LANDSCAPE ARCHITECTURE

Department of Geography
College of Social Science

280. Introduction to Landscape Architecture
Fall. 3(0-6)
Environmental issues and problem-solving strategies within landscape architecture.

220. Graphic Communication
Fall. 4(2-4)
R: Open only to students in Landscape Architecture, Urban and Regional Planning, and Horticulture. Fundamentals of graphic design including digital and traditional drawing, layout, typography, and presentation. Principles of design and presentation techniques. Introduction to basic symbols, references, methods of presentation and graphic reproduction.

270. Landscape Design History
Spring. 3(0-6)
History of landscape architecture. Landscape development, design, forms, and organization.

311. Landscape Design and Management Specifications
Spring. 4(3-2) Interdepartmental with Horticulture. Administered by Horticulture. Principles and procedures for landscape engineering of site structures and systems such as road alignment, storm and subsurface drainage. Site utilities.

330. Site Construction: Materials and Methods
Fall. 4(2-6)
P: LA 220. R: Open only to majors in Landscape Architecture, Horticulture, Crop and Soils Sciences, and Park and Recreation Resources. Principles and properties of grading, drainage, construction materials and methods.

331. Site Engineering
Spring. 4(2-4)
P: LA 330. R: Open only to majors in Landscape Architecture and Horticulture. Principles and procedures for landscape engineering of site structures and systems such as road alignment, storm and subsurface drainage. Site utilities.

341. Basic Site Design I
Fall. 4(2-4)
P: LA 240. R: Open only to students in Landscape Architecture, Horticulture, Crop and Soils Sciences, and Urban Planning. Introduction to the design process. Focus on program development, inventory, and analysis.

342. Basic Site Design II
Spring. 4(2-6)
P: LA 341. R: Open only to students in Landscape Architecture, Horticulture, Crop and Soils Sciences, and Urban Planning. Development of design solutions for individual projects at a small scale. Focus on simple design programs and problems of limited complexity.

359. Introduction to Zoo and Aquarium Science

390. Landscape Architecture Field Studies
Fall, Spring. 3-4 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
R: Open only to juniors and 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)
P: LA 342. R: Open only to majors in Landscape Architecture. Methods of 3-D visualization in the design process.

437. Design Implementation
Fall. 3 credits
P: LA 331, LA 489. R: Open only to seniors in the 5th year of the Landscape Architecture major and to seniors in Horticulture. 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-numbered years. 3(3-0) Interdepartmental with Urban Planning. Administered by Urban Planning.
P: UP 344 or LA 342. R: Open only to seniors and 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.

441. Community Project Design I
Fall. 5(2-6)
P: LA 342. R: Open only to students in Landscape Architecture with an urban design cognate and to students in Urban Planning. Development of design solutions for medium scale site development projects focusing on moderately complex design programs and problems.

442. Community Project Design II
Spring. 5(2-6)
P: LA 443. R: Open only to students 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 credits
P: LA 444, LA 541. R: Open only to juniors and 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.

486. Regional Environmental Design
Fall. 3 credits
P: LA 444. R: Open only to seniors in Landscape Architecture. 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.

489. Professional Practice (W)
Fall. 3-2-2
P: LA 443. R: Open only to seniors and graduate students in Landscape Architecture. Completion of Tier I writing requirement. 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 and History of Art. Administered by Urban Planning. R: Not open to freshmen and 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. 1-4 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 a topic of interest in the Landscape Architecture faculty.

490H. Honors in Landscape Architecture
Fall, Spring. 3-4 credits. A student may earn a maximum of 7 credits in all enrollments for this course.
R: Open only to Honors College seniors. Approval of department. Supervised individual investigation of Landscape Architecture topics.

492. Senior Research Seminar (W)
Spring. 3(2-2)
P: Open only to seniors and graduate students in Landscape Architecture. Completion of Tier I writing requirement. Contemporary issues of relevance to the profession.

493. Internship in Landscape Architecture
Fall, Spring, Summer. 2-6 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: 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 and seniors in Landscape Architecture. Approval of department. Selected subjects in landscape architecture derived from emerging issues and topics.
LARGE ANIMAL CLINICAL SCIENCES

Department of Large Animal Clinical Sciences
College of Veterinary Medicine

412. Hazard Analysis and Critical Control Points in Production Medicine
Spring, 2 credits
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 and public health. Production medicine and the ability to develop hazard analysis critical control points (HACCP) strategies for animal disease management.

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

511. 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: Open only to graduate-professional students in the College of Veterinary Medicine. Approval of department. Research related to a large animal specialty.

562. Equine Clinical Clerkship I
Fall, Spring, Summer. 3 credits.
A student may earn a maximum of 6 credits in all enrollments for this course.
P: LCS 620 or LCS 621; approval of department. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 650.
Supervised practice in equine medicine and surgery. Diagnosis, prognosis, treatment, and disease prevention.

563. Equine Musculoskeletal Diseases Clerkship
Fall, Spring, Summer. 3 credits.
P: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 651.
Techniques and procedures used for the diagnosis and management of equine musculoskeletal diseases. Hospitalized and field cases.

564. Equine Orthopedic Surgery
Fall, Spring, Summer. 3 credits.
P: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 654.
Emphasis on diagnostic methods utilized in equine reproduction.

565. Equine Herd Health Clerkship
Fall, Spring, Summer. 3 credits.
P: LCS 621. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Establishing and maintaining equine herd health programs. Reproduction, parasitic control, immunization, and diagnostic medicine and surgery in the field.

566. Advanced Equine Medicine
Fall, Spring, Summer. 3 credits.
P: LCS 620 or LCS 621; LCS 622. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.
Advanced, in-depth training in the veterinary management of equine surgical patients. Emphasis on breeds used for racing or sport.

567. Techniques in Equine Anesthesia and Surgery
Fall, Spring, Summer. 3 credits.
P: LCS 620 or LCS 621; LCS 622. R: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.

568. Equine Fundamentals
Spring. 3 credits.
P: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.
Basic clinical skills in equine medicine, surgery and reproduction.

612. Equine Fundamentals
Fall, Spring, Summer. 3 credits.
P: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.
Basic clinical skills in equine medicine, surgery and reproduction.

622. Food Animal Medicine and Surgery Clerkship
Fall, Spring, Summer. 3 credits.
P: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 660.
Disease diagnosis and therapy of food animal species in a hospital setting. Disease process related to herd origin.

632. Advanced Equine Surgical Clerkship
Fall, Spring, Summer. 3 credits.
P: LCS 640. Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 672.
In depth, supervised food animal medicine and surgery.

633. Dairy Production Clerkship
Fall, Spring, Summer. 3 credits.
P: LCS 631, completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 668.
Dairy farm and herd health management. Record keeping, general management, housing, nutrition, mastitis control.

634. Swine Production Medicine Clerkship
Fall, Spring, Summer. 3 credits.
P: LCS 631, completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 668.
Swine diseases and related production problems encountered in swine herd health programs.

635. Advanced Swine Production Medicine
Fall. 3 credits.
P: LCS 634. Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.
Preparation for herd consultation, population management, records analysis, integrated production systems, and complex multi-factorial problems.

636. Introduction to Herd Medicine
Fall, Spring, Summer. 3 credits.
P: Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.
Principles of herd health and production medicine. Participation in the production medicine service.

637. Advanced Dairy Production Medicine
Fall, Spring, Summer. 3 credits.
P: LCS 635; LCS 638. Completion of semester 5 of the professional veterinary program. Open only to graduate-professional students in College of Veterinary Medicine.
Topics related to enhancing profitability, decreasing disease, and improving management of dairy farms.