

## Criminal Justice—CJ

- 335 Police Process**  
Fall, Spring. 4(4-0) RB: (CJ 292) R: Open only to juniors or seniors in the Criminal Justice major.  
Roles, responsibilities, issues, and trends pertinent to contemporary law enforcement organizations in contemporary society.
- 355 Juvenile Justice Process**  
Fall, Spring. 4(4-0) P:M: (CJ 220) R: Open only to juniors or seniors in the Criminal Justice major.  
The juvenile justice system and law. Theories of juvenile delinquency and deviance. Sociological, psychological, and anthropological perspectives.
- 365 Corrections Process**  
Fall, Spring. 4(4-0) RB: (CJ 292) R: Open only to juniors or seniors in the Criminal Justice major.  
Historical and contemporary views of offender management and treatment. Corrections system operation. Effects of institutionalization. Alternatives to incarceration.
- 375 Criminal Law Process**  
Fall, Spring. 4(4-0) RB: (CJ 110 or concurrently and CJ 292) R: Open only to juniors or seniors.  
Administration of criminal law. Investigation, prosecution, adjudication, and sentencing. Constitutional safeguards and legal controls on official action.
- 385 Introduction to Private Security**  
Fall. 3(3-0) R: Not open to freshmen or sophomores.  
Relationships of private protective services with public law enforcement. Individuals, businesses, and governments providing prevention, protection, investigation and disaster recovery services. Protection of persons, property, and information.
- 400H Honors Study**  
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 Honors College seniors and approval of school.  
Faculty-supervised group or individual study dealing with a phase of the criminal justice system.
- 421 Minorities, Crime, and Social Policy**  
Spring of odd years. 3(3-0) P:M: (CJ 110 or SOC 100) R: Open only to juniors or seniors.  
A socio-historical analysis of the effects of race and ethnicity on legitimate social opportunities, criminal behavior, victimization, and differential judicial processing. Analysis of the impact of assimilation and acculturation on criminal behavior, victimization, and criminal justice processes.
- 422 Comparative and Historical Criminal Justice**  
Fall of odd years. 3(3-0) RB: (CJ 110) R: Open only to juniors or seniors in the Criminal Justice major.  
Comparative study of criminal justice systems. Theories, types, and effects of intervention.
- 425 Women and Criminal Justice**  
Spring of even years. 3(3-0) Interdepartmental with Women's Studies. RB: (CJ 220 or WS 201) R: Open only to juniors or seniors.  
Theories on women's victimization and criminality. Women's experiences as victims, offenders, and criminal justice employees. Laws and their effects on the rights of women in the criminal justice system.
- 432 Community Policing**  
Spring. 3(3-0) RB: (CJ 335) R: Open only to juniors or seniors in the Criminal Justice major.  
Community policing philosophy, applications, issues, and contemporary research. Community policing models.
- 433 Law Enforcement Intelligence Operations**  
Spring. 3(3-0) RB: (CJ 335) R: Open only to juniors or seniors in the Criminal Justice major.  
Law enforcement intelligence as an analytic tool for case development and resource allocation. Historical, ethical, legal, and operational issues affecting current practice.
- 434 Police Administration (W)**  
Fall. 3(3-0) P:M: Completion of Tier I writing requirement. RB: (CJ 335) R: Open only to seniors in the Criminal Justice major.  
Organizational theory, leadership, communications, and labor relations in police administration. Historical and legal perspectives.
- 435 Investigation Procedures**  
Fall. 3(3-0) RB: (CJ 375) R: Open only to seniors in the Criminal Justice major.  
Laws of evidence controlling investigative procedures. Crime scene concerns. Multi-agency investigation.
- 455 Delinquency and Treatment Approaches**  
Spring. 3(3-0) RB: (CJ 355) R: Open only to juniors or seniors in the Criminal Justice major.  
Investigation and evaluation of delinquency. Prevention programs and treatment approaches. Implementation and assessments of correctional and community intervention strategies in agency settings.
- 456 Criminal Careers and Career Criminals (W)**  
Spring. 3(3-0) P:M: Completion of Tier I writing requirement. RB: (CJ 355 or CJ 365) R: Open only to seniors in the Criminal Justice major.  
Types of juvenile and adult criminal careers. Extent, etiology, control, and treatment of selected offender types. Process of criminal career development.
- 465 Correctional Programming and Analysis**  
Spring. 3(3-0) RB: (CJ 355 or CJ 365) R: Open only to juniors or seniors in Criminal Justice.  
Contemporary institutional and community corrections programs. Research on adult and juvenile crime prevention, diversion, and treatment programs.
- 466 Corrections Organizations and Systems (W)**  
Fall. 3(3-0) P:M: Completion of Tier I writing requirement. RB: (CJ 355 or CJ 365) R: Open only to seniors in the Criminal Justice major.  
Management of correctional organizations. Interactions between correctional organizations and their political and cultural environments.
- 471 Law of Corrections**  
Fall of odd years. 3(3-0) RB: (CJ 375) R: Open only to juniors or seniors in the Criminal Justice major.  
Constitutional limitations and the impact of law on correctional practice. Due process, prisoners' rights, and parole and probation.
- 474 Law and Criminal Justice Policy**  
Spring. 4(4-0) RB: (CJ 375) R: Open only to juniors or seniors in the Criminal Justice or Interdisciplinary Studies in Social Science major.  
Impact of law on police practices, court processes, and corrections institutions and programs. Development, implementation, and evaluation of judicial policies.
- 485 Asset Protection Management (W)**  
Spring. 3(3-0) P:M: Completion of Tier I writing requirement. RB: (CJ 385) R: Open only to seniors in the Criminal Justice major.  
Risk analysis, security surveys, and audits to control losses due to crime, errors, and safety and environmental hazards. Management of asset protection and loss prevention programs in business, industry, and government.
- 490 Independent Study**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: (CJ 335 and CJ 355 and CJ 365 and CJ 375) R: Open only to juniors or seniors in the Criminal Justice major. Approval of school.  
Individual study in fields of criminal justice, under direct supervision of a faculty member.
- 491 Topics in Criminal Justice**  
Fall, Spring. 2 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course. RB: (CJ 292) R: Open only to juniors or seniors in the Criminal Justice major. Approval of school.  
Special issues in criminal justice.
- 494 Criminal Justice Practicum**  
Fall, Spring, Summer. 3 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (CJ 335 and CJ 355 and CJ 365 and CJ 375) R: Open only to juniors or seniors in the Criminal Justice major. Approval of school.  
Observation, participation and study in selected criminal justice agencies.

## CROP AND SOIL SCIENCES CSS

### Department of Crop and Soil Sciences College of Agriculture and Natural Resources

- 100 Crop Production**  
Fall. 3(2-2) R: Open only to students in the Institute of Agricultural Technology. SA: CSS 054 Not open to students with credit in CSS 101 or CSS 054.  
Basic principles of crop production including soil fertility, weed control, tillage, cultivar selection, row spacing, crop rotation, and environmental concerns. Seed, crop, and weed identification.
- 101 Introduction to Crop Science**  
Fall. 3(2-2)  
Principles of crop management, improvement, and fertilization. International and sustainable agriculture. Water quality issues.

- 110 Computer Applications in Agronomy**  
Fall. 2(1-2) R: Open only to students in the College of Agriculture and Natural Resources. Not open to students with credit in CSE 101.  
Use of computers in agriculture. Basic computer operating systems. Management and use of storage media. Laboratory experience in word processing, spread sheets, data bases, programming languages, networking, and software related to agriculture.
- 164 Golf Course Design and Construction Techniques**  
Fall. 2(2-0) RB: (CSS 210 and CSS 232)  
Concepts and theory of golf course design and construction including location, space, topography, clientele, and environmental concerns.
- 171 Operations Budgeting for Golf Course Managers**  
Spring. 2(3-0) RB: (CSS 232 and CSS 210)  
Not open to students with credit in CSS 071.  
Budgeting. Financial analysis. Purchasing and materials management for golf course operations. Offered first ten weeks of semester.
- 178 Golf Turf Irrigation**  
Spring. 2(2-2) R: Open only to students in the Institute of Agricultural Technology. SA: CSS 078 Not open to students with credit in CSS 078.  
Golf course irrigation systems: installation and maintenance including water management. Offered first ten weeks of semester.
- 181 Pesticide and Fertilizer Application Technology**  
Spring. 3(3-3) SA: CSS 081  
Effective and efficient application of pesticides and fertilizers to turf and ornamentals. Pesticide handling, legal, and environmental concerns. Calibration of equipment. Offered first ten weeks of semester.
- 192 Professional Development Seminar I**  
Spring. 1(0-2) R: Open only to students in the Department of Crop and Soil Sciences.  
Career development, critical issues analysis, resume writing, scientific presentations and public speaking in crop and soil sciences.
- 201 Forage Crops**  
Fall. 3(2-2)  
Forage crop production, management, and utilization. Crop identification. Soil fertilization. Planting and harvesting of grasses and legumes.
- 210 Fundamentals of Soil and Landscape Science**  
Fall, Spring. 3(2-3) Interdepartmental with Forestry. RB: (CEM 141)  
Agricultural and natural resource ecosystems: soil, vegetation and ground water components. Energy, water and nutrient cycles. Soil classification and mapping. Land management and use issues.
- 211 Turfgrass and the Environment**  
Spring. 2(3-0) P:M: (CSS 232) RB: (CSS 210) R: Open only to students in the Institute of Agricultural Technology.  
Pesticide and nutrient fate, site assessment, fuel use, equipment washing systems and criteria for recognizing sensitive sites. Conservation and best management practices to maximize protection of natural resources. Offered first ten weeks of semester.
- 222 New Horizons in Biotechnology**  
Fall. 2(2-0) Interdepartmental with Entomology.  
Perspectives on biotechnology for safer food production, environmental quality, and improved human health. Impacts of biotechnology on the national economy. Political and ethical ramifications of applied biotechnology.
- 232 Introduction to Turfgrass Management**  
Fall. 3(2-2) P:M: (CSS 210 or concurrently) RB: (CSS 110 or CSE 101)  
Turfgrass utilization, identification, establishment and management principles. Responses to various cultural practices.
- 242 Athletic Field Maintenance**  
Fall. 2(2-0) P:M: (CSS 232)  
Art and science of athletic field maintenance including root-zone modification, traffic wear management, field preparation techniques, wet weather strategies, safety concerns, legal issues, and crisis management. Field trips required.
- 262 Turfgrass Management Seminar**  
Fall. 1(2-0) A student may earn a maximum of 2 credits in all enrollments for this course. P:M: (CSS 232 or concurrently)  
Presentations by individuals involved in turfgrass and golf course management. Topics include golf course construction and operations, preparation for tournaments, and public relations.
- 267 Turfgrass Practices**  
Spring. 2(2-2) P:M: (CSS 232) SA: CSS 067  
Turfgrass establishment, renovation, and construction principles. Maintenance of golf course turf. Agronomic and management principles applied to golf course maintenance.
- 269 Turfgrass Strategies**  
Spring. 2(3-0) P:M: (CSS 232)  
Issues in turfgrass management including employee relations, construction, and environmental problems. Offered first ten weeks of semester.
- 272 Turfgrass Soil Management**  
Fall. 3(2-2) RB: (CSS 043 or CSS 210) Not open to students with credit in CSS 044 or CSS 342.  
Impact of fertilization programs on turfgrasses and the environment. Irrigation, drainage, cultivation, top dressing, amendments and pH control of turfgrass soils.
- 282 Turfgrass Physiology**  
Spring. 2(3-0) P:M: (CSS 232) RB: (PLB 105) Not open to students with credit in CSS 332.  
Physiological principles of turfgrass growth and development. Water relations, light, temperature, respiration, photosynthesis, mineral nutrition, and hormone action. Impact of mowing, cultivation, and traffic on turfgrass growth. Offered first ten weeks of semester.
- 289 Civilizations, Food Crops and the Environment**  
Fall, Spring. 3(3-0) Interdepartmental with Agriculture and Natural Resources. Administered by College of Agriculture and Natural Resources. SA: TCC 289  
Role of the major food crops in the survival of civilizations and cultures from the past to the present, and the resulting environmental impacts.
- 290 Independent Study in Crop and Soil Science**  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to students in the Institute of Agricultural Technology. SA: CSS 057 Not open to students with credit in CSS 057.  
Field, laboratory, or library research problems.
- 292 Management of Turfgrass Weeds**  
Spring. 2(2-2) P:M: (CSS 232) RB: (BOT 105)  
Chemical, biological, and cultural methods of managing turfgrass weeds. Environmental considerations in weed management.
- 310 Soil Management and Environmental Impact**  
Spring. 3(3-0) P:M: (CSS 210)  
Management of soil physical and chemical properties for the production of food and fiber. Soil management systems that reduce the environmental impact on soil, water and air resources and maximize crop production potential.
- 332 Advanced Turf Management**  
Spring. 3(3-0) P:M: (CSS 232) and completion of Tier I writing requirement.  
Effect of light, heat, cold, drought, and traffic on turfgrass growth and development. Impact of practices such as mowing, cultivation, and compaction on the growth of grasses.
- 350 Introduction to Plant Genetics**  
Spring. 3(4-0) P:M: (BOT 105 or BS 111) R:  
Not open to freshmen or sophomores.  
Fundamentals of plant genetics with applications to agriculture and natural resources.
- 355 Environmental Soil Chemistry**  
Fall. 3(2-2) P:M: (CEM 143 and CSS 210)  
Soil chemistry concepts as they apply to major chemical groups of environmental importance including metals, nitrogen, phosphorus, organic contaminants, and pesticides.
- 362 Management of Turfgrass Pests**  
Fall. 4(3-2) Interdepartmental with Plant Pathology; Entomology. P:M: (CSS 232)  
Chemical, biological, and cultural methods of managing weeds, diseases, and insect pests of turfgrass. Environmental considerations in pest management.
- 380 Crop Physiology**  
Spring of even years. 3(2-3) P:M: (CSS 101) and (BOT 105 or BOT 301)  
Physiological and metabolic function of plants from a whole plant viewpoint. Environmental effects on crop growth, development, and yield.
- 402 Principles of Weed Science**  
Fall. 3(2-2) RB: (BOT 105 and CEM 143) R:  
Not open to freshmen or sophomores.  
Weed biology and ecology. Cultural, mechanical, biological, and chemical control practices. Herbicide action, selectivity in plants, and effects on environment.

## Crop and Soil Sciences—CSS

- 404 Forest and Agricultural Ecology**  
Fall. 3(3-0) Interdepartmental with Forestry. Administered by Department of Forestry. P:M: (CSS 210) and (BOT 105 or BS 110) RB: (ZOL 355)  
Ecological interactions crucial to the sustainable management of crop and forest ecosystems. Plant resources, competition, community development and dynamics, biodiversity, primary productivity, nutrient cycling, ecosystem structure and function, and impacts of global environmental change.
- 404L Forest and Agricultural Ecology Laboratory**  
Fall. 1(0-3) Interdepartmental with Forestry. Administered by Department of Forestry. P:M: (CSS 210) and (BOT 105 or BS 110) and (FOR 404 or concurrently) RB: (ZOL 355)  
Field studies and data analysis of ecological processes central to the sustainable management of forest and agricultural resources. Field exercises cover primary production, community structure, soil resources, biodiversity, succession, nutrient cycling, critiques of primary literature. Two weekend field trips required.
- 406 Seed Production and Technology**  
Fall of even years. 3(2-2) P:M: (CSS 101 and CSS 350) R: Not open to freshmen or sophomores.  
Principles and practices of field seed production. Crop improvement, variety release, seed production, seed technology and evaluation involved in producing high quality field crop seed.
- 425 Microbial Ecology**  
Spring. 3(3-0) Interdepartmental with Microbiology and Molecular Genetics. Administered by Department of Microbiology and Molecular Genetics. RB: (MMG 301) SA: MPH 425  
Microbial population and community interactions. Microbial activities in natural systems, including associations with plants or animals.
- 426 Biogeochemistry**  
Summer. 3 credits. Summer: Given only at W.K. Kellogg Biological Station. Interdepartmental with Microbiology and Molecular Genetics; Geological Sciences; Zoology. Administered by Department of Microbiology and Molecular Genetics. RB: (BS 110 or LBS 144 or LBS 148H or BS 111 or LBS 145 or LBS 149H) and (CEM 143 or CEM 251) SA: MPH 426  
Integration of the principles of ecology, microbiology, geochemistry, and environmental chemistry. Societal applications of research in aquatic and terrestrial habitats.
- 430 Soil Fertility and Chemistry**  
Spring. 3(2-2) P:M: (CSS 210) R: Not open to freshmen or sophomores.  
Application of chemistry to diagnosing and improving soil fertility. Soil amendments including macro- and micro-nutrients. Reducing environmental degradation.
- 431 Soil and Plant Resources for Sustained World Food and Fiber Production**  
Spring of odd years. 3(3-0) P:M: (CSS 101 and CSS 210)  
World food and fiber production capacities related to soil and climatic resources. Management and utilization of genetic resources for sustained production of human foods and animal feeds.
- 440 Soil Biophysics**  
Fall of even years. 3(2-2) P:M: (CSS 210) R: Not open to freshmen or sophomores.  
Plant growth properties and soil physical conditions which influence productivity. Principles and applications of soil texture, structure, mechanical impedance, aeration and water. Root responses to the environment.
- 441 Plant Breeding and Biotechnology**  
Spring of even years. 4(3-2) Interdepartmental with Forestry; Horticulture. P:M: (CSS 350)  
Plant improvement by genetic manipulation. Genetic variability in plants. Traditional and biotechnological means of creating and disseminating recombinant genotypes and cultivars.
- 451 Cellular and Molecular Principles and Techniques for Plant Sciences**  
Spring. 4(2-6) Interdepartmental with Forestry; Horticulture. RB: (CSS 350 or ZOL 341)  
Principles, concepts, and techniques of agricultural plant biotechnology. Recombinant DNA technology, plant molecular biology, transformation, cell tissue, and organ culture in relation to plant improvement.
- 452 Watershed Concepts**  
Fall, Spring, Summer. 3(3-0) Interdepartmental with Resource Development; Biosystems Engineering; Forestry; Fisheries and Wildlife. Administered by Department of Resource Development. P:M: (RD 324 and ZOL 355) RB: organic chemistry  
Watershed hydrology and management. The hydrologic cycle, water quality, aquatic ecosystems and social systems. Laws and institutions for managing water resources.
- 455 Pollutants in the Soil Environment**  
Fall. 3(3-0) P:M: (CEM 143) and completion of Tier I writing requirement. R: Open only to seniors or graduate students.  
Chemical and biological reactions of organic and inorganic pollutants in soils.
- 464 Statistical Methods for Biologists I**  
Fall. 3(3-0) Interdepartmental with Statistics and Probability; Animal Science. Administered by Department of Statistics and Probability. RB: (STT 421)  
Biological random variables. Estimation of population parameters. Testing hypotheses. Linear correlation and regression (prediction). Analyses of counted and measured data to compare several biological groups (contingency tables and analysis of variance).
- 465 Statistical Methods for Biologists II**  
Spring. 3(3-0) Interdepartmental with Statistics and Probability; Animal Science. Administered by Department of Statistics and Probability. RB: (STT 464)  
Concepts of reducing experimental error: covariance, complete and incomplete block designs, latin squares, split plots, repeated-measures designs, regression applications, and response surface designs.
- 470 Soil Resources**  
Fall. 3(2-3) RB: (CSS 210) R: Not open to freshmen or sophomores.  
Evaluation of the properties, genesis, and classification of soil resources to assist in making land-use decisions. Field trips required.
- 477 Pest Management I: Pesticides in Management Systems**  
Fall. 3(3-0) Interdepartmental with Entomology; Fisheries and Wildlife; Horticulture. Administered by Department of Entomology. RB: (CEM 143 or CEM 251) and (BOT 405 and CSS 402) and (ENT 404 or ENT 470 or FW 328)  
Chemistry, efficient use, and environmental fate of pesticides. Legal and social aspects of pesticide use.
- 478 Pest Management II: Biological Components of Management Systems (W)**  
Spring of even years. 3(2-3) Interdepartmental with Entomology; Forestry; Fisheries and Wildlife; Horticulture. Administered by Department of Entomology. P:M: (ENT 404 or ENT 470 or PLP 405 or CSS 402 or FW 328) and completion of Tier I writing requirement.  
Principles of host plant resistance and biological control and their relationship to the design of agroecosystems. Classification of insect biological control agents.
- 486 Biotechnology in Agriculture: Applications and Ethical Issues**  
Fall of even years. 3(3-0) Interdepartmental with Horticulture; Forestry; Philosophy. Administered by Department of Horticulture. P:M: (BOT 105 or BS 111) RB: (CSS 350 or ZOL 341) R: Not open to freshmen or sophomores.  
Current and future roles of biotechnology in agriculture: scientific basis, applications. Environmental, social, and ethical concerns.
- 488 Agricultural Cropping Systems: Integration and Problem Solving**  
Spring. 3(2-2) P:M: (CSS 101 and CSS 210 and CSS 310) RB: (CSS 402 and CSS 430 and PLP 405 and ENT 404) Back-ground/course work in crop production and management. R: Open only to seniors in the Crop and Soil Sciences major.  
Integration and synthesis of agronomic and related concepts in agricultural cropping systems. Problem solving and application of information.
- 490 Independent Study**  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P:M: (CSS 101 or CSS 210) R: Approval of department; application required.  
Individual work on field, laboratory, or library research problem of special interest to the student.
- 491 Special Topics**  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P:M: (CSS 101 or CSS 210) RB:  
Topics from crop production, crop physiology, turfgrass management, organic soils, turfgrass soils, soil fertility, plant and soil relationships, genetics, biotechnology, environmental science, or sustainable agriculture.
- 492 Professional Development Seminar II**  
Fall. 1(0-2) P:M: (CSS 210 and CSS 272) and completion of Tier I writing requirement. R: Open only to seniors in the Department of Crop and Soil Sciences.  
Synthesis, integration and application of agronomic principles to current issues in agronomy via discussion and oral and written communication.

**493 Professional Internship in Crop and Soil Sciences**  
 Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department; application required. A student may earn a maximum of 6 credits for any or all of these courses: ABM 493, AEE 493, ANR 493, ANS 493, CSS 493, EEP 493, FIM 493, FW 493, HRT 493, PKG 493, PLP 493, PRR 493, and RD 493.

Supervised professional experiences in agencies and businesses related to Crop & Soil Sciences and Environmental Soil Sciences

**494 International Agriculture Seminar**  
 Spring of odd years. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. P:M: Completion of Tier I writing requirement.

Global food, soil and water resources issues.

**499 Undergraduate Research**  
 Fall, Spring, Summer. 3(0-9) R: Approval of department; application required.

Faculty supervised research in a selected area of crop and soil sciences or environmental soil science.

## ECONOMICS EC

### Department of Economics College of Social Science

**201 Introduction to Microeconomics**  
 Fall, Spring, Summer. 3(3-0) Not open to students with credit in EC 251H.

Economic institutions, reasoning and analysis. Consumption, production, determination of price and quantity in different markets. Income distribution, market structure and normative analysis.

**201T Introduction to Microeconomics**  
 Fall, Spring. 3(2-2) Not open to students with credit in EC 201 or EC 251H.

Microeconomic reasoning and analysis. Determination of price and quantity in different markets. Income distribution, market structure, and normative analysis. Extensive use of computer exercises and internet technology.

**202 Introduction to Macroeconomics**  
 Fall, Spring, Summer. 3(3-0) Not open to students with credit in EC 252H.

Determinants of Gross National Product, unemployment, inflation and economic growth. National income accounting and fiscal policy. Aggregate demand, supply management and monetary policy.

**210 Economics Principles Using Calculus**  
 Fall. 3(3-0) P:M: (MTH 133 or MTH 153H or MTH 126) Not open to students with credit in EC 201 or EC 202.

A combined microeconomics and macroeconomics course. Emphasis on topics of interest in engineering and management, such as discounting, cost-benefit analysis, innovation, externalities, and the role of government regulation.

**251H Microeconomics and Public Policy**  
 Fall, Spring. 4(4-0) Not open to students with credit in EC 301.

Theories of consumer behavior, production and cost. Output and price determination in competition and monopolies. Welfare economics, general equilibrium, externalities, and public goods.

**252H Macroeconomics and Public Policy**  
 Fall, Spring. 3(3-0) P:M: (EC 201 and EC 301) or (EC 251H) Not open to students with credit in EC 302.

Theory of national income, unemployment, inflation and economic growth and its application to economic analysis and policy.

**293 Cooperative Education for Business Students**

Fall, Spring. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. Interdepartmental with Marketing and Supply Chain Management; Accounting; Finance; Management; Hospitality Business. Administered by Department of Marketing and Supply Chain Management. R: By permission of the Department only.

Integration of pre-professional educational employment experiences in industry and government with knowledge and processes taught in the student's academic program. Educational employment assignment approved by the Department of Marketing and Supply Chain Management.

**301 Intermediate Microeconomics**  
 Fall, Spring, Summer. 3(3-0) P:M: (EC 201) RB: (EC 202) Not open to students with credit in EC 251H.

Theories of consumer choice, production, cost, perfect competition, and monopoly. Welfare economics, general equilibrium, externalities and public goods.

**302 Intermediate Macroeconomics**  
 Fall, Spring, Summer. 3(3-0) P:M: (EC 201 and EC 202) Not open to students with credit in EC 252H.

National income accounting. Determination of aggregate output, employment, price level, and inflation rate. Policy implications.

**306 Comparative Economic Systems**  
 Fall. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H)

Characteristics and functions of economic systems. Alternative patterns of economic control, planning, and market structure. Theories, philosophies, and experiences associated with capitalism, socialism, and mixed economies.

**310 Economics of Developing Countries**  
 Spring. 3(3-0) P:M: (EC 201 or EC 251H)

Overview of economic patterns and policy issues of developing countries such as modern economic growth and structural transformation, state controls versus markets, poverty and human welfare, investments in human resources, and trade and industrialization.

**320 Analysis of Economic Data**  
 Fall, Spring. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H) R: Not open to students in the Department of Accounting or Department of Finance or School of Hospitality Business or Department of Management or Department of Marketing and Supply Chain Management.

Sources of economic data. Techniques for presenting and summarizing economic data. Testing theories of economic behavior. Methods for forecasting in uncertain economic environments. Evaluation of current quantitative work in economics.

**330 Money, Banking, and Financial Markets**  
 Fall, Spring, Summer. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H)

Money markets and financial intermediation. Money, the Federal Reserve System, and monetary policy. Regulation of money markets.

**335 Taxes, Government Spending and Public Policy**  
 Fall, Spring, Summer. 3(3-0) Interdepartmental with Environmental Economics and Policy. P:M: (EC 201 or EC 251H) SA: PRM 335 Not open to students with credit in EC 435 or EC 436.

Economics of the public sector. Public goods, externalities, design and incidence of the tax system. Equity and efficiency effects of government programs.

**340 Survey of International Economics**  
 Fall, Spring, Summer. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H) Not open to students with credit in EC 440 or EC 441.

Comparative advantage. Costs and benefits of trade. International economic policies. Balance of payments. Foreign exchange markets. The international monetary system. Contemporary trade and international currency issues.

**360 Private Enterprise and Public Policy**  
 Fall, Spring, Summer. 3(3-0) P:M: (EC 201 or EC 251H)

Effects of antitrust, economic regulation, and other public policies on competition, monopoly, and other market problems in the United States economy.

**380 Labor Relations and Labor Market Policy**  
 Fall, Spring, Summer. 3(3-0) P:M: (EC 201 or EC 251H)

Development, functions, legal framework, and economic effects of unions and collective bargaining. Institutions and economic impacts of government programs. Minimum wages, workers' compensation, unemployment insurance, and antidiscrimination policies.

**385 International Labor Market Policy and Labor Relations**  
 Fall. 3(3-0) P:M: (EC 201 or EC 251H) Not open to students with credit in EC 380.

Comparative treatment of labor policy and labor relations in the United States, Western Europe, Japan, Canada, and Australia. Analysis of how different policies affect wages, living standards, and economic efficiency. Labor markets and integration of national economies.

**391 Special Topics in Economics**  
 Fall, Spring. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H)

Special topics supplementing regular course offerings.

**401 Advanced Microeconomics**  
 Fall, Spring. 3(3-0) P:M: (EC 301 or EC 251H)

Economics of uncertainty and incomplete information. Game theory and theories of oligopoly. Transaction costs. Advanced topics in welfare economics, general equilibrium, externalities, and public goods.

**402 Advanced Macroeconomics**  
 Fall, Spring. 3(3-0) P:M: (EC 251H or EC 301) and (EC 252H or EC 302)

Consumption, investment, and monetary theories. The role of expectations. Theories of economic growth and cycles. Stabilization policies.