

**Descriptions—Labor and Industrial Relations of Courses**

**858. Collective Bargaining**  
Fall, , Summer. 3(3-0)  
R: Open only to students in the School of Labor and Industrial Relations.  
Theory and practice of collective bargaining. Wages, benefits, seniority, grievances, arbitration, and labor-management committees. Legal, economic, technological, and historical contexts.  
QA: LIR 858

**860. Negotiation and Conflict Resolution**  
Spring. 3(3-0)  
P: LIR 824 or LIR 858. R: Open only to students in the School of Labor and Industrial Relations.  
Negotiation and conflict resolution in employment settings. Use of experiential simulations to develop bargaining styles and interpersonal process skills.  
QP: LIR 824 or LIR 858

**863. Law of Labor Management Relations**  
Fall, Spring. 3(3-0)  
R: Open only to students in the School of Labor and Industrial Relations.  
Legal framework for contract negotiations and administration. National Labor Relations Act as amended. Right to organize and undertake concerted activity. Strikes and lockouts. Unfair labor practices.  
QA: LIR 863

**865. Grievance Administration and Arbitration**  
Spring. 3(3-0)  
P: LIR 858 or LIR 863. R: Open only to students in the School of Labor and Industrial Relations.  
Grievance procedure and arbitration as the terminal step in the grievance process under collective bargaining. Grievance procedures in non-union employment settings.  
QP: LIR 858 or LIR 863 QA: LIR 865

**868. Equal Employment Opportunity and Occupational Safety and Health Policy**  
Spring, Summer. 3(3-0)  
R: Open only to students in the School of Labor and Industrial Relations.  
Administrative policies and judicial decisions promoting equal employment opportunity. Analysis and review of governmental policies protecting workers from unsafe working conditions. Implications for employers and unions.  
QA: LIR 868

**871. Collective Bargaining in Public Employment**  
Fall. 3(3-0)  
P: LIR 858 or LIR 863. R: Open only to students in the School of Labor and Industrial Relations.  
History and current status of collective bargaining policies and practices in public jurisdictions, including federal, state, and local government units.  
QP: LIR 858 or LIR 863 QA: LIR 841

**890. Readings in Labor Relations and Human Resources**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: 15 credits in LIR. R: Open only to students in the School of Labor and Industrial Relations.  
Individual readings under faculty guidance.  
QA: LIR 895

**891. Special Topics in Labor Relations and Human Resources**  
Fall. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to students in the School of Labor and Industrial Relations.  
Special topics in collective bargaining, human resources, employment, and training.  
QA: LIR 881

**899. Master's Thesis Research**  
Fall, Spring, Summer. 3 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: 9 graduate credits. R: Open only to students in the School of Labor and Industrial Relations.  
QA: LIR 899

**934. Survey Methods in Labor and Industrial Relations**  
Spring of odd-numbered years. 3(3-0)  
R: Open only to students in the School of Labor and Industrial Relations.  
Design and conduct of data collection operations in labor and industrial relations. Sample design and sampling procedures. Design of questionnaires and interview schedules. Data editing, coding, and analysis.  
QA: LIR 834

**992A. Seminar in Organizational Behavior and Human Resources**  
Fall of odd-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LIR 823 and LIR 824. R: Open only to students in the School of Labor and Industrial Relations.  
Research and policy analysis of selected topics in organizational behavior and human resources in labor and industrial relations.  
QA: LIR 923

**992B. Seminar in Collective Bargaining and Labor Unions**  
Spring of even-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LIR 801 and LIR 858. R: Open only to students in the School of Labor and Industrial Relations.  
Research and policy analysis of selected topics in collective bargaining and labor unions.  
QP: LIR 858 QA: LIR 958

**LANDSCAPE ARCHITECTURE** LA  
Department of Geography  
College of Social Science

**200. Introduction to Landscape Architecture**  
Fall. 3(3-0)  
Environmental issues and problem-solving strategies within landscape architecture.  
QA: LA 100, LA 201

**220. Graphic Communication**  
Fall. 4(2-4)  
R: Open only to students in Landscape Architecture, Urban and Regional Planning, and Horticulture.  
Freehand and mechanical drafting and lettering, sketching, and perspective drawing. Graphic symbols and diagrams. Delineation and rendering media and techniques. Presentation and graphic reproduction methods.  
QA: LA 120, LA 221

**240. Applied Design Fundamentals**  
Spring. 4(2-4)  
R: Open only to majors in Landscape Architecture, Horticulture, Crop and Soil Sciences, and Urban Planning.  
Application of the principles and theory of design in advanced two- and three-dimensional representation.  
QA: LA 110, LA 221

**270. Landscape Design History**  
Spring. 3(3-0)  
History of landscape architecture. Landscape development styles, design forms, and organization.  
QA: LA 370, LA 471

**330. Site Construction: Materials and Methods**  
Fall. 4(2-4)  
P: LA 220. R: Open only to majors in Landscape Architecture, Horticulture, Crop and Soil Sciences, and Park and Recreation Resources.  
Elements and principles of grading, drainage, construction materials and methods.  
QP: LA 120 or LA 221 QA: LA 233, LA 330

**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.  
QP: LA 233, LA 330 QA: LA 332

**341. Basic Site Design I**  
Fall. 4(2-4)  
P: LA 240. R: Open only to students in Landscape Architecture, Horticulture, Crop and Soil Sciences, and Urban Planning.  
Introduction to the design process. Focus on program development, inventory, and analysis.  
QP: LA 120 QA: LA 240

**342. Basic Site Design II**  
Spring. 4(2-4)  
P: LA 341. R: Open only to students in Landscape Architecture, Horticulture, Crop and Soil 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.  
QP: LA 240 QA: LA 340 LA 340L

**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 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.  
QA: LA 390

**401. Environmental Land-Planning Theory**  
Fall. 3(3-0)  
R: Open only to seniors and graduate students.  
Issues and principles of ecology-based land planning. Use of natural resources in development. Assessment of environmental quality. Environmental regulations and policies at local, state, and national levels.  
QA: LA 401

**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.  
QA: LA 420

**437. Design Implementation**  
Spring. 3(0-6)  
P: LA 331, LA 480. 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.  
QA: LA 437

**443. Community Project Design I**  
Fall. 4(2-4)  
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.  
QP: LA 340L QA: LA 342, LA 346

**444. Community Project Design II**  
Spring. 4(2-4)  
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.  
QP: LA 340L QA: LA 342, LA 346

**445. Advanced Project Design**  
Spring. 4(0-8)  
P: LA 444, LA 480. 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.  
QP: LA 444, LA 480 QA: LA 448

- 473. Urban Design Theory**  
Fall, 3(3-0)  
R: Not open to freshmen and sophomores. Concepts and procedures for the organization, design, and development of public and private urban forms and spaces. Focus on American communities.  
QA: LA 403, LA 471
- 480. Professional Practice**  
Spring, 3(2-2)  
P: LA 443. R: Open only to seniors and graduate students in Landscape Architecture. Principles and procedures of professional office practice. Organization and management of offices, personnel, and projects. Ethical and legal issues.  
QP: LA 346 QA: LA 480
- 490. Independent Study**  
Fall, Spring, 3 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.  
QA: LA 490
- 490H. Honors in Landscape Architecture**  
Fall, Spring, 3 to 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.  
QA: LA 400H
- 492. Senior Research Seminar**  
Spring, 3(2-2)  
R: Open only to seniors and graduate students in Landscape Architecture. Contemporary issues of relevance to the profession.  
QA: LA 483
- 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: Seniors in Landscape Architecture or approval of department. Supervised experience in approved public agencies and professional offices.  
QA: LA 489

## LARGE ANIMAL CLINICAL SCIENCES LCS

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

- 412. Principles of Production Medicine**  
Spring, 2(2-0)  
R: Open only to juniors and seniors in College of Agriculture and Natural Resources. Animal health with emphasis on infectious, parasitic and metabolic disease control and prevention. Principles of production medicine.  
QA: LCS 412
- 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. Advanced clinical training in a problem related to large animal clinical sciences.
- 612. Problems in Production Medicine**  
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LCS 630 or LCS 631; approval of department. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Production medicine problems of livestock health management. Course offered through a consortium with the universities of Illinois, Florida, California, and Nebraska, and Kansas State University, work to be completed at one of those universities.

- 620. Equine Medicine and Surgery Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: Completion of semester 5 of the professional veterinary program. R: 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.  
QA: LCS 650
- 621. Equine Field Service Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine. Diagnosis, treatment, and prevention of common diseases of horses in a field setting.
- 622. Advanced Equine Medicine and Surgery Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LCS 620. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in LCS 654. In-depth, supervised equine medicine and surgery.  
QA: LCS 654
- 623. Equine Musculoskeletal Diseases Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: Completion of semester 5 of the professional veterinary program. R: 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.  
QA: LCS 651
- 624. Equine Theriogenology Clerkship**  
Fall, Spring, Summer, 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. Not open to students with credit in LCS 644. Emphasis on diagnostic methods utilized in equine reproduction.  
QA: LCS 644
- 625. Equine Herd Health Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LCS 621. R: Completion of semester 5 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in LCS 666. Establishing and maintaining equine herd health programs. Reproduction, parasite control, immunization, and diagnostic medicine and surgery in the field.  
QA: LCS 666
- 630. Food Animal Medicine and Surgery Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: Completion of semester 5 of the professional veterinary program. R: 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 of origin.  
QA: LCS 660

- 631. Introductory Food Animal Production Medicine**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 660. Management of on-farm environment. Epidemiological approach to problem solving involving total herd medicine.  
QA: LCS 660
- 632. Advanced Food Animal Medicine and Surgery Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LCS 630, completion of semester 5 of the professional veterinary program. R: 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.  
QA: LCS 672
- 633. Dairy Production Medicine Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LCS 631, completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 664. Dairy farm and herd health management. Record keeping, general management, housing, nutrition. Mastitis control.  
QA: LCS 664
- 634. Swine Production Medicine Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: LCS 631, completion of semester 5 of the professional veterinary program. R: 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.  
QA: LCS 668
- 640. Large Animal Anesthesia Clerkship**  
Fall, Spring, Summer, 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
P: Completion of semester 5 of the professional veterinary program. R: Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 656. Concepts and supervised practice in large animal anesthesia.  
QA: LCS 656
- 642. Special Problems-Research Clerkship**  
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 fourth year graduate-professional students in College of Veterinary Medicine. Application required. Research related to a large animal specialty. Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.
- 644. Theriogenology Clerkship**  
Spring, Summer, 2 credits.  
R: Open only to fourth year graduate-professional students in College of Veterinary Medicine. Not open to students with credit in LCS 624. Clinical experience with diagnostic methods used in large animal reproduction. Temporary approval effective from Fall Semester 1992 through Spring Semester 1996.  
QA: LCS 644