

- BCIS 450. Systems Design, Development and Implementation 3 cr.  
Design, development and implementation of business information processing systems. Includes maintenance, evaluation and system management considerations. Prerequisite: C or better in BCIS 350.
- BCIS 455. Design of On-Line Business Systems 3 cr.  
Covers analysis, design, and development of on-line, real-time computerized business-information systems. Prerequisite: C or better in BCIS 322 or consent of instructor.
- BCIS 458. Knowledge Management and Decision Support 3 cr.  
Design, evaluation and implementation of computerized decision systems. Prerequisite: C or better in BCIS 338 or consent of instructor. Majors may not use this course to satisfy the requirements.
- BCIS 460. Data Communications and Networks (f, s) 3 cr.  
Data communications for business computer systems. Local and wide area networks, data communications protocols and media, client-server and distributed processing systems. Prerequisite: C or better in BCIS 350 or consent of instructor.
- BCIS 465. Business Systems Simulation (f, s) 3 cr.  
Simulation of business systems. Model design, implementation, testing and analysis. Prerequisites: C or better in BCIS 322 and STAT 251.
- BCIS 470. Object-Oriented Systems Development Techniques (f, s) 3 cr.  
Design and implementation of n-tier information systems in the object-oriented environment, including web-based interfaces, business logic, and database communication. Prerequisite: C or better in BCIS 322 and BCIS 350 or consent of instructor.
- BCIS 475. Database Management Systems (f, s) 3 cr.  
Design, development, and use of database management systems in the business environment. Prerequisite: C or better in BCIS 350 or consent of instructor.
- BCIS 480. Ecommerce Security 3 cr.  
Introduction to securing network-based applications from internal and external threats. Fundamentals of network security, including TCP/IP, firewalls, intrusion detection, and vulnerability. Prerequisite: C or better in BCIS 460 or consent of instructor.
- BCIS 482. Management of Information Security 3 cr.  
Provides management overview of information security and thorough examination of administration of information security. Surveys field of information security including planning, policy and programs, protection and people relative to information security. Prerequisite: BCIS 110G or equivalent. Same as BCIS 575.
- BCIS 490. Selected Topics 1-3 cr.  
Current topics in business systems analysis. Prerequisites vary according to topics being covered. May be repeated for a maximum of 12 credits under different subtitles.
- BCIS 498. Independent Study 1-3 cr.  
Individual studies directed by consenting faculty with prior approval of the department head. Prerequisites: junior or above standing and consent of instructor. May be repeated for a maximum of 3 credits.
- **BIL—Bilingual Education**  
**Department of Curriculum and Instruction**
- BIL 355. Introduction to Bilingual/Multicultural Special Education 3 cr.  
Introduction to issues related to the provision of services to culturally and linguistically diverse students with exceptionalities. Same as SPED 355.
- BIL 489. Topics 3 cr.  
Course subtitled in the *Schedule of Classes*. May be repeated three times for a maximum of 9 credits.
- **BIOL—Biology**
- BIOL 101G. Human Biology 3 cr.  
Introduction to modern biological concepts. Emphasis on relevance to humans and their relationships with their environment. Cannot be taken for credit after successful completion of BIOL 111G or BIOL 211G. Corequisite: BIOL 101L.
- BIOL 101L. Human Biology Laboratory 1 cr. (3P)  
Laboratory for BIOL 101G. Laboratory experiences and activities exploring biological concepts and their relevance to humans and their relationship with their environment. Corequisite: BIOL 101G.
- BIOL 110G. Contemporary Problems in Biology 4 cr. (3+3P)  
Fundamental concepts of biology will be presented using examples from relevant problems in ecology, medicine and genetics. For nonscience majors only. Branch campuses only.
- BIOL 111G. Natural History of Life 3 cr.  
Survey of major processes and events in the genetics, evolution, and ecology of microbes, plants and animals, and their interactions with the environment. Appropriate for nonscience majors. Must be taken with BIOL 111L to meet general education requirements.
- BIOL 111L. Natural History of Life Laboratory 1 cr. (3P)  
Laboratory experiments, demonstrations and exercises on interrelationships among organisms, biodiversity, processes of evolution, and interaction of organisms and their environment. Corequisite: BIOL 111G.
- BIOL 154. Introductory Anatomy and Physiology 4 cr. (3+3P)  
Survey of human structure and function (does not replace BIOL 190, BIOL 111G, or BIOL 211G as a prerequisite for advanced courses in biology). Branch campuses only.
- BIOL 190. Principles of Biology 3 cr.  
Principles of metabolism, genetics, physiology, evolution, and ecology. A background in chemistry is strongly recommended. For non majors only.
- BIOL 201. The Local Environment 4 cr. (3+3P)  
Introduction to the organisms, ecosystems, landscapes and environments of the surrounding area; field and laboratory studies of organisms and their environment; interaction of humans with other organisms and the environment from prehistory to present. Branch campuses only.
- BIOL 211G. Cellular and Organismal Biology 3 cr.  
Principles of cellular structure and function, genetics, and physiology of microbes, plants, and animals. Suitable for nonmajors with sufficient chemistry. Must be taken with BIOL 211L to meet general education requirements. Corequisites: CHEM 110G and CHEM 111.
- BIOL 211L. Cellular and Organismal Biology Laboratory 1 cr. (3P)  
Laboratory demonstrations, experiments and exercises on molecular and cellular biology and organismal physiology. Must have passed BIOL 211G or be concurrently enrolled in BIOL 211G and BIOL 211L. Corequisite: either CHEM 110G or CHEM 111.
- BIOL 212. Supplemental Instruction for Cellular and Organismal Biology 1 cr.  
Optional workshop for collaborative learning experiences aimed to improve class performance in cellular and organismal biology. Activities illustrate lecture material and encourage study strategies. Corequisite: BIOL 211G. May be repeated for a maximum of 2 credits.
- BIOL 219. Public Health Microbiology 3 cr.  
The characteristics of pathogenic microorganisms and the diseases that they cause. Will not meet the microbiology requirements for biology or medical technology majors. Prerequisite: BIOL 211G and BIOL 211L.
- BIOL 221. Introductory Microbiology 3 cr.  
Principles of isolation, taxonomy, and physiology of microorganisms. Prerequisite: CHEM 112 or equivalent. Corequisite: BIOL 221L. Branch campuses only.
- BIOL 221L. Introductory Microbiology Laboratory 1 cr. (3P)  
Laboratory to accompany BIOL 221. Prerequisites: BIOL 221 or BIOL 219 or consent of instructor.
- BIOL 222. Zoology 3 cr. (2+3P)  
Structure, function, and survey of animals. Prerequisite: BIOL 111G and BIOL 111L, or BIOL 190, and at least sophomore standing. Branch campuses only.
- BIOL 225. Human Anatomy and Physiology I 4 cr. (3+3P)  
The first in a two-course sequence that covers the structure and function of the human body. Included terminology of the human gross anatomy, chemistry overview, cell structure, cell physiology (including DNA, protein synthesis and cell division). The organization of cells and tissues and their metabolic and homeostatic processes and regulation are also covered. Physical and chemical operation of organs and systems of the human body include the intergumentary skeletal muscular and nervous systems. Prerequisites: CHEM 110G or equivalent. Branch campuses only.
- BIOL 226. Human Anatomy and Physiology II 4 cr. (3+3 P)  
The second in a two-course sequence that covers the structure and function of the human body. Includes the physical and chemical operation of the organs and systems of the human body, including endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproduction system. Concepts of nutrition, metabolism, energy, fluid and electrolyte balance, heredity pregnancy and human embryonic and fetal development are also covered. Prerequisites: BIOL 225. Branch campuses only.

- BIOL 241. Introduction to Research 1-3 cr. (3P-9P)  
Seminar with demonstrations by research professors. May be repeated for a maximum of 6 credits.
- BIOL 250. Special Topics 1-3 cr.  
Specific subjects to be announced in the *Schedule of Classes*. May be repeated for a maximum of 6 credits. Branch campuses only.
- BIOL 253. Human Anatomy 4 cr. (3+3P)  
Detailed presentations of human anatomy, with laboratory. Prerequisites: Grade of C in BIOL 190 or BIOL 211G and either CHEM 111 or CHEM 110G. For nursing, prenursing, and human nutrition and food science majors only.
- BIOL 254. Human Physiology 3 cr.  
Physical and chemical operation of the organs and systems of the human body. Not open to students who have passed BIOL 354 or BIOL 381. Prerequisites: BIOL 190 or BIOL 211G; BIOL 211L; CHEM 111 or CHEM 110G.
- BIOL 254L. Human Physiology Laboratory 1 cr.  
Laboratory to accompany BIOL 254. BIOL 254 must be taken concurrently or in an earlier semester. Branch campuses only.
- BIOL 260. Human Genetics 3 cr.  
Human genetics for science and nonscience majors. Major topics include cell division, transmission genetics, single gene effects, sex-linked inheritance, cytogenetics, DNA structure and replication, gene expression, and recombinant DNA technology. Prerequisite: C or better in BIOL 111G or BIOL 211G.
- BIOL 260L. Human Genetics Laboratory 1 cr. (3P)  
Laboratory course to accompany BIOL 260. Corequisite BIOL 260.
- BIOL 267. Introduction to Genetics and Evolution 3 cr.  
Basic principles of genetics (historical background, variation, mutation, heredity) and evolution (historical background, natural selection, adaptation, speciation). For majors and nonmajors. Prerequisite: BIOL 110G or BIOL 111G. Branch campuses only.
- BIOL 271. Human Systemic Anatomy 3 cr.  
Detailed study of human anatomy with emphasis in skeletal, muscular, nervous and cardiovascular systems. Designed specifically for students interested in allied health occupations. Prerequisite: consent of instructor. Corequisite: BIOL 271L or SP M 271L. Same as SP M 271. Not for biology majors.
- BIOL 271L. Human Systemic Anatomy Laboratory 1 cr.  
Detailed study of human anatomy with emphasis in skeletal, muscular, nervous and cardiovascular systems. Designed specifically for students interested in allied health occupations. Prerequisite: consent of instructor. Corequisite: BIOL 271 or SP M 271. Same as SP M 271L.
- BIOL 301. Principles of Ecology 3 cr.  
A survey of ecology including general theory, the adaptations of organisms, population dynamics, species interactions, and the structure and function of natural communities and ecosystems. May not be offered spring semester, odd-numbered years. Prerequisite: BIOL 111G or BIOL 190. Recommended: MATH 142G or MATH 191 and E ST 311G. Same as E S 301.
- BIOL 305. Principles of Genetics 3 cr.  
Same as AGRO 305, ANSC 305, HORT 305.
- BIOL 305L. Genetics Techniques 1 cr. (3P)  
Experimental procedures used in genetics research. Prerequisite: BIOL 305 or concurrent enrollment. Same as AGRO 305L.
- BIOL 311. General Microbiology 3 cr.  
Principles of physiology, molecular biology, ecology, and taxonomy of microorganisms. Not open for credit toward graduation for students who have taken BIOL 221, General Microbiology. Prerequisite: BIOL 211G.
- BIOL 311L. General Microbiology Laboratory 2 cr. (4P)  
Microbiology techniques and procedures, including isolation and identification of microorganisms and biotechnology procedures that employ microorganisms. Not open for credit for students who have taken BIOL 221L. Prerequisite: BIOL 219 or BIOL 311 or concurrent enrollment.
- BIOL 312. Plant Taxonomy 3 cr.  
Classification and identification of representative plant families and local plants. Emphasis on ability to use technical sources. Saturday field trips may be recommended. Prerequisites: BIOL 111G or BIOL 190.
- BIOL 313. Structure and Function of Plants 3 cr. (2+3P)  
Structure, function, and survey of plants. Not open for credit toward graduation for students who have taken BIOL 220, Botany. Prerequisite: BIOL 111G or BIOL 190 and sophomore-level standing. BIOL 211G recommended.
- BIOL 314. Plant Physiology 3 cr.  
Photosynthesis, respiration, water relation of plants, minerals and organic nutrition, growth and development. Prerequisites: BIOL 211G and CHEM 122. Same as EPWS 314.
- BIOL 314L. Plant Physiology Lab 2 cr.  
Examination of and laboratory techniques for measurement of plant water relations, solute transport, mineral nutrition, photosynthesis, enzyme activity, gene expression, nitrogen metabolism, hormone content and function, and growth / development. Corequisite: BIOL 314 or EPWS 314. Same as EPWS 314L.
- BIOL 322. Zoology 3 cr. (2+3P)  
Structure, function, and survey of animals. Not open for credit toward graduation for students who have taken BIOL 222, Zoology. Prerequisite: BIOL 111G or BIOL 190 and at least sophomore-level standing. BIOL 211G recommended.
- BIOL 330. Comparative Anatomy and Embryology 4 cr. (3+3P)  
The developmental and evolutionary basis for the diversity and homology of body plans within the classes of vertebrate organisms. Laboratories will emphasize comparative dissection. Prerequisite: BIOL 190 or BIOL 111G and BIOL 211G. BIOL 322 recommended.
- BIOL 340. Plant Tissue Culture Methods 3 cr. (2+2P)  
Same as AGRO 340, HORT 340.
- BIOL 350. Special Topics 1-3 cr.  
Specific subjects announced in *Schedule of Classes* and offered as scheduled courses. May be repeated for unlimited credit.
- BIOL 351. Biology Internship 1-6 cr.  
Substantial off-campus experience in biology selected by student in consultation with regular biology faculty member. Internship must be approved by faculty member. Student will supply mutually agreed upon documentation of internship activities after the internship is completed. Prerequisite: 45 college credits, 2.5 or better GPA, consent of instructor. May be repeated for a maximum of 6 credits. Restricted to biology and microbiology majors. Graded S/U.
- BIOL 354. Physiology of Humans 3 cr.  
Principles of integrative functions in humans. A systems approach emphasizing tissues, organs, and their regulation. Not open to students who have taken BIOL 254. Prerequisite: BIOL 211G.
- BIOL 354L. Laboratory of Human Physiology 1 cr.  
Laboratory to accompany BIOL 354. Not open to students who have taken BIOL 254L. Prerequisite: either BIOL 254, BIOL 381, BIOL 354, or concurrent enrollment in BIOL 354.
- BIOL 373. Fungal Biology 3 cr. (3+2P)  
Same as EPWS 372. Prerequisite: EPWS 310 or BIOL 311 or consent of instructor.
- BIOL 377. Cell Biology 3 cr.  
Fundamentals of eukaryotic cell structure, organization, and function. Emphasis on membranes, subcellular organelle systems, cytoskeleton, and cell cycle. Includes basic aspects of molecular biology. Prerequisite: BIOL 211G and BIOL 305 and either BCHE 341 or BCHE 395 (or concurrent enrollment in either biochemistry) or consent of instructor. BIOL 111G recommended.
- BIOL 381. Animal Physiology 3 cr.  
Principles of integrative function in animals, emphasizing tissues, organs, organ systems, and regulation. Includes adaptations of animals to their environments. Prerequisites: BIOL 211G and junior-level standing. BIOL 111G and BIOL 377 recommended.
- BIOL 398. Biology Research Programs 1-3 cr.  
Directed studies and research experiences, by arrangement with instructor. May be repeated for a maximum of 6 credits.
- BIOL 405. Foundations in Cell Biology 2 cr.  
Surveys seminal papers in cell and developmental biology. Examines recent advances in the field. Prerequisite: BIOL 377 or equivalent.
- BIOL 406. Biological Electron Microscopy (f) 4 cr.  
Principles and use of light microscope, transmission and scanning electron microscope, specimen preparation techniques, thick and ultrathin sectioning, analysis of micrographs.
- BIOL 408. Ecology of Plants 3 cr.  
Controlling factors, succession, community dynamics, and the classification of vegetation. Prerequisite: BIOL 301.

- BIOL 410. Introduction to Evolutionary Ecology 3 cr.  
Overview of current knowledge and modern research into ecological adaptation, evolutionary processes acting on contemporary populations, and the consequences of natural selection for population and community processes. Prerequisite: BIOL 301 and BIOL 467.
- BIOL 411. Principles of Plant Taxonomy 1 cr.  
Examination of principles of classification through use of lecture, discussion, reports and reading of primary literature. Students will take, or will have taken, BIOL 312 or equivalent to relate theory and practice. Prerequisite: BIOL 111G or BIOL 190. Corequisite: BIOL 312.
- BIOL 412. Seminar in Microbiology 1 cr.  
Seminar to aid students in assessment and presentation of current topics in microbiology. Prerequisites: BIOL 311 and BIOL 311L. Graded S/U.
- BIOL 433. Insect Biology 3 cr.  
Classification, structure, physiology, and evolution of insects. Prerequisite: BIOL 111G or BIOL 190 and junior-level standing. BIOL 211G recommended. Same as EPWS 433.
- BIOL 433L. Insect Identification 1 cr. (3P)  
Collection and identification of insect orders and families. Not open to students who have taken EPWS 302 or EPWS 303. Same as EPWS 433L.
- BIOL 435. Cell Biology Current Topics 2 cr.  
Seminars and discussions on current topics in cell biology. May be repeated for a maximum of 8 credits.
- BIOL 439. Animal Behavior 3 cr.  
A survey of the field of animal behavior. Prerequisites: BIOL 111G or BIOL 190 and junior-level standing. BIOL 322 recommended.
- BIOL 440. Molecular Systematics 3 cr. (1+6P)  
Application of molecular biological techniques to traditional life history, natural history, and evolutionary biology. Curriculum includes methods of DNA characterization as applied to pedigree analysis, phylogenetic estimation and population genetics. BIOL 467 recommended. Prerequisites: BIOL 305 and consent of instructor. May be repeated for a maximum of 6 credits.
- BIOL 441. Seminar in Comparative Physiology 2 cr.  
Readings and discussions on current topics in comparative physiology. Prerequisite: BIOL 381 or consent of instructor.
- BIOL 445. Herpetology 4 cr. (3+3P)  
The ecology, behavior, systematics, morphology, and conservation of amphibians and reptiles. Field trip recommended. Prerequisite: BIOL 111G, BIOL 190, or BIOL 211G. BIOL 322 recommended.
- BIOL 447. Ornithology (so) 4 cr. (3+3P)  
Morphology, life histories, systematics, ecology, and behavior of birds.
- BIOL 448H. Senior Thesis 2 cr.  
Two-semester research on a selected problem. Includes a written paper and an oral examination. Open to senior biology majors with an overall GPA of 2.5 or better and consent of faculty.
- BIOL 450. Special Topics 1-3 cr.  
Specific subjects announced in the *Schedule of Classes* and offered as scheduled courses. May be repeated for unlimited credit.
- BIOL 451. Physiology of Microorganisms 3 cr.  
Aspects of cellular physiology unique to prokaryotes. Prerequisites: C or better in BIOL 311 (or equivalent) and either BCHE 341 or BCHE 395 (or equivalent).
- BIOL 454. Biology of Respiration 3 cr.  
How aquatic and terrestrial animals obtain oxygen and dispose of carbon dioxide. Includes respiratory-system structures and functions, gas-exchange and gas-transport mechanisms, and control systems. Emphasizes animals that live or travel in extreme environments. Prerequisite: BIOL 211G. BIOL 381 recommended.
- BIOL 461G. Human Ecology 3 cr.  
Principles of ecosystem and global ecology, and role of humans in the global environment. Both scientific and social perspectives on current environmental problems. Prerequisites: two courses in the humanities or social sciences, and three courses in the sciences, or consent of instructor. Graded S/U.
- BIOL 462. Conservation Biology 3 cr.  
Examination of the value of biological diversity, the natural processes that control biological diversity, and the ways in which human activities have resulted in the loss of biological diversity, both regionally and globally. Prerequisite: BIOL 301.
- BIOL 463. Field Ecology 3 cr.  
Application of ecological theory and quantitative techniques to plant and animal populations and communities. Prerequisite: BIOL 111 or BIOL 190. MATH 142 or 191 and EST 311G recommended.
- BIOL 465. Invertebrate Zoology 4 cr. (3+3P)  
Survey, ecology, behavior and physiology. Prerequisite: BIOL 111G or BIOL 190 and junior-level standing. BIOL 322 recommended.
- BIOL 466. Invertebrate Zoology Field Trip 1 cr.  
A one-week field trip for the study of marine invertebrates. Registrants must provide own camping gear. Prerequisite: BIOL 465 or equivalent (or concurrent enrollment) or consent of instructor. Graded S/U.
- BIOL 467. Evolution 3 cr.  
Covers theory, historical background, population variation, natural selection, adaptation, speciation. May not be offered spring semester, even-numbered years. Prerequisite: BIOL 111G or BIOL 190 and BIOL 305.
- BIOL 468. Avian Ecology 3 cr. (2+3P)  
Overview of current knowledge and modern research into avian ecology and behavior. Field trips required. Prerequisites: BIOL 111 and 301.
- BIOL 470. Plant Community Ecology 3 cr.  
Investigation of selected vegetation types; field trip included after end of semester. Prerequisites: BIOL 312 or BIOL 408, and consent of instructor.
- BIOL 471. Molecular and Cellular Mycology 3 cr.  
Exploration of the world of fungi with emphasis on fungal molecular biology and development. Including discussion of fungal taxonomy and genomics. Prerequisites: BIOL 311 required, BCHE 341 or BCHE 395 recommended, or consent of instructor.
- BIOL 473. Ecology of Microorganisms 3 cr. (2+3P)  
The metabolic interactions of microorganisms in the environment, with emphasis on their roles in ecological processes. Prerequisites: BIOL 311 or consent of instructor.
- BIOL 474. Immunology 3 cr.  
Basic concepts of the immune response. Prerequisites: BIOL 305 and CHEM 211 or CHEM 313.
- BIOL 475. Virology 3 cr.  
Mechanisms of viral infections of animals and man. Prerequisites: BIOL 311, and either BCHE 341 or BCHE 395.
- BIOL 476. Soil Microbiology 3 cr.  
Same as SOIL 476.
- BIOL 476L. Soil Microbiology Laboratory 1 cr. (3P)  
Same as SOIL 476L.
- BIOL 477. Applied and Environmental Microbiology 4 cr.  
A lecture-laboratory course on the microorganisms and the reactions they mediate which either impact the environment or have industrial applications. Reading of current literature will be emphasized. Topics include bioremediation, water quality, and aspects of industrial and food microbiology. Prerequisite: BIOL 311, and 311L, or consent of instructor.
- BIOL 478. Molecular Biology of Microorganisms 3 cr.  
The biochemical basis for gene mutation, recombination, and expression with emphasis on prokaryotes. Includes fundamentals of recombinant DNA technology. Prerequisites: BIOL 305, BIOL 311, and either passage or concurrent enrollment in BCHE 341 and BCHE 395.
- BIOL 479. Medical Microbiology 3 cr.  
An in-depth overview of microbial pathogens associated with human infectious disease. Etiological agents, pathogenesis, and processes leading to the disease state and the therapies of infectious disease. Prerequisite: BIOL 474 recommended.
- BIOL 479L. Medical Microbiology Laboratory 1 cr.  
Overview of common procedures used by medical microbiologists to identify agents of disease or microbial pathogen traits. Prerequisite: BIOL 479 or concurrent enrollment.
- BIOL 480. Histology 4 cr.  
Microscopic anatomy of vertebrate tissues and organs. Emphasis on the correlation of structure and function. Prerequisites: BIOL 190 or BIOL 111G and BIOL 211G.
- BIOL 481. Biology of the Heart 3 cr.  
Covers cardiovascular principles, cardiac development, evolution, and biomedical issues. Topics range from cellular/molecular to organismal. Prerequisite: either BIOL 254, BIOL 354, or BIOL 381.
- BIOL 482. Microbial Systematics 2 cr.  
Systematics of prokaryotic organisms, and consideration of fungi and protists. Integration of morphological, biochemical, molecular, and genetic information in determining group relationships. Problems encountered when applying classic systematic principles to organisms without significant contribution of sexual reproduction. Prerequisites: BIOL 311 (or equivalent) and consent of instructor.

BIOL 486. Intermediate Genetics Same as AGRO 486, HORT 486, and MOLB 486.	3 cr.		
BIOL 487. Advanced Cell Biology Same as BIOL 377 but also includes weekly discussions on current topics, methodology and ethical issues in modern cell biology. Scientific writing skills will be emphasized. Prerequisites: BIOL 211G and BIOL 305 and either BCHE 341 or BCHE 395 (or concurrent enrollment in either biochemistry) or consent of instructor. BIOL 111G recommended.	4 cr. (3+1P)		
BIOL 488. Principles of Conservation Genetics Fundamentals of the genetics of small populations. Genetic technologies used in studying small populations. Application of genetics and evolution to the conservation of biological populations. Prerequisite: BIOL 305.	3 cr.		
BIOL 489. Genetic Aspects of Population Biology Basic theory of population genetics and how that theory has guided, and been influenced by, studies of natural populations. Prerequisite: BIOL 305 or equivalent.	3 cr.		
BIOL 490. Neurobiology Fundamentals of neurobiology with an emphasis on properties of neurons and glia, principles of synaptic transmission, development of nervous system and organization of motor and sensory systems. Prerequisite: BIOL 211, BIOL 305, MATH 142G, or MATH 191, and CHEM 211 or CHEM 313.	3 cr.		
BIOL 498. Biology Research Programs Directed studies and research experiences, by arrangement with instructor. May be repeated for a maximum of 6 credits.	1-3 cr.		
<b>• BLAW—Business Law</b>			
<b>Department of Finance</b>			
BLAW 230. Business Law Introduction to law in general and application to business specifically; comprehensive study of the law of contracts; and the principal and agent relationship. Offered at all NMSU Branch Campuses except Doña Ana Branch Community College. Credit may not be earned in both BLAW 230 and BLAW 317.	3 cr.		
BLAW 313. Sports and the Law Introduction to legal concepts related to sports and business including an introduction to U. S. law and the civil practice, agency, sports contracts, sport torts, sport crimes, pertinent federal legislation such as Title IX, drugs and sports, international sports issues, pertinent antitrust issues, intellectual property, ethics and alternative dispute resolution. Students may not receive credit for both BLAW 313 and BLAW 316.	3 cr.		
BLAW 316. Legal Environment of Business Survey of business law including: the legal system (court systems, sources and types of law, litigation and dispute resolution), ethics and corporate social responsibility, administrative law, tort law, contract law, agency and employment law, business structure and governance, securities regulations, and international law. Students may not receive credit for both BLAW 316 and BLAW 317.	3 cr.		
BLAW 325. Real Estate Principles and Law I Same as FIN 325.	3 cr.		
BLAW 385G. Consumers and the Law Study of the interrelationships between business, legal, and ethical aspects of consumer issues and their attendant civil liability and remedies in domestic and international markets.	3 cr.		
BLAW 391. Business Law Internships and Cooperative Education Integration of academic studies and principles of business law in a relevant work experience. The amount of academic credit (1 to 3 credit hours) will be determined at the time of enrollment by the department head or supervising instructor based upon the duration of the work experience and the scope of the academic requirements. Prerequisites: BUSA 111, one BLAW course and consent of instructor. May be repeated for a maximum of 3 credits.	3 cr.		
BLAW 418. Uniform Commercial Code and Advanced Business Law Topics Property, advanced contract law, debtor-creditor relations, bankruptcy and Uniform Commercial Code topics including sales, negotiable instruments, secured transactions and documents of title. Students who have taken BLAW 318 may not receive credit for BLAW 418. Prerequisite: BLAW 316.	3 cr.		
BLAW 440. Health Care Law Examination of legal issues relevant to health care administrators and other health care providers including: medical malpractice, informed consent, labor law issues, medical records and confidentiality, hospital corporate negligence and reimbursement and payment issues.	3 cr.		
BLAW 490. Selected Topics Prerequisites vary according to the seminar being offered.		1-3 cr.	
BLAW 498. Independent Study Individual studies directed by consenting faculty with the prior approval of the department head. Prerequisites: junior or above standing and consent of instructor and department head.		1-3 cr.	
<b>• BOT—Business Office Technology</b>			
The following courses are offered at the branch campuses only.			
BOT 101. Keyboarding Basics Covers correct fingering and mastery of the keyboard to develop skillful operation. Formatting basic business letters, memos, and manuscripts.		3 cr. (2+2P)	
BOT 102. Keyboarding: Document Formatting Designed to improve keyboarding speed and accuracy; introduce formats of letters, tables and reports. A speed and accuracy competency requirement must be met. Prerequisite: BOT 101 or consent of instructor.		3 cr. (2+2P)	
BOT 105. Business English I Training and application of the fundamentals of basic grammar, capitalization and sentence structure (syntax).		3 cr.	
BOT 106. Business Mathematics Mathematical applications for business, including training in the touch method of the 10-key calculator. Prerequisite: CCDM 103N or adequate score on math placement exam.		3 cr. (2+2P)	
BOT 109. Business English II Training and application of the fundamentals of punctuation, numbers, basic writing and editing skills. Prerequisite: C or better in BOT 105.		3 cr.	
BOT 110. Records Management Principles, methods and procedures for the selection, operation and control of manual and automated records systems.		3 cr.	
BOT 114. Speedwriting Shorthand I Principles of speedwriting shorthand and an introduction to dictation and transcription. Prerequisite: minimum keyboarding speed of 30 wpm and C or better in BOT 105 or BOT 109.		3 cr. (2+2P)	
BOT 116. Introduction to Business Office Technology Departmental procedures, study skills, time and stress management, professionalism, interpersonal relations, career opportunities, campus and community resources for beginning students.		3 cr.	
BOT 119. Microcomputer Keyboarding Efficient use of the computer keyboard. Covers the alphabet, number, and symbol keyboards. Individualized approach with interactive software.		2 cr. (1+2P)	
BOT 120. Accounting Procedures I Business accounting principles and procedures. Use of special journals, cash control, and merchandising concepts. Reports for sole proprietorships.		3 cr. (2+2P)	
BOT 121. Accounting Procedures II Continuation of BOT 120, emphasizing accounting principles and procedures for notes and interest, depreciation, partnerships and corporations, cash flow and financial statement analysis. Prerequisite: BOT 120.		3 cr. (2+2P)	
BOT 122. Beginning Typing: Level I Presentation of the touch method of typing.		1 cr. (2P)	
BOT 123. Beginning Typing: Level II Continuation of BOT 122.		1 cr. (2P)	
BOT 124. Beginning Typing: Level III Continuation of BOT 123.		1 cr. (2P)	
BOT 125. Beginning Typing: Level IV Continuation of BOT 124.		1 cr. (2P)	
BOT 126. Intermediate Typing: Level I Continuation of BOT 125.		1 cr. (2P)	
BOT 127. Intermediate Typing: Level II Continuation of BOT 126.		1 cr. (2P)	
BOT 128. Intermediate Typing: Level III Continuation of BOT 127.		1 cr. (2P)	
BOT 129. Intermediate Typing: Level IV Continuation of BOT 128.		1 cr. (2P)	
BOT 130. Advanced Typing: Level I Presentation of advanced typing. Continuation of BOT 129.		1 cr. (2P)	
BOT 131. Advanced Typing: Level II Continuation of BOT 130.		1 cr. (2P)	
BOT 132. Advanced Typing: Level III Continuation of BOT 131.		1 cr. (2P)	