

**969. Supervision of Counseling Psychologists**  
Spring, 3(2-3)

P: CEP 967, CEP 994B. R: Open only to Ph.D. students in Counseling Psychology and School Psychology.  
Theoretical, empirical and practical aspects of the supervisory relationship. Process and outcome variables.  
QP: CEP 956C

**982. Seminar in Counseling, Educational Psychology and Special Education (MTC)**  
Fall, Spring, Summer, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

R: Open only to doctoral students in College of Education.  
Seminars in the various fields of emphasis in counseling, educational psychology, and special education.

**990. Independent Study**

Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to Ph.D. students.  
Individual or small group study, guided by a faculty member, in the areas of Counseling, Educational Psychology and Special Education.

**991A. Special Topics in Educational Psychology**

Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to Ph.D. students.

QA: CEP 911

**991B. Special Topics in Educational Statistics and Research Design**  
Fall, Spring, 4(4-0)

P: CEP 933. R: Open only to Ph.D. students.

QP: CEP 906

**994A. Counseling Psychology Practicum I**  
Fall, 3(0-9)

P: CEP 960. C: CEP 966 R: Open only to Ph.D. students in Counseling Psychology.  
Supervised practice in counseling, assessment, diagnosis and related professional activities within an agency providing counseling and psychological services.  
QP: CEP 948A QA: CEP 956A, CEP 956B

**994B. Counseling Psychology Practicum II**  
Spring, 3(0-9)

P: CEP 994A. C: CEP 967 R: Open only to Ph.D. students in Counseling Psychology.  
Intermediate supervised practice in counseling, assessment, diagnosis and related professional activities within an agency providing counseling and psychological services.  
QA: CEP 956C

**994C. Advanced Practicum in Counseling Psychology**  
Spring, 3(0-9)

P: CEP 994B. R: Open only to Ph.D. students in Counseling Psychology.  
Client conceptualization, assessment, intervention design, ethical and professional development issues, supervision, and consultation.  
QA: CEP 958B

**995. Practicum in Research Design and Data Analysis**  
Spring, 3 credits.

P: CEP 933. R: Open only to Ph.D. students in Education.  
Supervised research practicum. Design, execution, analysis, presentation, critique, and revision of research projects.  
QP: CEP 904, CEP 905

**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 Ph.D. students.

**CRIMINAL JUSTICE CJ**

**School of Criminal Justice  
College of Social Science**

**110. Introduction to Criminal Justice**  
Fall, Spring, Summer, 3(3-0)

Description and analysis of agencies and processes involved in administration of justice in the United States.  
QA: C J 110

**210. Introduction to Forensic Science**  
Spring, 4(4-0)

Techniques of crime scene search. Collection and preservation of physical evidence. Class and individual scientific tests. Rules of evidence governing admissibility of physical evidence. Expert testimony.  
QA: C J 210

**220. Criminology**

Fall, Spring, 3(3-0) Interdepartmental with Sociology.

P: C J 110 or SOC 100. R: Open only to undergraduate students in Criminal Justice or Forensic Science or Sociology or approval of school.  
Introduction to the socio-legal foundation of crime. Crime typology and measurement procedures. Theory and public policy. Societal responses to crime and criminals.  
QP: C J 110, SOC 241 QA: C J 320, SOC 320

**292. Methods of Criminal Justice Research**  
Fall, Spring, Summer, 4(4-0)

P: C J 220. R: Not open to freshmen. Open only to students in the School of Criminal Justice.  
Logic, design, analysis and ethical principles in criminal justice research. Indicators of crime and its control.  
QP: C J 320, SOC 320 or QA: C J 492

**335. Police Process**

Fall, Spring, 3(3-0)  
P: C J 292. R: Open only to juniors or seniors in Criminal Justice or Forensic Science.  
Roles, responsibilities, issues, and trends pertinent to contemporary law enforcement organizations in contemporary society.  
QP: C J 492 QA: C J 335

**355. Juvenile Justice Process**

Fall, Spring, Summer, 3(3-0)  
P: C J 292. R: Open only to juniors or seniors in Criminal Justice or Forensic Science.  
The juvenile justice system and law. Theories of juvenile delinquency and deviance. Sociological, psychological, and anthropological perspectives.  
QP: C J 492 QA: C J 355

**365. Corrections Process**

Fall, Spring, Summer, 3(3-0)  
P: C J 292. R: Open only to juniors or seniors in Criminal Justice or Forensic Science.  
Historical and contemporary views of offender management and treatment. Corrections system operation. Effects of institutionalization. Alternatives to incarceration.  
QP: C J 492 QA: C J 365

**375. Criminal Law Process**

Fall, Spring, 4(4-0)  
P: C J 292. R: Open only to juniors or seniors in Criminal Justice or Forensic Science.  
Administration of criminal law. Investigation, prosecution, adjudication, and sentencing. Constitutional safeguards and legal controls on official action.  
QP: C J 492 QA: C J 375

**385. Introduction to Private Security**  
Fall, 3(3-0)

R: Not open to freshmen and 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.  
QA: C J 485

**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, or approval of school.  
Faculty-supervised group or individual study dealing with a phase of the criminal justice system.  
QA: C J 400H

**419. Forensic Science I**  
Fall, 3(0-6)

P: C J 210, C J 292, CEM 252, CEM 255, PHY 232, PHY 252. R: Open only to seniors in Forensic Science.  
Forensic science laboratory practice. Scientific instruments. Chain of custody. Scientific analysis of trace evidence and controlled substances.  
QP: C J 210, C J 492, CEM 243, CEM 244, CEM 245, PHY 239, PHY 259 QA: C J 312, C J 313

**420. Forensic Science II**  
Spring, 3(0-6)

P: C J 419. R: Open only to seniors in Forensic Science.  
Scientific analysis of pattern evidence and evidence from human origin. Presentation of scientific evidence in court. Rules governing admissibility of scientific evidence. Case work and mock trials.  
QP: C J 312, C J 313 QA: C J 314

**421. Minorities, Crime, and Social Policy**  
Spring of even-numbered years, 3(3-0)

P: C J 110. R: Open only to juniors or seniors in Criminal Justice or Forensic Science.  
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.  
QP: C J 110 QA: C J 409

**422. Comparative and Historical Criminal Justice**

Fall of odd-numbered years, 3(3-0)  
P: C J 110. R: Open only to juniors or seniors in Criminal Justice or Forensic Science.  
Comparative study of criminal justice systems. Theories, types, and effects of intervention.  
QP: C J 110 QA: C J 822

**425. Women and Criminal Justice**

Spring of odd-numbered years, 3(3-0)  
Interdepartmental with Women's Studies.  
P: C J 220 or WS 201. R: Open only to juniors in Criminal Justice and Women's Studies.  
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.  
QP: C J 320, SOC 320, WS 201 QA: C J 425

**432. Community Policing**

Fall, Spring, 3(3-0)  
P: C J 335. R: Open only to juniors or seniors in Criminal Justice or Forensic Science.  
Community policing philosophy, applications, issues, and contemporary research. Community policing models.  
QP: C J 335 QA: C J 318

**433. Law Enforcement Intelligence Operations**  
Spring, 3(3-0)

P: C J 335. R: Open only to juniors or seniors in Criminal Justice or Forensic Science.  
Law enforcement intelligence as an analytic tool for case development and resource allocation. Historical, ethical, legal, and operational issues affecting current practice.  
QP: C J 335 QA: C J 409

**434. Police Administration**  
Fall, 3(3-0)

P: C J 335. R: Open only to seniors in Criminal Justice.  
Organizational theory, leadership, communications, and labor relations in police administration. Historical and legal perspectives.  
QP: C J 335 QA: C J 434

**435. Investigation Procedures**

Spring of odd-numbered years, 3(3-0)  
P: C J 375. R: Open only to seniors in Criminal Justice or Forensic Science.  
Laws of evidence controlling investigative procedures. Crime scene concerns. Multi-agency investigation.  
QP: C J 375 QA: C J 315

**Descriptions—Criminal Justice  
of  
Courses**

**455. Delinquency and Treatment Approaches**  
Spring. 3(3-0)

P: CJ 355. R: Open only to juniors or seniors in Criminal Justice or Forensic Science. Investigation and evaluation of delinquency. Prevention programs and treatment approaches. Implementation and assessments of correctional and community intervention strategies in agency settings.  
QP: C J 355 QA: C J 455

**456. Criminal Careers and Career Criminals**  
Spring. 3(3-0)

P: CJ 355 or CJ 365. R: Open only to seniors in Criminal Justice. Types of juvenile and adult criminal careers. Extent, etiology, control, and treatment of selected offender types. Process of criminal career development.  
QP: C J 355, C J 365

**465. Correctional Programming and Analysis**  
Spring. 3(3-0)

P: CJ 355 or CJ 365. R: Open only to juniors or seniors in Criminal Justice or Forensic Science. Contemporary institutional and community corrections programs. Research on adult and juvenile crime prevention, diversion, and treatment programs.  
QP: C J 355 or C J 365 QA: C J 465

**466. Corrections Organizations and Systems**  
Fall. 3(3-0)

P: CJ 355 or CJ 365. R: Open only to seniors in Criminal Justice. Management of correctional organizations. Interactions between correctional organizations and their political and cultural environments.  
QP: C J 355 or C J 365 QA: C J 466

**471. Law of Corrections**

Fall of odd-numbered years. 3(3-0)

P: CJ 375. R: Open only to juniors or seniors in Criminal Justice or Forensic Science. Constitutional limitations and the impact of law on correctional practice. Due process, prisoners' rights, and parole and probation.  
QP: C J 375 QA: C J 871

**472. Criminal Law**  
Spring. 4(4-0)

P: CJ 375. R: Open only to juniors or seniors in Forensic Science or Criminal Justice. Criminal law as a means of preserving and protecting life and property.  
QP: C J 375 QA: C J 472

**485. Asset Protection Management**  
Spring. 3(3-0)

P: CJ 385. R: Open only to seniors in Criminal Justice. 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.  
QP: C J 485 QA: C J 486

**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.

P: CJ 335, CJ 355, CJ 365, CJ 375. R: Open only to juniors or seniors in Criminal Justice or Forensic Science. Approval of school. Individual study in fields of criminal justice, under direct supervision of a faculty member.  
QP: C J 335, C J 355, C J 365, C J 375 QA: C J 401

**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.

P: CJ 292. R: Open only to juniors or seniors in Criminal Justice or Forensic Science. Approval of school. Special issues in criminal justice.  
QP: C J 492 QA: C J 409

**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.

P: CJ 335, CJ 355, CJ 365, CJ 375. R: Open only to juniors or seniors in Criminal Justice or Forensic Science. Approval of school. Observation, participation and study in selected criminal justice agencies.  
QP: C J 335, C J 355, C J 365, C J 375 QA: C J 490

**809. Issues in Criminal Justice**

Fall, Spring. 2 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course.

R: Open only to graduate students. Special issues in criminal justice research and management.  
QA: C J 809

**810. Proseminar in Criminal Justice**

Fall. 3(3-0)

R: Open only to graduate students in the School of Criminal Justice. Survey of classical and recent literature in criminal justice. Trends and issues that transcend the components of the criminal justice system.  
QA: C J 810

**811. Design and Analysis in Criminal Justice Research**

Fall. 3(3-0)

R: Open only to graduate students in the School of Criminal Justice. Scientific methods in criminal justice research. Design, data collection and analysis, interpretation of findings, and ethical concerns. Computer use in data analysis.  
QA: C J 811

**812. Criminal Justice Management Seminar**

Fall. 3(3-0)

R: Open only to graduate students in the School of Criminal Justice. Organization theory and behavior for the criminal justice agency. organization and policy planning, budgeting, forecasting, human resource management, and project implementation.  
QA: C J 812

**814. Seminar in Management Topics**

Spring. 3(3-0)

R: Open only to graduate students in the School of Criminal Justice. Critical application of selected analytical tools to managing justice agencies. Human and financial resources, organizational design, productivity measurement and enhancement, and resource acquisition and allocation.  
QA: C J 813, C J 814

**815. Proseminar in Criminal Investigation**

Spring. 3(3-0)

P: CJ 811. R: Open only to graduate students in the School of Criminal Justice. Research on the criminal justice process. Investigation and role of evidence in the administration of justice. Ethical issues.  
QP: C J 811 QA: C J 815

**835. Managing Police Organizations**

Fall. 3(3-0)

P: CJ 810. R: Open only to graduate students in the School of Criminal Justice. Issues and practices in police management. Management philosophy and personnel management.  
QP: C J 810 QA: C J 837

**836. Assessment of Police Policies and Operations**

Spring. 3(3-0)

P: CJ 835. R: Open only to graduate students in the School of Criminal Justice. Recent policy-related research and its application to the deployment of human resources.  
QP: C J 837 QA: C J 838

**855. Delinquency Prevention and Control**  
Fall. 3(3-0)

R: Open only to graduate students in the School of Criminal Justice. Historical overview. Theories and methodologies. Models and organization of delinquency prevention and control programs. Law and public policy. Program evaluation.  
QA: C J 855

**865. Adult Corrections**

Fall. 3(3-0)

R: Open only to graduate students in the School of Criminal Justice. Traditional and contemporary adult correctional practices. Social, political, economic, and organizational factors affecting correctional policies.  
QA: C J 865

**866. Adult and Juvenile Corrections Programs**

Spring. 3(3-0)

P: CJ 855 or CJ 865. R: Open only to graduate students in the School of Criminal Justice. Adult and juvenile crime prevention and correctional programs. Application of research findings to management issues.  
QP: C J 865 or C J 855 QA: C J 866

**885. Security Management**

Fall. 3(3-0)

P: CJ 811 or concurrently. R: Open only to graduate students in the School of Criminal Justice. Organization and management of security operations in business, industry and government.  
QA: C J 885

**886. Security Administration**

Spring. 3(3-0)

R: Open only to graduate students in the School of Criminal Justice. Administrative and quantitative techniques for security operations. Statistical analyses. Analysis of financial statements. Operations research and computer techniques.  
QP: C J 885 QA: C J 886

**887. Quantitative Methods in Criminal Justice Research**

Spring. 3(3-0)

P: CJ 811. R: Open only to graduate students in the School of Criminal Justice. Descriptive and inferential statistics and computer use in criminal justice research.  
QP: C J 811 QA: C J 892

**890. Independent Study**

Fall, Spring. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to graduate students in the School of Criminal Justice. Approval of school. Individual research and writing under faculty supervision.  
QA: C J 801

**894. Practicum**

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 graduate students in the School of Criminal Justice. Approval of school. Observation, study, and work in selected criminal justice agencies. Participation in domestic and foreign criminal justice systems.  
QA: C J 890

**896. Policy Analysis under Conditions of Change**

Spring. 3(3-0)

P: CJ 811. R: Open only to graduate students in the School of Criminal Justice. Methods of policy analysis in criminal justice settings. Policy analysis for the formulation, adoption and implementation of changes.  
QP: C J 811 QA: C J 896

**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.

R: Open only to graduate students in Criminal Justice. Planned research and writing directed by student's thesis committee.  
QA: C J 899

**901. Seminar in Contemporary Criminal Justice Theory**  
Fall. 3(3-0)

R: Open only to graduate students in Criminal Justice or in Social Science-Criminal Justice. Theoretical perspectives and issues in criminal justice and criminology  
QA: C J 990

**902. Seminar in Criminal Justice Systems**  
Spring of odd-numbered years. 3(3-0)

R: Open only to graduate students in Criminal Justice or in Social Science-Criminal Justice. Contemporary issues in the criminal justice system.  
QA: C J 930

**903. Research Utilization in Criminal Justice**  
Spring of even-numbered years. 3(3-0)

R: Open only to graduate students in Criminal Justice or in Social Science-Criminal Justice. Research application in criminal justice theory and practice.  
QA: C J 992

**310. Soil Management and Environmental Impact**  
Spring. 3(2-3)

P: 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.  
QP: CSS 210 QA: CSS 390

**332. Advanced Turf Management**  
Spring. 3(3-0)

P: CSS 232.  
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.  
QP: CSS 318 QA: CSS 416

**342. Turfgrass Soil Management**  
Fall. 3(3-0)

P: CSS 210.  
Fertility and pH control of turf soils. Drainage, irrigation programming, cultivation, topdressing, and soil amendments. Environmental impacts. Specialized soils.  
QP: CSS 318 QA: CSS 414

**350. Introduction to Plant Genetics**  
Spring. 3(4-0)

P: BOT 105 or BS 111. R: Not open to freshmen and sophomores.  
Fundamentals of plant genetics with applications to agriculture and natural resources.  
Temporary approval effective from Spring Semester 1993 through Spring Semester 1995.  
QP: BOT 205, BS 211 QA: CSS 350

**362. Management of Turfgrass Pests**  
Fall. 4(3-2) Interdepartmental with Botany and Plant Pathology, and Entomology.

P: CSS 232.  
Chemical, biological, and cultural methods of managing weeds, diseases, and insect pests of turfgrass. Environmental considerations in pest management.  
QP: CSS 318 QA: CSS 419

**370. Agricultural Cropping Systems Management**  
Fall. 3(2-3)

P: CSS 101 or CSS 210; MTH 110 or MTH 116. R: Not open to freshmen and sophomores.  
Interdisciplinary decision making to select crop and production systems based upon soil productivity, climatic adaptation, environmental impacts, and economic constraints.  
QP: CSS 101 or CSS 210, MTH 108

**380. Crop Physiology**  
Spring of odd-numbered years. 3(2-3)

P: CSS 101; BOT 105 or BOT 301. R: Not open to freshmen and sophomores.  
Physiological and metabolic function of plants from a whole plant viewpoint. Environmental effects on crop growth, development, and yield.  
QP: CSS 101, BOT 301 QA: CSS 380

**402. Principles of Weed Science**  
Fall. 3(2-2)

P: BOT 105, CEM 143. R: Not open to freshmen and sophomores.  
Weed biology and ecology. Cultural, mechanical, biological, and chemical control practices. Herbicide action, selectivity in plants, and effects on environment.  
QP: CEM 143, BOT 301 QA: CSS 402

**406. Seed Production and Technology**  
Fall of even-numbered years. 3(2-2)

P: CSS 101, CSS 350. R: Not open to freshmen and 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.  
QP: CSS 101, CSS 350 QA: CSS 406, CSS 485

**430. Soil Fertility and Chemistry**  
Spring. 3(2-2)

P: CSS 210. R: Not open to freshmen and sophomores.  
Application of chemistry to diagnosing and improving soil fertility. Soil amendments including macro- and micro-nutrients. Reducing environmental degradation.  
QP: CSS 210 QA: CSS 430

**440. Soil Biophysics**  
Fall of even-numbered years. 3(2-2)

P: CSS 210. R: Not open to freshmen and 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.  
QP: CSS 210 QA: CSS 440

**441. Plant Breeding and Biotechnology**  
Spring. 4(3-2) Interdepartmental with Horticulture and Forestry.

P: CSS 350.  
Plant improvement by genetic manipulation. Genetic variability in plants. Traditional and biotechnological means of creating and disseminating recombinant genotypes and cultivars.  
QP: CSS 350 QA: CSS 408

**451. Cellular and Molecular Principles and Techniques for Plant Sciences**  
Spring. 4(2-6) Interdepartmental with Forestry and Horticulture.

P: 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.  
QP: CSS 350 or ZOL 441 QA: CSS 451, HRT 838

**455. Pollutants in the Soil Environment**  
Fall. 3(3-0)

P: CEM 143. R: Open only to seniors and graduate students.  
Chemical and biological reactions of organic and inorganic pollutants in soils.  
QP: CEM 143 QA: CSS 455

**470. Soil Resources**  
Fall. 3(2-3)

P: CSS 210. R: Not open to freshmen and sophomores.  
Evaluation of the properties, genesis, and classification of soil resources to assist in making land-use decisions. Field trips required.  
QP: CSS 210 QA: CSS 470

**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: 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.  
QP: CSS 101 or CSS 210 QA: CSS 411

**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: CSS 101 or CSS 210.  
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.  
QP: CSS 101 or CSS 210 QA: CSS 412

**492. Seminar**

Fall. 1(1-0)  
P: CSS 210; CSS 342 or CSS 370.  
Synthesis, integration and application of agronomic principles to current issues in agronomy via discussion and oral and written communication.  
QP: CSS 210, CSS 370 or CSS 342 QA: CSS 420

**801. Physiological Crop Ecology**

Fall of even-numbered years. 2(2-0)  
Environmental factors that limit crop distribution and productivity. Physiological basis for stress injury, resistance to temperature extremes, flooding, drought, and salinity.  
QA: CSS 801

**CROP AND SOIL SCIENCES**

**CSS**

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

**101. Introduction to Crop Science**

Fall. 3(2-2)  
Principles of crop management, improvement, and fertilization. International and sustainable agriculture. Water quality issues.  
QA: CSS 101

**110. Computer Applications in Agronomy**  
Fall. 2(1-2)

R: Open only to College of Agriculture and Natural Resources students. Not open to students with credit in CPS 100.  
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.

**201. Forage Crops**  
Fall. 3(2-2)

Forage crop production, management, and utilization. Crop identification. Soil fertilization. Planting and harvesting of grasses and legumes.  
QA: CSS 301

**210. Fundamentals of Soil and Landscape Science**  
Fall. 3(2-3) Interdepartmental with Forestry.

P: 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.  
QA: CSS 210

**232. Introduction to Turfgrass Management**  
Fall. 3(2-2)

P: CSS 110; CSS 210 or concurrently.  
Turfgrass utilization, identification, establishment and management principles. Responses to various cultural practices.  
QP: CSS 210 QA: CSS 318

**262. Turfgrass Management Seminar**  
Fall. 1(2-0)

P: 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.  
QP: CSS 318 QA: CSS 417