

Labor and Industrial Relations—LIR

855 Labor and Management Relations
Spring. 2(2-0) Interdepartmental with Executive MBA Program. Administered by Business. R: Open only to students in the Executive M.B.A. Program. SA: MGT 855

Industrial relations in American union and management collective bargaining. Compensation issues. Grievance concepts and arbitration. Dispute resolution.

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.

860 Negotiation and Conflict Resolution
Fall, Spring. 3(3-0) P:M: (LIR 823 or LIR 858) R: Open only to students in the School of Labor and Industrial Relations and students in the Interdisciplinary Ph.D. program in Social Science with a concentration in Industrial Relations and Human Resources.

Negotiation and conflict resolution in employment settings. Use of experiential simulations to develop bargaining styles and interpersonal process skills.

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.

865 Grievance Administration and Arbitration
Spring. 3(3-0) P:NM: (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.

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.

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:NM: 15 credits in LIR. R: Open only to students in the School of Labor and Industrial Relations.

Individual readings under faculty guidance.

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.

899 Master's Thesis Research
Fall, Spring, Summer. 0(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P:NM: 9 graduate credits. R: Open only to students in the School of Labor and Industrial Relations.
Master's thesis research.

992A Seminar in Organizational Behavior and Human Resources
Fall of odd years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P:NM: (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.

992B Seminar in Collective Bargaining and Labor Unions
Spring of odd years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P:NM: (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.

311 Landscape Design and Management Specifications
Spring. 4(3-2) Interdepartmental with Horticulture. Administered by Department of Horticulture. P:M: (HRT 211 and HRT 212 or concurrently)

Landscape design techniques, spatial organization, plant selection, plant and site interaction. Relationship between design, construction and maintenance. Preparation of planting and maintenance specifications.

330 Site Construction: Materials and Methods
Fall. 4(2-4) P:NM: (LA 220) R: Open only to majors in Landscape Architecture, Horticulture or Crop and Soil Sciences or Park, Recreation and Tourism Resources.

Elements and principles of grading, drainage, construction materials and methods.

331 Site Engineering
Spring. 4(2-4) P:NM: (LA 330) R: Open only to majors in Landscape Architecture or 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:NM: (LA 240) and (GEO 221 and HED 240) R: Open only to majors in Landscape Architecture or Horticulture or Crop and Soil Sciences or Urban and Regional Planning.

Introduction to the design process. Focus on program development, inventory, and analysis.

342 Basic Site Design II
Spring. 5(2-6) P:NM: (LA 341) R: Open only to majors in Landscape Architecture or Horticulture or Crop and Soil Sciences or Urban and Regional Planning.

Development of design solutions for individual projects at a small scale. Focus on simple design programs and problems of limited complexity.

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) P:NM: (LA 342) R: Open only to majors in Landscape Architecture.
Methods of 3-D visualization in the design process.

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.

220 Graphic Communication
Fall. 4(2-4) R: Open only to majors in Landscape Architecture or Urban and Regional Planning or Horticulture.

Fundamentals of graphics including freehand and technical drafting, lettering, sketching, perspective drawing, and delineation and rendering. Principles of design and field drawing techniques. Also introduced: plan, section, elevation and basic symbols, references, methods of presentation and graphic reproduction.

240 Applied Design Fundamentals
Spring. 4(2-4) P:NM: (LA 220) or approval of department. R: Open only to majors in Landscape Architecture or Horticulture or Crop and Soil Sciences or Urban and Regional Planning.

Application of the principles and theory of design in advanced two- and three-dimensional representation.

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

- 437 Design Implementation**
Fall. 3(0-6) P:NM: (LA 331) R: Open only to seniors in the Landscape Architecture or Horticulture major. C: LA 443 concurrently, 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. P:NM: (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) P:NM: (LA 443) R: Open only to majors in Landscape Architecture or Urban and Regional Planning. Approval of department. C: LA 437 concurrently, 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) P:NM: (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) P:NM: (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) P:NM: (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, 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.

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. P:NM: (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.