

- 897 Project 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 graduate students in the Department of Kinesiology. SA: PES 897

Project experience under the guidance and supervision of MSU faculty. Development of products such as technical reports, instructional media, or curriculum materials to address an educationally significant problem. Capstone experience option in master's degree program.

- 899 Master's Thesis Research**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:NM: (KIN 871) SA: PES 899

Master's thesis research.

- 910 Current Issues in Exercise Physiology**  
Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P:NM: (KIN 810) SA: PES 910

Selected issues in exercise physiology and related fields of study.

- 930 Current Issues in Biomechanical Aspects of Physical Activity**  
Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. Interdepartmental with Osteopathic Manipulative Medicine. P:NM: (KIN 830) SA: BIM 930, PES 930

Selected issues of biomechanical analyses of sport and physical activity.

- 940 Current Issues in Psychosocial Aspects of Physical Activity**  
Fall. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. SA: PES 940

Selected issues in the psychology and sociology of sport and physical activity.

- 950 Current Issues in the Design and Evaluation of Physical Activity Programs**  
Fall. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. SA: PES 950

Selected issues in the design and evaluation of physical activity programs.

- 960 Current Issues in Motor Behavior**  
Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P:NM: (KIN 860) SA: PES 960

Selected issues in motor development, motor learning, adapted physical education, and related fields of study.

- 990 Independent Study in Kinesiology**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to doctoral students. Approval of department. SA: PES 990

Individual study in an area of kinesiology under faculty supervision.

- 995 Research Practicum in Kinesiology**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to doctoral students in the College of Education. Approval of department. SA: PES 995

Supervised research practicum. Design, execution, analysis, presentation, critique, and revision of research projects.

- 999 Doctoral Dissertation Research**  
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 54 credits in all enrollments for this course. R: Open only to doctoral students in the Department of Kinesiology. SA: PES 999

Doctoral dissertation research.

## 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) P:NM: (EC 201) R: Open only to MLRHR students and students in the Interdisciplinary Ph.D. program in Social Science with a concentration in Industrial Relations and Human Resources.

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 Training and Development**  
Fall, Spring. 3(3-0) R: Open only to graduate students in the Labor Relations and Human Resources, Labor Relations and Human Resources-Urban Studies major, and students in the Interdisciplinary Ph.D. program in Social Science with a concentration in Industrial Relations and Human Resources.

Analyze and experience critical issues in the design and administration of employee training and development.

- 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:M: (LIR 824) 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.

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:NM: (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 High Performance Work Systems**  
Spring. 3(3-0) P:M: (LIR 823) R: Open to graduate students in Labor Relations and Human Resources or Labor Relations and Human Resources-Urban Studies, or Social Science Industrial Relations and Human Resources or approval of department.

How work innovations relate to employee empowerment initiatives, organizational processes and performance. Innovations from the perspectives of human resource management, socio-technical systems and labor-management relations. American and international applications.

- 828 Human Resource Information Systems**  
Fall, Spring. 3(3-0) P:M: (LIR 824) 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.

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:M: (LIR 801 or LIR 858 or LIR 863) 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.

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.

## 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.