

**LABOR AND INDUSTRIAL RELATIONS**

**854\*.** **Comparative Industrial Relations**  
 Spring. 3(3-0)  
 P: LIR 801 or 858 or 863 R: graduate students

Review and analysis of labor relations in different nations. Comparison of industrialized market economies and industrial relations experience. Analysis of selected current comparative industrial relations problems.  
 QP: LIR 801 ORLIR 858ORLIR 863 QA: LIR 854

**858\*.** **Collective Bargaining**  
 Fall, , Summer. 3(3-0)  
 R: Open only to graduate students.

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 graduate students.

Negotiation and conflict resolution in employment settings. Use of experiential simulations to develop bargaining styles and interpersonal process skills.  
 QP: LIR 824 ORLIR 858

**863\*.** **Law of Labor Management Relations**  
 Fall, Spring. 3(3-0)  
 R: Open only to graduate students.

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 graduate students.

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 ORLIR 863 QA: LIR 865

**868\*.** **Equal Employment Opportunity and Occupational Safety and Health Policy**  
 Spring, Summer. 3(3-0)  
 R: Open only to graduate students.

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 graduate students.

History and current status of collective bargaining policies and practices in public jurisdictions, including federal, state, and local government units.  
 QP: LIR 858 ORLIR 863 QA: LIR 841

**890\*.** **Readings in Labor Relations and Human Resources**  
 Fall, Spring, Summer. 1 to 6 credits.  
 May reenroll for a maximum of 6 credits.

P: 15 credits in LIR. R: Open only to graduate students. Approval of school. Individual readings under faculty guidance.  
 QA: LIR 895

**891\*.** **Special Topics in Labor Relations and Human Resources**  
 Fall. 1 to 6 credits. May reenroll for a maximum of 6 credits.  
 R: Open only to graduate students.

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.  
 May reenroll for a maximum of 6 credits.  
 P: 9 graduate credits. R: Open only to graduate students. Approval of school.

QA: LIR 899

**934\*.** **Survey Methods in Labor and Industrial Relations**  
 Spring of even-numbered years. 3(3-0)  
 R: Open only to graduate students in 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)  
 May reenroll for a maximum of 6 credits.

P: LIR 823 and LIR 824. R: Open only to graduate students. 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 odd-numbered years. 3(3-0)  
 May reenroll for a maximum of 6 credits.

P: LIR 801 and LIR 858. R: Open only to graduate students. Research and policy analysis of selected topics in collective bargaining and labor unions.  
 QP: LIR 858 QA: LIR 958

**LANDSCAPE ARCHITECTURE LA**

**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(02-04)  
 R: Open only to students in Landscape Architecture, Urban Planning, Horticulture, and Interior Design.

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 ORLA 221 QA: LA 233 LA 330

**331\*.** **Site Engineering**  
 Fall. 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 ANDLA 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: LA120 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: LA240 QA: LA 340 LA340L

**390\*.** **Landscape Architecture Field Studies**  
 Spring. 2 to 4 credits. May reenroll for a maximum of 6 credits.

R: Not open to freshmen and sophomores. 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

**LANDSCAPE ARCHITECTURE**

**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: LA340L 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*  
Fall. 4(0-8)  
P: LA 444, LA 480. R: Open only to students 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. May reenroll for a maximum of 7 credits.  
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. May reenroll for a maximum of 7 credits.  
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. May reenroll for a maximum of 8 credits.  
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**

**412\*.** *Principles of Production Medicine*  
Spring. 2(2-0)  
P: None. C: None. R: Junior or Senior Agriculture and Natural Resources Agriculture Fundamentals of animal health with special emphasis on infectious, parasitic and metabolic disease control and prevention. Principles of production medicine will be developed.  
QP: NONE QA: LCS 412

**620\*.** *Equine Medicine and Surgery Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 of the College of Veterinary Medicine. R: College of Veterinary Medicine. Veterinary Medicine none Concepts and supervised practice in equine medicine and surgery. Emphasis on diagnosis, prognosis, treatment and disease prevention.

**621\*.** *Equine Field Service Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 of the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none Diagnosis, treatment and prevention of common diseases of horses in a field setting.

**622\*.** *Advanced Equine Medicine and Surgery Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 and LCS 651 R: College of Veterinary Medicine Veterinary Medicine none In-depth, supervised equine medicine and surgery.

**623\*.** *Equine Musculoskeletal Diseases Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 of the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none Techniques and procedures used for the diagnosis and management of a variety of equine musculoskeletal diseases utilizing hospitalized and field cases.

**624\*.** *Equine Theriogenology Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 of the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none Provide clinical experience with emphasis on diagnostic methods utilized in equine reproduction.

**625\*.** *Equine Herd Health Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 of the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none Establishing and maintaining equine herd health programs. Reproduction, parasite control, immunization, and diagnostic medicine and surgery in the field.

**630\*.** *Food Animal Medicine and Surgery Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 of the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none Disease diagnosis and therapy of food animal species in a hospital setting with an emphasis on the disease process as it relates to the herd of origin.

**631\*.** *Introductory Food Animal Production Medicine*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 of the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none Training relative to management of on-farm environment. An epidemiological approach to problem solving involving total herd medicine.

**632\*.** *Advanced Food Animal Medicine and Surgery Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 and LCS 630. R: College of Veterinary Medicine Veterinary Medicine none Advanced, supervised food animal medicine and surgery.

**633\*.** *Dairy Production Medicine Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 and LCS 631. R: College of Veterinary Medicine Veterinary Medicine none Dairy farm and herd health management. Record keeping, general management, housing, nutrition and mastitis control will be emphasized.

**634\*.** *Swine Production Medicine Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 and LCS 631. R: College of Veterinary Medicine Veterinary Medicine none Swine diseases and related production problems encountered in swine herd health programs.

**640\*.** *Large Animal Anesthesia Clerkship*  
Fall, Spring, Summer. 3(-) May reenroll for a maximum of 6 credits.  
P: Completion of semesters 1-5 of the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none Concepts and supervised practice in large animal anesthesiology.

**642\*.** *Special Problems-Research Clerkship*  
Fall, Spring, Summer. 2(-)  
P: Completion of Year 3 of the College of Veterinary Medicine R: Year 4 College of Veterinary Medicine Veterinary Medicine none Research related to a large animal specialty.

**644\*.** *Theriogenology Clerkship*  
Spring, Summer. 2(-)  
P: Completion of Year 3 of the College of Veterinary Medicine. R: Year 4 College of Veterinary Medicine Veterinary Medicine none Provide hands-on clinical experience with diagnostic methods utilized in large animal reproduction.