

- 369 Introduction to Zoo and Aquarium Science**  
 Spring. 3(3-0) Interdepartmental with Zoology; Fisheries and Wildlife; Veterinary Medicine. Administered by Department of Zoology. P:M: (BS 110 or LBS 144 or LBS 148H)  
 Fundamentals of zoo and aquarium operations including research, interpretation, design, nutrition, captive breeding, conservation, ethics and management.
- 390 Landscape Architecture Field Studies**  
 Fall, Spring. 2 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to juniors or seniors in Landscape Architecture. Approval of department.  
 Field observation and analysis of selected professional offices, design and planning projects, natural areas, or places of historic interest. Background familiarization of selected study sites. Evaluation and synthesis of study experiences.
- 420 Advanced Graphic Communication**  
 Spring. 4(1-6) RB: (LA 342) R: Open only to majors in Landscape Architecture.  
 Methods of 3-D visualization in the design process.
- 437 Design Implementation**  
 Fall. 3(0-6) RB: (LA 331) R: Open only to seniors in the Landscape Architecture or Horticulture major. C: LA 443 concurrently and LA 480 concurrently.  
 Development of a complete package of contract documents for a representative site development project, including construction plans, bid documents, and specifications.
- 439 Golf Course Planning and Design**  
 Fall of even years. 3(3-0) Interdepartmental with Urban Planning. Administered by Department of Geography. RB: (LA 342) R: Open only to seniors or graduate students in Urban and Regional Planning or Urban and Regional Planning-Urban Studies or Landscape Architecture.  
 History, planning, and design of the golf course as a component of the community. Environmental, regulatory, technical, and financing issues.
- 443 Community Project Design I**  
 Fall. 5(2-6) RB: (LA 342) R: Open only to majors in Landscape Architecture or Urban and Regional Planning. Approval of department. C: LA 437 concurrently and LA 480 concurrently.  
 Development of design solutions for medium scale site development projects focusing on moderately complex design programs and problems.
- 444 Community Project Design II**  
 Spring. 5(2-6) RB: (LA 443) R: Open only to majors in Landscape Architecture.  
 The community systems planning process. Application of multiple use theory and techniques. Integration of project demands and community infrastructure.
- 445 Advanced Project Design**  
 Spring. 4(0-8) RB: (LA 444 and LA 480) R: Open only to seniors in Landscape Architecture.  
 Application of design theory to complex site development projects in community settings. Interaction of human activities, sites, and end uses. Use of community feedback.

- 446 Regional Environmental Design**  
 Fall. 3(0-6) RB: (LA 444) R: Open only to seniors in Landscape Architecture or approval of department.  
 Theory and tools in regional environmental design and their application to site facilities, assignment of land use, and management of landscape structure with special emphasis on spatial identity, visual quality, and environmental modeling. Human dimensions to landscape change.
- 480 Professional Practice (W)**  
 Fall. 3(2-2) P:M: Completion of Tier I writing requirement. R: Open only to seniors or graduate students in Landscape Architecture. C: LA 437 concurrently and LA 443 concurrently.  
 Principles and procedures of professional office practice. Organization and management of offices, personnel, and projects. Ethical and legal issues.
- 483 Historic Preservation and Preservation Planning in the U.S.**  
 Fall. 4(4-0) Interdepartmental with Urban Planning. Administered by Department of Geography. R: Not open to freshmen or sophomores. Approval of department.  
 History and philosophy of the preservation of buildings, structures, and objects significant to the heritage of this nation. Preservation as a planning tool for local governments.
- 490 Independent Study**  
 Fall, Spring. 1 to 4 credits. A student may earn a maximum of 7 credits in all enrollments for this course. R: Open only to students in Landscape Architecture. Approval of department.  
 Individual investigation of landscape architecture topics in the interest areas of the Landscape Architecture faculty.
- 492 Senior Research Seminar (W)**  
 Spring. 3(2-2) P:M: Completion of Tier I writing requirement. R: Open only to seniors or graduate students in Landscape Architecture.  
 Contemporary issues of relevance to the profession.
- 493 Internship in Landscape Architecture**  
 Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to seniors in Landscape Architecture or approval of department.  
 Supervised experience in approved public agencies and professional offices.
- 494 Special Topics in Landscape Architecture**  
 Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to juniors or seniors in Landscape Architecture or approval of department.  
 Selected subjects in landscape architecture derived from emerging issues and topics.
- 498 Internship in Zoo and Aquarium Science**  
 Fall, Spring, Summer. 3 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. Interdepartmental with Zoology; Fisheries and Wildlife. Administered by Department of Zoology. R: Open only to juniors or seniors. Approval of department.  
 Application of zoological experience in a zoo or aquarium setting outside the university.

- 816 Environmental Design Theory**  
 Fall. 3(3-0) Interdepartmental with Horticulture; Park, Recreation and Tourism Resources; Human Environment and Design. RB: Undergraduate design degree recommended.  
 Differences between normative theories, scientific theories, models, and constructs. Exploration of normative theories related to thesis or practicum.
- 817 Environmental Design Studio**  
 Spring. 3(0-6) Interdepartmental with Horticulture; Park, Recreation and Tourism Resources; Human Environment and Design. P:M: (LA 816 and LA 883) RB: Undergraduate design degree.  
 Development of a student-selected environmental design project in a collaborative setting.
- 883 Environmental Design Seminar**  
 Fall. 3(3-0) Interdepartmental with Horticulture; Park, Recreation and Tourism Resources; Human Environment and Design. RB: Undergraduate design degree.  
 Examination of the breadth of environmental design projects. Literature review of focused projects. Development of practicum or thesis proposals.
- 898 Master's Thesis Practicum**  
 Fall, Spring, Summer. 3 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: Undergraduate design degree. R: Open only to graduate students in Environmental Design.  
 Detailed professional application of a student-selected environmental design project.
- 899 Master's Thesis Research**  
 Fall, Spring, Summer. 3 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: Undergraduate design degree. R: Open only to graduate students in Environmental Design.  
 Preparation and completion of an independent research thesis.

## LANGUAGE, LEARNING AND TEACHING

LLT

Department of Linguistics  
and Germanic, Slavic,  
Asian and African  
Languages  
College of Arts and Letters

- 307 Methods of Teaching English to Speakers of Other Languages**  
 Spring. 3(3-0) P:M: Completion of Tier I writing requirement. SA: ENG 307  
 National and international approaches, methods, materials, settings, needs, and characteristics of TESOL. Survey, evaluation, and application of major effective methods and materials.

## Language, Learning and Teaching—LLT

- 461 Second Language Acquisition**  
Fall, 3(3-0) P:M: Completion of Tier I writing requirement. R: Not open to freshmen or sophomores. Approval of department. SA: ENG 461

Factors in second language learning such as age, motivation, language input and interaction, social influences, the role of the native language, and language universals.

- 807 Methods of Teaching English to Speakers of Other Languages**  
Spring, 3(3-0) R: Open only to graduate students in College of Arts and Letters. SA: ENG 807

Approaches, methods, and materials for teaching English to non-native speakers, including the teaching of listening, speaking, reading, and writing. Selection and evaluation of materials, lesson planning, and management of activities and materials.

- 808 Studies in Teaching English to Speakers of Other Languages**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. RB: (ENG 807) R: Open only to master's students in English-Teaching of English to Speakers of Other Languages. SA: ENG 808

Methodology of selected areas in teaching English to non-native speakers. Materials development and syllabus design. Program administration and evaluation. Instructional evaluation. Testing methods and materials. Major contemporary issues.

- 841 Topics in Second/Foreign Language Learning and Teaching**  
Fall, Spring, 3(3-0)  
Selected topics and issues in second/foreign language learning and teaching.

- 846 English Structures and Functions**  
Spring, 3(3-0) R: Open only to master's students in English-Teaching of English to Speakers of Other Languages. SA: ENG 846

Phonological, morphological, grammatical, lexical, discourse and pragmatic systems of English, including historical origins and social, regional, and gender variations. Application to the teaching of English to speakers of other languages.

- 872 Research Methods for Language Teaching and Foreign/Second Language Learning**  
Fall, Spring, 3(3-0) RB: (LLT 807 and LLT 461)

Concepts and procedures for designing and conducting research in second/foreign language learning and teaching.

- 890 Independent Study**  
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

Special projects, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings.

- 896 Practicum in Teaching English as a Second Language**  
Spring, 3(3-1)

Syllabus and lesson plan development for a six-week English as a Second Language course. Team teach in a community setting.

- 897 Teaching English as a Second Language**  
Spring, 3(3-0)  
Teaching of pedagogical skills and grammar at different proficiency levels.

- 898 Master's Research**  
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
Directed research in support of Plan B master's degree requirements.

- 899 Master's Thesis Research**  
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
Directed research leading to a master's thesis, used in partial fulfillment of Plan A master's degree requirements.

- 992B Seminar in English as a Second Language**  
Fall, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to doctoral students in the College of Arts and Letters or approval of department. SA: ENG 992B

Contemporary theories and issues relating to learning English as a second language.

## LARGE ANIMAL CLINICAL SCIENCES LCS

### Department of Large Animal Clinical Sciences College of Veterinary Medicine

- 412 Hazard Analysis and Critical Control Points in Production Medicine**  
Spring, 2(2-0) R: Not open to freshmen. Not open to graduate-professional students in the College of Veterinary Medicine.

Animal disease and health in relation to livestock production, food safety and public health. Production medicine and the ability to develop hazard analysis critical control points (HACCP) strategies for animal disease management.

- 610 Problems in Large Animal Clinical Sciences**  
Fall, Spring, Summer, 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine or approval of department.

Advanced clinical training in a problem related to large animal clinical sciences.

- 611 Research Problems in Large Animal Clinical Sciences**  
Fall, Spring, Summer, 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine or approval of department.

Research related to a large animal specialty

- 613 Off-Campus Problems in Large Animal Clinical Sciences**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Completion of Semester 5 of the graduate-professional program in the College of Veterinary Medicine. Approval of department.

Advanced clinical-phase training in an off-campus setting in a specific problem related to large animal clinical sciences, for which on-campus training is not available. The students specific training objective will be developed and approved from both an on-campus liaison and the off-campus liaison.

- 620 Equine Clinical Clerkship I**  
Fall, Spring, Summer, 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Supervised practice in equine medicine and surgery. Diagnosis, prognosis, treatment, and disease prevention. Required clerkship.

- 621 Equine Practice Clerkship**  
Fall, Spring, Summer, 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Supervised, off-campus experience in an assigned veterinary practice. Regular equine farm calls. After-hours emergencies. Veterinary practice management.

- 622 Equine Clinical Clerkship II**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: (LCS 620) R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Advanced general training in equine medicine and surgery.

- 623 Equine Musculoskeletal Diseases Clerkship**  
Fall, Spring, Summer, 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Techniques and procedures used for the diagnosis and management of equine musculoskeletal diseases. Hospital and field cases.

- 624 Equine Theriogenology Clerkship**  
Fall, Spring, Summer, 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Emphasis on diagnostic methods utilized in equine reproduction.

- 625 Equine Herd Health Clerkship**  
Fall, Spring, 3 credits. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine.

Establishing and maintaining equine herd health programs. Reproduction, parasite control, immunization, and diagnostic medicine and surgery in the field.