898 Master's Research
Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 5 credits in all enrollments for this course. R: Open only to master's students in Food Science. Approval of department.
Directed research in support of Plan B master's degree requirements.

899 Master's Thesis Research
Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to M.S. students in Food Science.
Master's thesis research.

999 Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to Ph.D. students in Food Science.
Doctoral dissertation research.

FORENSIC SCIENCE FRS

School of Criminal Justice
College of Social Science

809 Issues in Forensic Science
Fall, Spring. 2 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
Forensic science research, practice and legal processes.

890 Independent Study
Fall, Spring. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
Individual research and writing under faculty supervision.

894 Practicum
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
Observation, study, and work in selected forensic science agencies.

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.
Planned research and writing directed by student's thesis committee.

FORESTRY FOR

Department of Forestry
College of Agriculture and Natural Resources

101 Michigan's Forests
Spring. 3(3-0)
Ecological, social and economic roles of Michigan's forests in historic and contemporary context. Geographic similarities and differences in forest resources.

201 Foundations of Forestry
Fall. 2(2-0) R: Open only to students in the Department of Forestry.
History, founding principles, and core concepts of forestry. Stewardship, conservation, professional ethics, and current forestry issues.

202 Introduction to Forestry
Fall, Spring. 3(3-0)
Historical development of forestry. Forest growth, protection, management, and products. Relationship of national and world economy and policy to forestry. Emphasis on multiple uses of forests.

204 Forest Vegetation
Fall. 4(3-3)
Nomenclature, classification, and identification of woody plants. Tree structure as it relates to growth and ecosystem dynamics.

210 Fundamentals of Soil and Landscape Science
Fall, Spring. 3(2-3) Interdepartmental with Crop and Soil Sciences. Administered by Department of Crop and Soil Sciences. 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 Introduction to Gender and Environmental Issues
Spring. 3(3-0) Interdepartmental with Fisheries and Wildlife; Environmental Economics and Policy; Resource Development; Women's Studies. Administered by Department of Fisheries and Wildlife. R: Not open to freshmen. SA: PRM 211
The concept of gender. Overview of environment and habitat. Historical gender roles in environmental management. Gender-based theoretical perspectives. Case studies on developing and developed countries. Environmental management with emphasis on fisheries, wildlife and wetlands. Women environmental professionals.

220 Forests and the Global Environment
Fall. 3(3-0)
Relationships between forests, climatic and edaphic factors, and human influences upon forest resources. Deforestation, biodiversity, sustainable forest management and timber trade.

304 Wood Technology
Fall. 4(3-2) P: (CEM 141 and PHY 231) and (MTH 116 or MTH 104 or LBS 117) R: Not open to freshmen or sophomores.
Structure and identification of wood. Physical and mechanical characteristics. Major industrial timber utilization processes including manufacture of lumber, furniture, composites, and paper.

305 Wood Composites
Spring. 2(2-0) P: (CEM 141 or CEM 151 or CEM 181H)
Physical and chemical principles of wood adhesion. Wood gluing. Wood adhesives and their properties. Manufacturing principles of wood-based composites. Composite design, process unit operations, property evaluation, and applications. New wood-based composite developments.

306 Forest Biometry
Spring. 4(3-2) P: (MTH 124 or MTH 132 or LBS 118) RB: (FOR 204) R: Not open to freshmen or sophomores.
Describing location and area of forest resources. Quantification of site, stand, and tree characteristics. Sampling and inventory. Predicting growth and yield.

310 Foundations of Forest Conservation
Spring. 2(2-0) R: Not open to freshmen or sophomores.
Analysis of current forest conservation issues. Synthesis of classical forest conservation literature.

330 Social Applications in Forestry
Spring. 2(2-0) P: (ISS 210 or ISS 215 or ISS 220 or ISS 225)
Social factors underlying forest resource management issues. Public values, attitudes, knowledge, and behavior with respect to forests. Public participation, conflict resolution, and communicating forestry issues.

393 Forest Products Internship
Summer. 2 credits. RB: (FOR 304 or FOR 305) R: Open only to juniors in the Forestry major.
Pre-professional educational employment experience in forest products industry, government, or public agency.

400 Forest Harvest Operations
Spring. 2(1-2) P: (CSS210) and (FOR404) and (MTH124 or concurrently or MTH132 or concurrently) RB: (FOR 406 and FOR 420) R: Open only to juniors or seniors.
Forest harvest systems, components and equipment, non-timber products, and road and transport planning. Soil, slope, riparian and wetland limitations. Erosion prediction and control. Harvest contracting and best management practices.

404 Forest and Agricultural Ecology
Fall. 3(3-0) Interdepartmental with Crop and Soil Sciences. P: (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 Crop and Soil Sciences. P: (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.