

## Winter Term 2024-2025 Tech Electives

By utilizing this list, I acknowledge that:

- This list is *not* all-inclusive.
- Just because I *can* take a class, does not mean I *should* take a class.
- I am responsible for ensuring I meet pre-requisites.
  - Pre-reqs are enforced by the department offering the course.
- Class schedules and offerings may change; classes may not be available when I register.

### **AGRON 3420: World Food Issues: Past and Present**

(Cross-listed with ENVS, FSHN). Cr. 3.

*Prereq: Junior classification*

Issues associated with global agricultural and food systems including ethical, social, economic, environmental, and policy contexts. Investigation of various causes and consequences of overnutrition/undernutrition, global health, poverty, hunger, access, and distribution.

**Meets International Perspectives Requirement.**

### **ARCH 3340: Computer-aided Architectural Design**

Cr. 3.

Exploration of current and potential applications of computing in architectural design. Projects engage digital design methods, data and media workflows.

### **BIOL 3130: Principles of Genetics**

(Cross-listed with GEN). Cr. 3.

*Prereq: BIOL 2110; BIOL 2110L; BIOL 2120; BIOL 2120L*

Introduction to the principles of transmission and molecular genetics of plants, animals, and bacteria. Recombination, structure and replication of DNA, gene expression, cloning, quantitative genetics, and population genetics. Students may receive graduation credit for no more than one of the following: Gen 260, Gen 313 and 313L, Gen 320, Biol 313 and 313L, and Agron 320.

### **CONE 3800: Engineering Law**

Cr. 3.

*Prereq: Junior classification*

Introduction to law and judicial procedure as they relate to the practicing engineer. Contracts, professional liability, professional ethics, licensing, bidding procedures, intellectual property, products liability, risk analysis. Emphasis on development of critical thinking process, abstract problem analysis and evaluation.

### **ENVS 3420: World Food Issues: Past and Present**

(Cross-listed with AGRON, FS HN, T SC). Cr. 3.

*Prereq: Junior classification*

Issues in the agricultural and food systems of the developed and developing world. Emphasis on economic, social, historical, ethical and environmental contexts. Causes and consequences of overnutrition/undernutrition, poverty, hunger and access/distribution. Explorations of current issues and ideas for the future. Team projects.

**Meets International Perspectives Requirement.**

### **ENVS 4600: Controversies in Natural Resource Management**

(Cross-listed with NREM). Cr. 3.

*Prereq: (AECL 3120 or NREM 3010); NREM 1200; Junior classification*

Analysis of controversial natural resource issues using a case approach that considers uncertainty and adequacy of information and scientific understanding. Ecological, social, political, economic, and ethical implications of issues will be analyzed.

### **FSHN 3420: World Food Issues: Past and Present**

(Cross-listed with AGRON, ENV S). Cr. 3.

*Prereq: Junior classification*

Issues associated with global agricultural and food systems including ethical, social, economic, environmental, and policy contexts. Investigation of various causes and consequences of overnutrition/undernutrition, global health, poverty, hunger, access, and distribution.

**Meets International Perspectives Requirement.**

### **IE 3050: Engineering Economic Analysis**

Cr. 3.

*Prereq: MATH 1660*

Economic analysis of engineering decisions under uncertainty. Financial engineering basics including time value of money, cash flow estimation, and asset evaluation. Make versus buy decisions. Comparison of project alternatives accounting for taxation, depreciation, inflation, and risk.

### **MGMT 3200: Corporate Entrepreneurship**

Cr. 3

*Prereq: Sophomore classification*

Introduces entrepreneurial approaches aimed at the identification, development and exploitation of technical and organizational innovations, the management of new product or process developments, and the effective management of new ventures. Focuses on mid-size to large corporations, especially in the manufacturing and service industries. Develops an awareness and understanding of the range, scope, and complexity of issues related to the creation of a corporate environment that is supportive of entrepreneurial endeavors as well as the effective implementation of technological and organizational innovations in corporate settings.

### **MGMT 3710: Organizational Behavior**

Cr. 3.

*Prereq: Sophomore classification*

The study of individual attributes, interpersonal relations, and employee attitudes in organizations. Instructional emphasis is placed on how management concepts such as reward systems, job design, leadership, teams, etc., can be used to manage employee attitudes and behavior.

### **MIS 3010: Management Information Systems**

Cr. 3.

*Prereq: COM S 1130*

The role of information technology in organizations. Overview of methodologies for design and development of systems including decision support systems, expert systems, data bases, end-user computing, etc. Computer applications relate concepts to practice. Lecture and laboratory work emphasizes the enabling role of IT in contemporary organizations.

## **SCM 3010: Supply Chain Management**

Cr. 3.

*Prereq: ECON 1010 and STAT 2260*

Various supply chain activities and integration of supply chain management with supply and demand, both within and between firms. Exposure to a wide range of supply chain management terminology, analytical tools, and theories related to four key elements of supply chain management: purchasing, operations, distribution, and integration. Specific topics include strategic sourcing, supply management, demand forecasting, resource planning, inventory management, process management, logistics, location analysis, process integration, and performance measurement.