

**995. Research Practicum in Kinesiology**  
*Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Open only to doctoral students in the College of Education. Approval of department.*  
 Supervised research practicum. Design, execution, analysis, presentation, critique, and revision of research projects.  
 SA: PES 995

**999. Doctoral Dissertation Research**  
*Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open only to doctoral students.*  
 SA: PES 999

**LABOR AND INDUSTRIAL RELATIONS LIR**

**School of Labor and Industrial Relations  
 College of Social Science**

**801. Trade Union History, Structure, and Administration**  
*Fall, Summer. 3(3-0) R: Open only to student in the School of Labor and Industrial Relations.*  
 History of American unions. Theories of unionism. Union structure, government and democracy. Role of unions in society and politics. Legal requirements on unions. Current union problems.

**809. Labor Markets**  
*Fall, Spring. 3(3-0) R: Open only to students in the School of Labor and Industrial Relations.*  
 Labor market structures and dynamics. Factors affecting work, wages, and occupational choices. Public and private policies on human resource development and utilization. Designed for human resource practitioners.

**811. Public and Private Employment and Training Programs**  
*Spring. 3(3-0) R: Open only to students in the School of Labor and Industrial Relations.*  
 Role of public and private employment and training programs in human resource development and utilization. Federal, apprenticeship, state vocational, and private training programs.

**813. Income Maintenance and Health Care Programs**  
*Fall. 3(3-0) R: Open only to students in the School of Labor and Industrial Relations.*  
 Public and private income maintenance programs and health care programs.

**823. Organizational Behavior in Labor and Industrial Relations**  
*Fall, Spring. 3(3-0) R: Open only to students in the School of Labor and Industrial Relations.*  
 Application of behavioral science knowledge at micro- and macro- levels to enhance individual, group and organizational functioning in industrial relations settings.

**824. Human Resource Strategies and Decisions**  
*Fall, Spring. 3(3-0) R: Open only to students in the School of Labor and Industrial Relations.*  
 Human resource planning, equal employment opportunity, staffing, training and development. Compensation and benefits. Workforce diversity and organizational development.

**825. Compensation and Benefits Systems**  
*Fall, Spring. 3(3-0) P: LIR 824. R: Open only to students in the School of Labor and Industrial Relations.*  
 Theory and practice relating organizational characteristics to compensation-system strategy, design, and administration. Job evaluation, pay surveys, pay structure, pay administration, group incentives, and benefits.

**826. Organizational Development and Planned Change**  
*Fall. 3(3-0) P: LIR 823. R: Open only to students in the School of Labor and Industrial Relations.*  
 Application of general systems and organizational behavior theories to the problems of organizational change and development in labor and industrial relations. Emphasis on the roles of leadership and change agents.

**827. Quality of Work Life**  
*Spring. 3(3-0) P: LIR 823. R: Open only to students in the School of Labor and Industrial Relations.*  
 Quality of work life approaches to organizational processes. Innovation from the perspectives of human resource development, sociotechnical systems, and labor-management relations. American and foreign applications.

**828. Human Resource Information Systems**  
*Fall, Spring. 3(3-0) P: LIR 824. R: Open only to students in the School of Labor and Industrial Relations.*  
 Information requirements for human resource decisions. Methods of appraising software. Role of human resource specialists in database development and operation.

**832. Data Sources in Labor and Industrial Relations**  
*Fall, Spring. 3(3-0) R: Open only to students in the School of Labor and Industrial Relations.*  
 Evaluation, use, and interpretation of data on industrial relations and human resources. Methods of presentation and report writing. Applications of index numbers, seasonal adjustments, and multiple regression.

**854. Comparative Industrial Relations**  
*Spring. 3(3-0) P: LIR 801 or LIR 858 or LIR 863. R: Open only to students in the School of Labor and Industrial Relations.*  
 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.

**855. Labor and Management Relations**  
*Spring. 2(2-0) Interdepartmental with Management. Administered by Management. R: Open only to students in the Advanced Management Program.*  
 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**  
*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.

**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: 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.

**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.

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

**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.

**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: 9 graduate credits. R: Open only to students in the School of Labor and Industrial Relations.

**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: 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: 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.

**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 students in Landscape Architecture, Urban and Regional Planning, and 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) 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.

**270. Landscape Design History**

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

**311. Landscape Design and Management Specifications**

Spring. 4(3-2) Interdepartmental with Horticulture. Administered by Horticulture. P: HRT 211; 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: 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.

**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 Soil Sciences, and Urban Planning.  
Introduction to the design process. Focus on program development, inventory, and analysis.

**342. Basic Site Design II**

Spring. 5(2-6) 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.

**369. Introduction to Zoo and Aquarium Science**

Spring. 3(3-0) Interdepartmental with Park, Recreation and Tourism Resources; Zoology; Fisheries and Wildlife; and Veterinary Medicine. Administered by Zoology. P: (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 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(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.

**439. Golf Course Planning and Design**

Fall of even 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.

**443. 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.

**444. 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(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.

**446. Regional Environmental Design**

Fall. 3(0-6) 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.