FSND 1409 Science of Foods (2) F Concepts and principles related to selection, preparation, processing, preservation, distribution, and use of foods.

FSND 2000 Fundamentals of Food Science (3) S Prereq.: BIOL 1201 and CHEM 1201 or permission of instructor. Introduction to scientific principles in chemistry of food constituents, new processing developments, food preservation, processing, packaging, and safety.

FSND 3000 Food Safety (3) S Prereq.: BIOL 1201 and CHEM 1201 or permission of instructor. Examination of integrated food safety including: introduction into food safety; extensive examination of causative agents responsible for foodborne illnesses; and foodborne disease case studies.

FSND 3000 Food Safety Research (1-3 per semester) S Prereq.: permission of department. May be taken for a max. of 2 sem. hrs. credit. Students on need and execute project and prepares a written report; problems related to processing, quality control, safety, and nutritional evaluation of food stuffs.

FSND 3100 Food Science and Technology Seminar (1) S F Prereq.: permission of department. May be taken for a max. of 2 sem. hrs. credit. Scientific seminar preparation and presentations on selected topics in food science and technology.

FSND 4005 Food Engineering Systems (3) S-O Prereq.: PHYS 2091 and MATH 1445 or equivalent 2 hrs. lecture; 3 hrs. lab. Application of engineering principles to various unit operations in food processing.

FSND 4050 Quality Assurance in the Food Industry (4-5) S-E Prereq.: DARY 4040.

FSND 4500 Food Composition and Analysis (4) S Prereq.: FSND 4060 or BIOL 2083 and CHEM 2261; or equivalent. 3 hrs. lecture; 3 hrs. lab. Chemical and physical properties of food products and analysis of food composition and nutrients; application of these methods to production of food products.

FSND 4600 Food Chemistry (4) S Prereq.: BIOL 2083 and either CHEM 2060 or CHEM 2261; or equivalent. 3 hrs. lecture; 3 hrs. lab. Principles of official and acceptable chemical and physical methods used in food analysis; application of these methods to production of food products.

FSND 4650 Food Laws, Standards, and Regulations (2) S Prereq.: Federal, state, and city food laws, and how they are regulated, manufactured, distributed, and used of foods, additives and regulated products.

FSND 4705 Ethics (S) S Prereq.: CHEM 2250 or 2252 or equivalent, BIOL 2053, and at least 3 sem. hrs. in any food science course; or consent of instructor. 2 hrs. lecture; 3 hrs. lab. Microbiology and biochemistry of food spoilage; environmental toxicology; food preservation and food sanitation; methods of food preservation.

FSND 4705 Food Product Development (3) S Prereq.: FSND 4060 and experience in food processing and storage. Examining a variety of new food concepts, product formulation, marketing, package design, and other aspects of product development.

FSND 4808 Foods Science Processing (3) S Prereq.: BIOL 1201 and CHEM 1201 or permission of instructor. Examination of all aspects of seafood processing including: history and current trends in seafood processing; industry resources; processes (freezing, canning, drying, salting, and pickling); processing by species; storage and distribution; and safety considerations.

FSND 4905 Principles of Sensory Evaluation of Foods (4) S Prereq.: EXST 2201 or equivalent. 3 hrs. lecture; 3 hrs. lab. Theory and current practices used to evaluate, measure, analyze, and interpret responses to those characteristics of foods and materials as they are perceived by the human senses of sight, smell, taste, touch, and hearing.

FSND 4912 Food Microbiology (4) S Prereq.: BIOL 2051 and consent of department. 2 hrs. lecture; 4 hrs. lab. Also offered as BIOL 4162. Microbiological principles as applied to foodborne diseases; emphasis on specific role of foodborne microorganisms.

FSND 4913 Industrial Microbiology (4) S Prereq.: BIOL 4110 or equivalent. 3 hrs. lecture; 4 hrs. lab. See BIOL 4163.

FSND 7020 Food Technology (3) S Prereq.: consent of instructor. Principles of risk assessment, food chemical safety and toxicity; mycotoxins, aquatic toxins; natural toxins, and food allergens; and food safety control.

FSND 7016 Current Topics Related to Nutrients in Processed Foods (3) V Effects of processing on nutrient retention in food.

FSND 7020 Food Packaging (3) S-E 2 hrs. lecture; 3 hrs. lab. Food package systems related to specific products and processes. Product composition, problems and packaging solutions, and shelf life considerations.

FSND 7020 Food Packaging Research (1-5 per semester) S-E Prereq.: permission of instructor. May be taken for a max. of 3 sem. hrs. credit. Individual problems in pertinent areas.

FSND 7040 Flavor and Colors of Foods (3) S Prereq.: CHEM 2060 and FSND 4060; or equivalent. 2 hrs. lecture; 3 hrs. lab. Methods of chemical, physical, and instrumental analysis in food colors and flavors; natural and synthetic flavorings and colorings.

FSND 7050 Food Protein Biotechnology (3) E Prereq.: FSND 4060, 4050 or permission of instructor. Overview of contemporary principles and applications of protein and enzyme technology; genetic engineering, and immunology for the production of safe foods and food ingredients; proteins as functional ingredients; and higher levels of regulation and biotechnological advances in food protein biotechnology in the food industry as well as ethical and legal issues; career opportunities in protein and enzyme biotechnology.

FSND 7060 Advanced Concepts in Food Science (3) V Prereq.: FSND 4060 and BIOL 4087. Analysis of new and progressive concepts in food science.

FSND 7071 Seminar in Food Science (1-2 per semester) S Prereq.: permission of instructor. Selected topics in food science and technology.

FSND 7075 Advanced Food Preservation (4) V Prereq.: FSND 4075 or equivalent. 3 hrs. lecture; 3 hrs. lab including field trips to local food processors. Preservation technologies of various food processing operations from raw ingredients to final product.

FSND 7094 Seminar in Nutrition (1) Same as HUEC 7094. May be taken for a max. of 2 hrs. credit. Prereq.: ANSC 7094, DARY 7091, FSND 7071, HUEC 7010, PLSC 7094 or equivalent or previous slide (not poster) presentation at a professional meeting.

FSND 7099 Toxicology Seminar (1) S Prereq.: consent of instructor. 3 hrs. lecture; 3 hrs. lab. Introduction to toxicology.

FSND 8000 Thesis Research (1-12 per semester) S Prereq.: permission of instructor. May be taken for a max. of 12 hrs. credit. Student's thesis research.

FSND 8103, 2103 HONORS: Intermediate French (3) S Prereq.: consent of instructor. May be taken for a max. of 3 sem. hrs. credit. Individual problems in pertinent areas.

FSND 2103 French for Travelers (3) E Prereq.: consent of department. May be taken for a max. of 3 sem. hrs. credit. Individual problems in pertinent areas.

FSND FREN Native speakers of French will not receive credit for courses marked with an asterisk (*).

General education courses are marked with stars (*).

*1001, 1002 Elementary French (4,4) F,S,Su Students with previous study of French should take the French placement exam.

*2001 French for Travelers (1) S Prereq.: consent of instructor. Departmental placement exam. May be taken for a max. of 4 sem. hrs. of credit. May be taken for a max. of 12 sem. hrs. of credit. Does not count toward satisfying foreign language requirement for undergraduates, although hours may count toward baccalaureate. Credit will not be given for both this course and introductory French courses.

*2101, 2102 Elementary Cajun French (4,4) F,S Credit will not be given for both FREN 1001 and FREN 2101 nor for both FREN 1002 and FREN 2102. Students with previous study of French should take the French placement exam. Students who do not place in FREN 1002 or higher through the placement exam should enroll in FREN 1201, FREN 1001, 2101 or equivalent prior study is prerequisite for FREN 1202. Basic lexicon and structure of Cajun French. Does not count toward satisfying foreign language requirement for undergraduates. Basic communication patterns; practical conversation; vocabulary, with exercises in comprehension and conversation.

*2001 French for Travelers (1) S Prereq.: consent of department. May be taken for a max. of 4 sem. hrs. credit. Basic lexicon and structure of Cajun French. Does not count toward satisfying foreign language requirement for undergraduates. Basic communication patterns; practical conversation; vocabulary, with exercises in comprehension and conversation.

*2001 French for Travelers (1) S Prereq.: consent of department. May be taken for a max. of 4 sem. hrs. credit. Basic lexicon and structure of Cajun French. Does not count toward satisfying foreign language requirement for undergraduates. Basic communication patterns; practical conversation; vocabulary, with exercises in comprehension and conversation.

*2100 Intermediate Oral Communication (3,3) F,S,Su Students with previous study of French should take the French placement exam.

*2100 Intermediate Oral Communication (3,3) F,S,Su Students with previous study of French should take the French placement exam.

*2100 Intermediate Oral Communication (3,3) F,S,Su Students with previous study of French should take the French placement exam.
4014 Advanced French Grammar and Composition (3) F.S Prereq.: FREN 2155 or equivalent, or permission of instructor. Major aspects of the literature of the period. 4016 French Film (3) F.S Prereq.: FREN 2155 or equivalent and senior standing. Required of French majors. 4020 French Film (4) F.S Prereq.: FREN 2155 or equivalent and senior standing. Required of French majors. 4040 French Literature of the 18th Century (3) V Majors of the literature of the period. 4051 French Film (3) V Prerequisites: EDPS 3401, EDPS 3402, or permission of instructor. Major aspects of the literature of the period. 4057 French Film (3) V Prerequisites: EDCI 2001, concurrent enrollment in EDCI 3002. 3 hrs. lab/field experiences in multicultural settings. A carefully monitored and evaluated French tutoring experience in a local middle or high school under the guidance of the course instructor and a mentoring teacher. 4060 Advanced French Syntax and Stylistics (3) F.S Prereq.: FREN 2155 or equivalent, or permission of instructor. Major aspects of the literature of the period. 4065 Louisiana French (3) V Prerequisites: FREN 2155 or equivalent. Taught in French and English. For understanding contemporary France and the Francophone world. 4066 Louisiana French (3) V Prerequisites: FREN 2155 or equivalent. Taught in French and English. For understanding contemporary France and the Francophone world. 4070 Literature of Africa and the Caribbean (3) Major aspects of the literature of Africa and the Caribbean. 4070 Literature of Africa and the Caribbean (3) Major aspects of the literature of Africa and the Caribbean. 4080 Special Topics in French/Francophone Cultures and Civilization (3) Prerequisites: FREN 2155 or equivalent. May be taken for a max. of 6 hrs. of credit with consent of department, if content varies. Topics focus on an author, movement, or literary mode. 4081 French Literature in Translation (3) F. S Prerequisites: FREN 4001 History of the French Language (3) V 4084 Critical Issues in Teaching French as a Second Language (1-3) F.S., Nu Prerequisites: FREN 3060 or equivalent or permission of instructor. May be taken for a max. of 6 hrs. credit with consent of department, if content varies. Topics focus on an author, movement, or literary mode. 4095 Studies in Gender and French Literature (3) Prerequisites: FREN 3071 or equivalent. French language students. May be taken for a max. of 6 sem. hrs. credit when topics vary. Examination of selected periods, themes, and genres. 4096 Louisiana French (3) V Prerequisites: FREN 2155 or equivalent. Taught in French and English. For understanding contemporary France and the Francophone world. 6000 Old French and Medieval Literature (3) V Prerequisites: FREN 2155 or equivalent. May be taken for a max. of 6 hrs. credit when topics vary. 4097 Louisiana French (3) V Prerequisites: FREN 2155 or equivalent. Taught in French and English. For understanding contemporary France and the Francophone world. 4100 Critical Issues in Teaching French as Second Language (3) Capstone Course (3) Prerequisites: EDPS 4401, EDPS 4403, and concurrent enrollment in EDPS 4404. Topics focus on major literary authors, movements, and other important figures of the Middle French period, such as Christine de Pisan, Alain Chartier, and Charles de La Colombe. May be taken for a max. of 6 sem. hrs. or equivalent credit when topics vary. 4100 Critical Issues in Teaching French as Second Language (3) Capstone Course (3) Prerequisites: EDPS 4401, EDPS 4403, and concurrent enrollment in EDPS 4404. Topics focus on major literary authors, movements, and other important figures of the Middle French period, such as Christine de Pisan, Alain Chartier, and Charles de La Colombe. May be taken for a max. of 6 sem. hrs. or equivalent credit when topics vary. 4101 Tutoring Learners of French as a Second Language (1) Prerequisites: FREN 2155 or equivalent; EDPS 3401, 3402, and concurrent enrollment in EDPS 4403. 3 hrs. lab/field experiences in multicultural settings. A carefully monitored and evaluated French tutoring experience in a local middle or high school under the guidance of the course instructor and a mentoring teacher. 4102 Developmental Language Lessons for French as a Second Language (1) Prerequisites: EDPS 3401, FREN 3401, and concurrent enrollment in EDPS 3002. 3 hrs. lab/field experiences in multicultural settings. Under the supervision of a French faculty member and a teacher mentor, teacher candidates will prepare and deliver second language French language lessons that incorporate audio-visual materials and technology-based learning activities. 4104 French Film (3) V Prerequisites: FREN 3060 or equivalent or permission of instructor. Current and past modes of critical discourse and their application to literary texts. 4105 Advanced French Syntax and Stylistics (3) F.S Prerequisites: FREN 3060 or equivalent or permission of instructor. Syntactical structure of French, with attention to stylistic implications of written and oral expression. 4106 Advanced French Phonetics (3) S Theoretical principles of French phonetics and their application. 4108 Masters of French literature (1-3) F. S Prerequisite: FREN 4014 or equivalent. French linguistics as applied to second language learning/acquisition. 4109 French Film (3) V Prerequisites: FREN 3060 or equivalent or permission of instructor. Major aspects of the literature of the period. 4110 French Literature of the 16th Century (3) V Prerequisites: FREN 3071 or equivalent or permission of instructor. Major aspects of the literature of the period. 4110 French Literature of the 16th Century (3) V Prerequisites: FREN 3071 or equivalent or permission of instructor. Major aspects of the literature of the period. 4111 French Literature of the 15th Century (3) V Prerequisites: FREN 3071 or equivalent or permission of instructor. Major aspects of the literature of the period. 4112 French Literature of the 14th Century (3) V Prerequisites: FREN 3071 or equivalent or permission of instructor. Major aspects of the literature of the period. 4113 Louis Lumière to the Present (3) V Prerequisites: FREN 3071 or equivalent or permission of instructor. Major aspects of the literature of the period. 4114 Introduction to French Linguistics (3) F French phonology, morphology, and syntax. 4115 Advanced French Phonetics (3) S Theoretical principles of French phonetics and their application. 4117 Methods and Theory (3) V Prerequisites: FREN 3060 or equivalent or permission of instructor. Current and past modes of critical discourse and their application to literary texts. 7032 Studies in 18th Century French Literature (3) V Prerequisites: FREN 2155 or equivalent, or permission of instructor. May be taken for a max. of 6 hrs. credit with consent of department, if content varies. Topics focus on an author, movement, or literary mode. 7041 French Romanticism (3) V Historiographical, aesthetic, and semiotic aspects of French Romanticism. 7042 Studies in 19th Century French Literature (3) V Prerequisites: FREN 2155 or equivalent, or permission of instructor. May be taken for a max. of 6 hrs. credit with consent of department, if content varies. Topics focus on an author, movement, or literary mode. 7100 Studies in Sub Saharan Francophone Literature and Culture (3) May be taken for a max. of 6 sem. hrs. credit with consent of department, if content varies. The major movements and authors of Francophone literature in the cultural context of Sub Saharan Africa. 7102 Studies in North African Francophone Literature and Culture (3) May be taken for a max. of 6 sem. hrs. credit with consent of department, if content varies. The major movements and authors of Francophone literature in the cultural context of North Africa. 7120 Studies in Francophone Asian Literature and Culture (3) May be taken for a max. of 6 sem. hrs. credit with consent of department, if content varies. The major movements and authors of Francophone literature in the cultural context of Francophone Asia. 7140 Studies in Caribbean Francophone Literature and Culture (3) May be taken for a max. of 6 sem. hrs. credit with consent of department, if content varies. The major movements and authors of Francophone literature in the cultural context of the Caribbean. 7150 Studies in Literature and Culture of Francophone North America (3) V May be taken for a max. of 6 sem. hrs. credit with consent of department, if content varies. The major trends, as well as writers of Francophone literature and filmmakers within Francophone cinema in the cultural context of Francophone North America and Quebec. 7170 Studies in Belgian Francophone Literature and Culture (3) May be taken for a maximum of 6 hrs. credit with approval of the department, if content of the course varies. Topics focus on major literary authors, movements, genres, and/or forms of artistic expression such as the graphic novel, film, or the visual arts which illustrate the specificity of Belgian Francophone Literature and Culture. 7201 French Phonology and Morphology (3) V Sound structure, form, and function in French; principles and techniques of French phonological and morphological analysis. 7202 French Syntax and Semantics (3) V French relational, generative syntax and semantics, with emphasis on generative semantics and its relationship to the syntactic component. 7203 French Dialectology (3) V Principles and methods of a real linguistics and social dialectology in French-speaking areas. 7204 Field Methods in French Linguistics (3) V Methods of eliciting linguistic materials, processing and analyzing data, and writing linguistic descriptions; detailed study of dialects of Louisiana French. 7205 Louisiana French and Bilingualism (3) V Some field work required. Sociolinguistic, psychological, and linguistic aspects of bilingualism as they apply to Louisiana; analysis of language contact situations, language change and variation. 7206 Old Provençal (3) V Pragmatics and morphology of Old Provençal based on the study of literary texts. 7410 Studies in Contemporary French Theory (3) V Prerequisites: FREN 2155 or equivalent. May be taken for a max. of 6 sem. hrs. credit with consent of department, if content varies. May be taken for a max. of 6 hrs. credit with consent of department, if content varies. Topics focus on an author, movement, or literary mode. 7411 Independent Study (1) Prerequisites: FREN 2155 or equivalent. May be taken for a max. of 3 hrs. credit in a master’s program. May be taken in a doctoral program. Directed individual readings guided by the graduate faculty. 7412 Proseminar in French Studies (3) Intensive workshop course covering research methods, professionalization training and issues, and contemporary research and pedagogical issues. 7460 Special Topics in French Literature (3) V May be taken for a max. of 6 hrs. credit for the master’s degree and/or the doctorate when topics vary. Topics to be announced. 7562 Special Topics in French Linguistics (3) V May be taken for 6 hrs. credit for the master’s degree and 9 hrs.
of credit for the doctorate when topics vary. Topics to be announced.

7970 Seminar in French Linguistics (3) Y May be taken for a max. of 6 hrs. of credit when topics vary. Topics to be announced.

7980 Seminar in Feminist Representations in French Literature (3) With consent of department, may be taken for a max. of 6 hrs. of credit when topics vary. Topics to be announced.

7990 Directed Research in Gender (1-12 per ann.) S/U grading.

7990 Dissertation Research (1-12 per ann.) S/U grading.

GEOGRAPHY • GEOG

General education courses are marked with stars (∗).

CORE CURRICULUM
(Required of majors.)

★ 1001 Human Geography: Americas and Europe (3) 1001 and 1003 need not be taken in numerical order. Principal themes of human geography, including the spatial distributions and interactions of culture, history, economy, population, and environment, with a regional emphasis on the Americas and Europe.

★ 1003 Human Geography: Africa and Asia (3) 1001 and 1003 need not be taken in numerical order. Principal themes of human geography, including the spatial distributions and interactions of culture, history, economy, population, and environment, with a regional emphasis on Africa and Asia.


★ 2050 Physical Geography: The Atmosphere (3) Credit will not be given for both this course and GEOG 2061. May be taken for elective geology credit. Physical principles, processes, and operations in the atmosphere; world climatic realms.

★ 2051 Physical Geography: Land and Water Surfaces, Plant and Animal Realms (3) Credit will not be given for both this course and GEOG 2061. Surface elements of the earth's environment; relationships among these elements.

2055 Map Reading (3) 2 hrs. lecture; 2 hrs. lab. Nature and interpretation of topographic maps.

MAPPING SCIENCES
(All majors select three courses.)

Cartography

2039 Cartographic Drafting and Graphic Presentation (3) 2 hrs. lecture; 2 hrs. lab. Basic drafting instruments and techniques necessary for preparation of maps and scientific illustrations.

4040 Advanced Cartography (3) Prereq.: GEOG 2039 or equivalent. Cartographic history; map projection; advanced techniques of data presentation and cartographic production.

4044 Computer Cartography (3) No programming knowledge necessary. Introduction to selected mapping packages.

4049 Advanced Computer Cartography (3) Prereq.: CSC 1250 or 1255 and GEOG 4044. Use of computer mapping programs; theory and methods of display of point, line, and area elements in thematic maps; algorithms involved in encoding, editing, storing, retrieving, and displaying data from a digital cartographic database.

Remote Sensing

4019 Aerial Photo Interpretation of Cultural Features (3) 2 hrs. lecture; 2 hrs. lab. Credit will not be given for both this course and GEOG 4020. Analysis of land use/land cover, urban, industrial, and military aspects from aerial photographs.

4020 Aerial Photo Interpretation (3) Prereq.: GEOG 1001 and 1003 or GEOG 2051. Credit will not be given for both this course and GEOG 4019. 2 hrs. lecture; 2 hrs. lab. Analysis and mapping of geographic structure, lithology, and landforms from aerial photographs.

4045 Environmental Remote Sensing (3) Prereq.: consent of instructor for elective geology credit. 2 hrs. lecture; 2 hrs. lab. Basic energy and matter relationships; principles of primary remote sensors; environment studied via remote sensing techniques.

GIS/Techniques

4041 Field Methods in Geography (3) 1 hr. lecture; 4 hrs. lab. Cannot be used for credit. Saturdays free. Fall semester emphasis on measurement of the cultural landscape; spring semester emphasis on the physical landscape.

4042 Enterprise Geographic Information Systems (3) The use of vector-based GIS application software for the input, management, analysis, and presentation of geospatial data. Emphasis is placed on how the GIS relates to database management systems as part of building an enterprise-wide GIS.

4046 Web Mapping (3) The creation of Web sites for the presentation of geospatial data via the World Wide Web. Emphasis is placed on how the technologies of Internet Web servers, GIS application software, and database management systems form a symbiotic relationship to make such Web sites possible.

4047 Geographic Information Systems (3) Prereq.: CSC 1250 or 1255 or equivalent. Geographic information systems used in land resource management and planning; data structures and algorithms for automated retrieval and analysis of spatial data; structuring cartographic data into spatial data; integration of remotely sensed data into geographic information systems.

4048 Methods of Spatial Analysis (3) Prereq.: EXST 4001 or equivalent. Mathematical, statistical, and spatial analytical methods for handling and interpreting data related to geography.

HUMAN GEOGRAPHY
(All candidates select two systematic and one regional course.)

Systematic

2010 Human Geography (3) Survey of patterns and processes of world's cultures and landscapes.

2090 Humans and the Environment (3) Exploration of geographic concepts that underlie nature-society relationships and human-dimensions of environmental change.

4012 Elements of Cultural Geography (3) Culturally oriented prosenium in American geographical thought during the present century.

4060 Political Geography (3) Systematic, cultural-political geography; emphasis on technical and philosophical aspects and on American political landscapes; territorial political entities (cadastral, civil, national, imperial); role of the lands and seas, nature and objects of war; impacts of political entities on the landscape.

4072 Urban Historical Geography (3) Spatial evolution of cities and city-systems in western civilization through the classical, medieval, mercantile, and industrial periods to 1945.

4073 Urban Geography (3) Internal arrangement, external relations, and locational aspects of urban places, with emphasis on U.S. cities and places identified by presence of tertiary economic activities.

4074 Place and Culture (3) See ANTH 4074.

4077 Economic Geography (3) Location, characteristics, and relationships of primary, secondary, and tertiary economic activity; measurements and theories of location of economic endeavor.

4078 Environment and Development (3) Geographic theories and methods for analyzing relationship between environment and development.

4079 Geography of Religion (3) Also offered as REL 4079. Theory and methods of analyzing the culture and movement of religious rituals and traditions over space and time.

4080 Historical Geography (3) Advanced concepts and principles of historical geography.

4086 Human-Environment Interactions (3) Also offered as ANTH 4080. Cognitive and cultural adaptations and influences on the environment; the cultural geography of the southern U.S.; emphasis on the natural environment, population and economy of China and its relationships to the rest of the world.

4089 Historical Geography of the South (3) Physical and cultural geography of the southern U.S.; emphasis on geographical elements identified with the south and their historical development; environment, exploration, population, agriculture, and cultural landscape.

4051 North Africa and the Middle East (3) Also offered as INTL 4051. Survey of the geography of North Africa and the Middle East; emphasis on the geographical elements of the history, ecology, economy, and politics of the region.

4052 Geography of the United States and Canada (3) Physical and cultural geography of the United States and Canada.

4055 Geography of Europe (3) Geographical survey of the natural, cultural, and economic resources of Europe and their relationships to the rest of the world.

PHYSICAL GEOGRAPHY
(All candidates select any three courses.)

Climatology

4013 Meteorology (3) Prereq.: GEOG 2050 or equivalent. May be taken for elective geology credit. Temporal and areal variations in composition and structure of the atmosphere; meteorological instruments and measurement techniques.

4014 Climatology (3) Prereq.: GEOG 2050 or equivalent. Climatic phenomena; methods in development of regional climatic studies.

4015 Physical Climatology (3) Prereq.: GEOG 4013 or 4014 or equivalent and MATH 1552 or equivalent. May be taken for elective geology credit. Exchanges of radiation, energy, matter and momentum between the earth's surface and the atmosphere that produce characteristic environmental conditions near the ground important to both rural and urban land uses.

4016 Methods of Climatological Analysis (3) Prereq.: GEOG 4013 or GEOG 4014 or equivalent. Analysis and interpretation of climatological data and application to physical and human problems.

4017 World Climates (3) Prereq.: GEOG 2050 or equivalent. Analysis of atmospheric circulation processes that produce differences in climates throughout the world; the earth's problem climate and climatically sensitive zones most susceptible to floods, droughts, and other environmental stresses.

4018 Geophysical Hydrology (3) Prereq.: MATH 1021 or equivalent. 2 hrs. lecture; 2 hrs. lab. Analysis of basic hydrologic processes with geographical perspective; variability of runoff and groundwater; floods and droughts; climatic and land use impacts on local and global water resources.

4221 The Tropical Atmosphere (3) Prereq.: GEOG 4013 or 4014. Comparative analysis of the tropical and mid-latitude atmospheric circulation systems, including monsoon systems, tropical cyclones, and easterly waves; elements of interannual topical variability such as El Niño-Southern Oscillation.

Geomorphology and Coastal

4021 Alluvial Morphology (3) Prereq.: GEOI 1001. 1003. May be taken for elective geology credit. Processes that originate and change land and hydrographic forms of alluvial surfaces; emphasis on Louisiana.

4023 Geomorphology of the Gulf Coastal Plains (3) Prereq.: GEOI 1001. 1003. May be taken for elective geology credit. Basic principles underlying the study of land forms; emphasis on processes shaping the natural landscapes of the world.

4024 Coastal Morphodynamics (3) Prereq.: MATH 1021, 1022, or 1023. See OCS 4024.

Coastal Resources Management (3) Introduction to coastal environments and contemporary global coastal and estuarine management.