: PHY* 4459.

- PHY 4491-4492 Guided Independent Research (1-4) A physics research project under the direction of a faculty member. The project must culminate in a written report with the results reported at a department seminar. Prerequisite: Senior standing or permission of department chair. Also see index for "Independent Study and Research."
- PHY 4493-4494 Guided Independent Study (1-4) Independent study for advanced students under the direction of a faculty member. Prerequisite: Permission of department chair. Also see index for "Independent Study and Research."
- PHY 4495 Topics in Physics (3) Focus on a topic of timely nature and/or special interest. Prerequisites: PHY 2253 and L253 or PHY 2263 and L263.

POLITICAL SCIENCE COURSES (POL)

- POL 2240 Honors American National Government (3) This course explores the stable political values that frame the US Constitution and have guided our societal environment for two hundred years. The course is intended for superior students and political science majors.
- POL 2241 American National Government (3) A study of the Constitution, federalism, the Presidency, Congress, the courts, and politics on the national level.
- POL 2260 World Politics (3) An investigation of the development, nature, and process of political actions across national boundaries in the global system. Topics include international security, comparative government, international political economy, international organizations, and new global issues.
- POL 3300 Foundations of Political Science (3) An introduction to the discipline of political science, this course offers an overview of the subfields and methods within the discipline.
- POL 3315 The Vietnam War (3) A study of the period 1946 to 1975 in Indochina with emphasis on the American involvement during and after the French colonial period, escalating involvement of the Kennedy and Johnson administrations, and Vietnamization and withdrawal under President Nixon. *Prerequisites: His 1111 and 1112.*
- POL 3330 Political Theory (3) An examination of selected advanced sources of classical and modern political theory. Theoretical perspectives, which are prominent in contemporary political science, are investigated.

POL 3340 U.S. Government – Executive Branch (3) An analysis of the American Presidency in the context of the Constitution, American political processes, national security, public opinion, and other branches of American government.

- POL 3341 U.S. Government Legislative Branch (3) An analysis of the structure and dynamics of the U.S. Congress in the context of its relationships to the Constitution, the presidency, the judiciary, political processes and subordinate levels of government.
- POL 3342 U.S. Government Judicial Branch (3) An analysis of the American federal judiciary in the context of its relationships to the Constitution, American political processes, the legislative and executive branches, state governments, and public opinion.
- POL 3343 American Political Processes (3) This course examines key topics in U.S. politics, specifically looking at national problems, actors and proposed solutions.
- POL 3351 International Relations (3) This course provides a comprehensive investigation of thinking about the relationship of both state and non-state actors in the international arena. It offers a framework for the further analysis of the discipline of International Relations including the principal schools of IR theory, the historical development of the contemporary international system, foreign policies of states, the search for state security, and the economic relationships between states within a global political context.
- POL 3360 Contemporary Political Thought (3) This course examines recent areas of research in political theory, including current issues of debate on the state, democratic theory, liberalism, conservatism, and feminism.
- POL 3364 State and Local Politics (3) An investigation of political processes and organization at the state and local level in the United States.
- POL 4402 Political Geography (3) An analysis of the reciprocal effects of geography and political organization on the behavior of states, including boundaries, national resources, spatial strategies, and maritime power.
- POL 4410 International Political Economy (3) An examination of the interrelationships between international politics and economics; states and markets, trade, foreign investment, international monetary affairs, foreign aid, state development strategies, and globalization.
- POL 4415 International Conflict (3) This course provides a detailed examination of patterns of international conflict and methods em-

ployed to manage them: bases, emergence, escalation, de-escalation, negotiation, mediation, termination, and consequences. Specific episodes of international conflict will be investigated.

- POL 4420 Constitutional Law (3) A survey of the legal, political, and methodological problems in constitutional law.
- POL 4421 Introduction to Public Administration (3) An introduction to the historical, institutional, and political context of the profession; current trends and issues; and the role of public administration in the larger governmental system.
- POL 4422 Public Policy Making (3) An introduction to the processes by which American public policy is formulated, implemented, and evaluated and to the roles of policy analysts in solving various public problems.
- POL 4423 American Foreign Policy to 1920 (3) A study of the factors, forces and functions in the making of American foreign policy from the 1760s to the end of World War I.
- POL 4424 Contemporary American Foreign Policy (3) This course examines the foreign policy processes of the United States: historical traditions, political

This course examines th

POL 4451 Public Personnel Administration (3) A survey of the basic principles and functions of parametric). May be used for Sociology credit. Prerequisite: MTH 1110 or higher, with a grade of C or above.

- PSY 3303 Educational Psychology (3) Characteristics of the learner and the teachinglearning process. Theories of learning, instruction, and motivation, and their application to students in grades P-12.
- PSY 3304 Abnormal Psychology (3) The study of mental disorders emphasizing their etiology, classification and amelioration as described in the current classification system of the American Psychiatric Association.
- PSY 3309 Advanced Statistics (3) Advanced quantitative methods in psychology. Topics include linear regression, analysis of variance, non-parametric techniques, estimation procedures, individual and multiple comparisons, and experimental design. *Prerequisite: PSY 3301.*
- PSY 3310 Sensation and Perception (3) A study of how sensory information helps both the human species and other animals to thrive. Exploration of the senses including their physiological makeup, development and functioning. Theoretical and empirical foundations of perception and the applications of perceptual knowledge are emphasized. *Prerequisite: Six semester hours of psychol*ogy and sophomore standing or above.
- PSY 3311 Research Methods (3) An introduction to the design, analysis, and interpretation of behavioral research, including strategies for reviewing scientific literature and organizing a research report. *Prerequisite: PSY 3301.*
- PSY 3312 Psychology of Women (3) The study of women's experience and gender issues in the context of psychological theory and research.
- PSY 3320 Child Psychology (3) The development of children from conception to puberty. Includes physical, cognitive, perceptual, language, social and emotional development.
- PSY 3322 Abnormal Child Psychology (3) A study of theories, research, etiology, assessment and diagnosis of mental disorders first seen in childhood or adolescence as defined by the current edition of the *Diagnostic and Statistical Manual of Mental Disorders.* Includes such disorders as ADHD, conduct problems, anxiety, mood, mental retardation, and autism.
- PSY 3325 Adolescent Psychology (3) Adolescents from puberty to early adulthood. Includes physical, cognitive, social, emotional, and personality development in cultural context.

- PSY 3330 Health Psychology (3) This course studies the science that connects behavior to health, including psychological processes and the relationship between health and human behavior.
- PSY 3332 Family Violence (3) An in-depth study of violence in families, including spousal abuse, child abuse, elder abuse, relationship dynamics, protection services, treatment programs, legal defense strategies, and current legislation. Prerequisite: junior standing or above. NOTE: May be taken for psychology or sociology credit, but not both.
- PSY 3340 Psychology of Learning (3) Introduction to learning and behavior in human and nonhuman animals, including fundamental principles and findings from laboratory investigations of classical, instrumental, cognitive, and social learning.
- PSY 3346 Educational Assessment (3) This course provides a study of measurement and evaluation techniques for the classroom teacher. Emphasis will be placed on the selection, evaluation, administration, scoring and interpretation of selected measures of student performance, achievement and behavior. The student will demonstrate skills in utilizing measurement data to plan appropriate learning activities for students. *Prerequisite: Admission to TEP. NOTE: May not be used to meet the requirements for the psychology major or minor.*
- PSY 3351 Theories of Learning (3) Critical analysis of the major theories of learning, including the works of Pavlov, Thorndike, Guthrie, Tolman, Hull, Skinner, and Mowrer.
- PSY 3360 For ensic Psychology (3) Forensic psychology is the application of the science and profession of psychology to questions and issues relating to law and the legal system. This course will introduce students to the specialty area of forensic psychology. Particular emphasis will be on applied aspects of the field. *Prerequisite: Six semester hours of psychology.*
- PSY 3365 Human Factor's Psychology (3) Analysis of theoretical issues and research methods related to the interaction between people and machines and human performance. Topics include information processing theory, human control systems and displays, task simulation, perceptual and motor factors limiting human performance. *Prerequisite: Six semester hours of psychology.*
- PSY 3370 Comparative Psychology (3) This course examines the development, causal mechanisms, evolutionary history, and function of the behavior of animals, including humans.

PSY 3380 Social Psychology (3) A theoretical and empirical analysis of social bePSY 4470 Advanced Theories of Developmental Psychology (3) Comparative study of major developmental theories from the exogenous, endogenous, and constructivist paradigms. Includes history, structural components, contributions, criticisms, evaluation, and relevant research of each theory. *Prerequisite: Six semester hours of psychology.*

PSY 4475 Theories of Training and Evaluation (3) Examines evaluation issues such as criteria development, organizational assessment, process and outcome criteria, along with instructional methodologies such as fairness in training, special populations, second careers, and ethics of organizational and industrial change. *Prerequisite: Six semester hours of psychology.*

PSY 4480 Senior Seminar in Psychology (3) A capstone course designed to integrate subject matter learned in previous courses, encourage critical analysis of contemporary issues, and contemplate future educational and employment opportunities in psychology. *Prerequisite: Senior standing.*

PSY 4491 Guided Independent Research (3) This course is designed to provide supervised research in the area of psychology. Opportunities for undergraduate research will be approved with attention to critical evaluation of research techniques, methods, and procedures. Selection of the problem must be approved by the professor under whom the study is to be conducted and the department chair or dean. A written request is to be submitted to the department chair at least two weeks in advance of the term in which study is to be undertaken. Preparation of a scholarly paper and oral defense may be required. Prerequisite: Junior or senior standing with a minimum overall GPA of 3.0. Guided independent research may be taken only in the applicant's major or minor field. May not be used to repeat a course for which a grade of D or below has been earned. Also see index for "Independent Study and Research.

PSY 4492 Guided Independent Research (1-3) This course is designed to prof**406** shoe of a state of the search in the area of psychology. Opportunities for undergraduate research will be approved with attenseat03 Tw8(se) [Sel0.01 Tf-2 Tw[c2ities)2 ap)7.1(pr) J2.96670.003 a sch2(e3.8333 (whoar()6.6c0.00296(is t(be paand)7..0028 Tw6(dee

techniques, methods of doing job surveys and ways of classifying information. *Prerequisite: HS 2230 or permission of instructor.*

- RHB 3360 Vocational Assessment (3) Processes, principles, and techniques used to diagnose vocational assets and liabilities of the individual. Emphasis upon the use of psychometric tests, work samples, and job samples. *Prerequisite: HS* 2230 or permission of instructor.
- RHB 3365 Introduction to Visual Impairment (3) This course will provide an understanding of the medical, psychological, social, educational, and vocational issues that professionals must understand in order to work effectively with persons who are visually impaired.
- RHB 3380 Medical and Vocational Aspects of Physical Disabilities (3) Examines specific physical disabilities from medical, psychological, social, and vocational points of view. Covers a number of disabling conditions including etiology, characteristics, and implications for treatment.
- RHB 3385 Rehabilitation of Persons with Sever e Disabilities (3) Course explores rehabilitation needs of persons with severe disabilities. Concepts, approaches, philosophy and ethical considerations related to independent living, supported employment, and advocacy efforts.
- RHB 4405 Juvenile Rehabilitation and Counseling (3) Treatment modalities, diagnostic techniques, intervention systems, concurrent problems, and counseling techniques with adolescents. Emphasis is upon evaluation of services, i.e., vocational, selfconcepts, academic, psychotherapy, peer relations, group counseling, family relations, and life skill development.
- RHB 4410 Rehabilitation Pre-practicum (1) Preparation for RHB 4420.

course will include communication, teamwork, and computer skills. *Prerequisite: RMI 3335 or permission of department chair.*

RMI 4460 Agency Management (3) The Agency Management course is designed to teach the fundamentals of establishing and operating an insurance agency or brokerage. This is a project-oriented class wherein students develop mission statements, strategic plans, marketing plans, operating plans and time charts in the areas of forming the corporation, licensing, choosing a product mix, developing markets, planning technology, staffing, training, sales, handling claims, and other administrative functions. Prerequisite: RMI 3335 or permission of department chair.

SCIENCE COURSES (SCI)

- SCI 2233 Physical Science (3) Basic chemistry and physics for non-science majors. Co-requisite: SCI L233. NOTE: Credit does not count toward a major in any science curriculum.
- SCI L233 Physical Science Laboratory (1) Laboratory experiments in basic chemistry and physics. *Co-requisite: SCI 2233.*
- SCI 2234 Earth and Space Science (3) Basic astronomy and geology for non-science majors. Co-requisite: SCI L234. NOTE: Credit does not count toward any major in the sciences.
- SCI L 234 Earth and Space Science Laboratory (1) Laboratory experiments in basic astronomy and geology. *Co-requisite: SCI 2234.*
- SCI 3335 Physical Geology (3) Constructive and destructive processes which alter the earth. *Co-requisite: SCI L335.*

utilized will include discussion, lecture, field experience, case studies, problem solving sessions, projects, and research.

SED 4454 Internship Seminar for Secondary Education (3) This course provides seniors an opportunity during internship to examine broad educational issues and concerns, topics on the state and local levels and those of personal interest. The scope of the course ranges from juvenile law, classroom management, professionalism, professional development for teachers and other course topics. *Prerequisite: Ad*- SOC 3331 Family Relations (3) Study of family, its origin, development, and problems affecting marital relations and happiness.

SOC 3332 Family Violence (3) A course to provide students with an in-depth study of the problems of violence in families including spouse abuse, child abuse, elder abuse, and the dynamics and dangers of violent relationships. The study will examine the root causes of family violence and the devastating, multi-generational effects of violence on its victims and society. Students will study current societal responses to family violence including protection services, treatment programs, legal defense strategies, and current legislation.

SOC 3345 Criminology (3) Study of crime and its causes and measurements. Topics include various explanations of criminal behavior, typology of crime, criminal justice system, and social relations to crime.

SOC 3350 Social Anthropology (3) An investigation of a major sub-discipline of anthropology using primary readings from its founders and contemporary ethnographic research while using a social anthropological approach.

SOC 3356 Sociology of Aging (3) Sociological examination of global social changes precipitated by the demographic phenomenon of the aging of U. S. society and other societies. Addresses the heterogeneity of the older population, their locations, perceptions, and constraints. Issues such as housing, transportation, health care, and death and dying are explored.

SOC 3357 Sociological Aspects of Human Sexuality (3) An examination of the cultural and social components of sexuality including current perspectives on sexuality, sex research and theory, cross-cultural perspectives and sexual diversity, gender issues, sexual relationships, sexual orientations, pregnancy and parenthood, sexually transmitted diseases, sexual victimization, sexuality across the life span, and recent social changes affecting sexuality in society.

SOC 3380 Social Behavior (3) Analysis of social behavior based on empirical research. Prerequisites: junior or senior standing and six hours of psychology, ENG 1102, or permission of instructor. NOTE: May be taken for psychology or sociology credit, but not for both.

SOC 4406 Urbanism (3) Historical, physical, economic, and social evolutions of urbanized areas. Emphasis on contemporary urban problems with implications for policy and planning. *Prerequisite: Twelve hours of social science.*

SOC 4408 Rural America: Past and Present (3) A study of rural society, its organization, agencies, institutions, population trends and composition, patterns of settlement, social processes and change in character. *Prerequisites: Twelve hours of social science.*

SOC 4409 Political Sociology (3)

other social institutions and organizations. *Prerequisite: Twelve hours of social science.*

- SOC 4435 The Sociology of Complex Societies (3) A history and analysis of complex organizations from early to modern times.
- SOC 4436 Social Evolution: Anarchy to Democracy (3) Social analysis of human history from bands to modern societies. *Prerequisite: Fifteen hours of social science.*
- SOC 4440 Sociology and the Internet (3) Provides an overview of using the Internet for social science research and practice. *Prerequisites: Nine hours of social science.*
- SOC 4441 The Sociology of Logic and Emotion (3) A study of the links between logic and emotions. Prerequisite: Nine hours of social science.
- SOC 4456 Gerontology (3) A survey of the aged in America, with emphasis on the psychosocial aspects of aging.
- SOC 4459 Medical Sociology (3) The sociological perspective applied to medicine. Topics include changing ideas of disease causation, the role of practitioners and patients, the institutional setting, differential delivery of health services, differential patterns of morbidity and mortality, and the politics of health.
- SOC 4490 Internship in Sociology (3) Applications of skills and knowledge of sociology in government agency, foundation, public service institution or similar situation under the supervision of a faculty member. *Prerequisite: Approval of the student's academic adviser and department chair.*

SOC 4491-4492 Guided Independent Research (1 to 3 credit hours per course per semester)
 Undergraduate research with attention to critical evaluation of research techniques, methods and procedures. Prerequisites: Junior or senior standing with a minimum overall GPA of 3.0, permission of guiding professor, approval of department chair or dean. A written request is to be submitted to the department chair at least two weeks in advance of the term in which the study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the office of University Records. Guided independent research may be taken only in the applicant's major or minor field. Also see index for "Independent Study and Research."

SOC 4493-4494 Guided Independent Study (1 to 3 credit hours per course per semester) Supervised study through field and laboratory projects, guided readings, creative endeavors or achievement of specific skills. *Prerequisites: Junior or senior standing, with a minimum overall GPA of 3.0, permission of guiding professor, approval of department chair or dean. A written re-* quest is to be submitted to the department chair at least two weeks in advance of the term in which the study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the office of University Records. Guided independent research may be taken only in the applicant's major or minor field. Also see index for "Independent Study and Research."

SOC 4495 Selected Topics (3) Designed as a vehicle for the exploration of topics of current interest within the major discipline of sociology.

SPECIAL EDUCATION COURSES (SPE) (COLLABORATIVE TEACHER)

- SPE 3302 Introduction to Moderate/Severe Disabilities (3) This course presents an overview of the social, emotional, physical, and learning characteristics of children and youth with moderate and severe disabilities. Emphasis is placed on information regarding the definition, prevalence, and etiology of moderate and severe disabilities as well as information pertaining to the classification, assessment, placement, instruction, and programming needs and services for individuals with moderate and severe disabilities. Prerequisite: Admission to TEP.
- SPE 3306 Teaching Students with Mild Disabilities (3) This course will focus on organizational procedures, universal design of curriculum, .00196(curriTf0 -TJT0.0006a

the design of a circle of care for students with complex needs. *Prerequisite: Admission to TEP.*

SPE 3330 Integrating Assistive Technology (2) This course will provide an overview of computerbased technologies as they relate to the teaching and learning of all students, as well as the use of assistive technology to facilitate the successful integration of individuals with disabilities. Selection, modifications, and classroom use of technologies to improve or bypass physical, sensory, communicative, learning, and social limitations will be explored. *Prerequisite: Admission to TEP.*

SPE 3340 Diverse Learners (3) This course is oriented toward identifying exceptional students and providing appropriate learning experiences in the classroom setting. This course is a survey of the nature and needs of exceptional children and an introduction to their educational programs.

SPE 3346 Assessment in Special Education (3) The purpose of this course is to provide students with a comprehensive study of assessment of the exceptional student. This course emphasizes the underlying concepts of tests and measurement, formal and informal assessment, test administration, the interpretation and utilization of test information for identification and eligibility, and the interpretation and utilization of diagnostic results in educational intervention. *Prerequisite: Admission* to TEP.

SPE 3349 Introduction to S24(tio)7.1(4(t TD(.9(i))5.7h)1.9M chi Dig)8.3(i)sabilie473.s(l) JJ0 -1.04 TD0.0002 TTD(49805 Tw rs (3))JJ/T

SPH 2214	Debate-Forensics Participation (1-3) (May be repeated for credit) Participation in a program of competitive public speaking and oral interpretation or related activi- ties.
SPH 2241	Fundamentals of Speech (3-3) Study of the principles and practices basic to all areas of oral communication.
SPH 2242	Advanced Public Speaking (3-3) Study and application of advanced techniques of oral communication for those who show unusual presence or potential ability in public speaking. Note: Admission to the class will be determined on the basis of the instructor's evaluation of the stu- dent's basic oral communication skills. <i>Prerequi- site: Advanced placement or SPH 2241.</i>
SPH 2243	Honor's Fundamentals of Speech (3-3) Study and application of the principles and prac- tices basic to all areas of oral communication. As part of the university's Honors Program, the course is designed to achieve the student's leadership ob- jectives through improved verbal and non-verbal communication skills by means of a focus on one substantive area of interest.
SPH 2251	Voice and Diction (2-2) Study of individual and group practice in the effec- tive use and control of the mechanics of oral deliv- ery with a focus on the "professional dialect," the general American dialect and/or the standard dia- lect. Includes use of the International Phonetic Alphabet.
SPH 3321	Communication Theory (3-3) Study of the nature of theory-building and commu- nication theory, and of the major classifications of contemporary communication theories. <i>Prerequi-</i> <i>site: SPH 2241 or permission of the instructor.</i>
SPH 3330	Interviewing (3-3) Study of the principles and practices of professional and personal interviewing, with an emphasis on oral communication and related topics such as re- sume writing.
SPH 3341	American Public Address (3-3) Study of the history and rhetorical criticism of ma- jor American speakers and their speeches from the Colonial to the Contemporary periods, with refer- ences to their biographical, intellectual, political y8bicpract

a

- SPN 2242 Intermediate Spanish II (3) Reinforcement of grammatical skills, reading of simple Spanish prose and poetry, composition and conversation. *Prerequisite: SPN 2241 or equivalent.*
- SPN 3332 Advanced Spanish I (3) Advanced-level reading, intensive work on composition, comprehensive treatment of Spanish phonetics. *Prerequisite: SPN 2242 or equivalent.*
- SPN 3333 Advanced Spanish II (3) Advanced-level reading, intensive work on aural comprehension and practical conversation facility, continued development of composition skills. *Prerequisite: SPN 2242 or equivalent.*
- SPN 3350 Hispanic Culture on Location I (3-TBA) An in-depth presentation of Hispanic culture combining lectures, readings, films, audiotapes, discussions and intensive language practice on the Troy campus with on-site visit to an Hispanic environment. Prerequisite: Permission of the instructor.
- SPN 3357 Hispanic Culture on Location II (3-TBA) An in-depth presentation of Hispanic culture combining lectures, readings, films, audiotapes, discussions and intensive language practice on the Troy campus with on-site visit to an Hispanic environment. Prerequisite: Permission of the instructor.
- SPN 4447 Readings in Hispanic Literature (3) In-depth study of the works of a selected major author, period or genre in the literature of Spain or Spanish America. Prerequisite: SPN 2242 or equivalent. May be repeated for credit.
- SPN 4450 Hispanic Culture and Civilization (3) A survey of the geography, history, cultural achievements, institutions and daily life of Spain and other Hispanic countries. *Prerequisite: SPN* 2242.
- SPN 491-4492 Guided Independent Research (1-3 credit hours per course per semester) Additional information is indexed under Guided Independent Research and Study.
- SPN 4493-4494 Guided Independent Study (1-3 credit hours per course per semester) Additional information is indexed under Guided Independent Research and Study.

SOCIAL SCIENCE COURSES (SS)

SS 3375 Introduction to Social Science Inquiry (3) Principles of pure and applied research for the social sciences. Special emphasis is given to the types of research methods employed by social scientists including survey techniques, field research, quasi-experimental designs and analytical procedures currently used in the social sciences. Prerequisite: general studies math.

- SS 3376 Applications of Social Science Inquiry (3) A detailed description of what social scientists do with the information they gather. Particular attention is given to descriptive and inferential statistics, the relationship between research and policy, evaluation research, and research ethics. *Prerequisite: general studies math.*
- SS 4474 Internship in Secondary Social Science Education (9) The Professional Internship Program is the culminating clinical field-based experience for students seeking certification in a teaching field. The Professional Internship Program provides the student with the opportunity to conduct classes and assume the role of a teacher while receiving supervision from a classroom teacher and a university supervisor for a period of one full semester. The student will demonstrate skills of the informed, reflective decision maker throughout the internship experi-

ence.

e

SWK 2280 Social Work Research I (3) Introduction to statistical analysis concepts and principles necessary for understanding research reports and for the interpretation of data. Use of microcomputer statistical programs in the analysis of univariate, bivariate, and multivariate data including parametric and non-parametric analysis techniques. Topics include descriptive techniques, averages and measures of variation, tests of statistical significance, correlation and regression, and analysis of variance. *Prerequisite: MTH 1110 or 1112 and IS 2200.*

SWK 2281 Social Work Research II (3) Introduction to research methodology and process with emphasis placed on the evaluation of practice. Understanding and using the journal research article as a tool for selecting appropriate intervention. Skills are built in using electronic data bases and information retrieval systems and integrated with writing skills necessary to critically evaluate the usefulness of research studies in practice application. *Prerequisite: SWK 2280.*

SWK 3301 Children and Family Services (3) Child welfare services from both the public and private sectors of social work practice will be assessed, emphasizing the availability and effectivevalues, and to develop goals. It also serves to assist non-traditional students considering a career change.

- TROY 1103 Study Skills (1) The primary purpose of this course is to teach students the skills needed to succeed in college. Structured for freshmen and sophomores, the skills taught will also benefit returning adult learners and any student having academic difficulties.
- TROY 3300 Career Preparation and Job Search Techniques (3) The primary purpose of this course is to aid stu-

The primary purpose of this course is to aid students in making a successful transition from college to career. It also serves to aid non-traditional students in career transition.