

# CONSERVATION AND ENVIRONMENTAL SCIENCES (CES)

## Conservation and Environmental Sciences Courses

### **CES 199 Independent Study**

1-3 cr. Undergraduate.

For further information, consult dept chair.

**Prerequisites:** 2.0 GPA; consent of instructor, department chair, and Assistant Dean for Student Academic Services.

**Course Rules:** Retakable to 6 cr max.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 210 Introduction to Conservation and Environmental Science**

3 cr. Undergraduate.

Relations between human populations and resource depletion, pollution and ecosystem disturbance; search for solutions. Discussion section includes some community activities with environmental organization.

**Prerequisites:** none.

**Course Rules:** 2 hrs lec, 1 hr dis.

**General Education Requirements:** Natural Science and Wellness

**Last Taught:** Fall 2025, Spring 2025.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 210X Introduction to Conservation and Environmental Science**

3 cr. Undergraduate.

Relations between human populations and resource depletion, pollution and ecosystem disturbance; search for solutions. Discussion section includes some community activities with environmental organization.

**Prerequisites:** none.

**Course Rules:** 2 hrs lec, 1 hr dis.

**General Education Requirements:** Natural Science and Wellness

**Last Taught:** Fall 2025, Spring 2025.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 289 Internship in Environmental Studies, Lower Division**

1-6 cr. Undergraduate.

Application of basic principles of environmental studies in a business, organizational, educational, political, or other appropriate setting.

**Prerequisites:** introductory course in CES; 2.50 GPA, and consent of supervising faculty member.

**Course Rules:** One cr earned for academic work based on 40 hours in internship. Retakable to 6 cr max.

**Last Taught:** Fall 2025, Fall 2023, Fall 2021, Spring 2011.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 297 Study Abroad:**

1-12 cr. Undergraduate.

Designed to enroll students in UWM-sponsored program before course work level, content, and credits are determined and/or in specially prepared course work.

**Prerequisites:** acceptance for Study Abroad Prog.

**Course Rules:** Retakable w/chg in topic.

**Last Taught:** Fall 2022, Spring 2022, Fall 2019, Spring 2019.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 299 Ad Hoc:**

1-6 cr. Undergraduate.

Course created expressly for offering in a specified enrollment period.

Requires only dept & assoc dean approval. In exceptional circumstances, can be offered in one add'l sem.

**Prerequisites:** none; add'l prereqs may be assigned to specific topic.

**Course Rules:** Retakable w/chg in topic.

**Last Taught:** Spring 1984.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 390 Changing Climate: A Conservation and Sustainability Approach**

3 cr. Undergraduate.

Students explore the challenges of the past alongside current science, policy, and action to discover the opportunities emerging in our global future. International non-governmental organizations and empirical evidence support effective solutions.

**Prerequisites:** BIO SCI 150(P), CES 210(P), or FRSHWTR 101(P); or consent of instructor.

**Last Taught:** Spring 2025.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 431 Natural History of Wisconsin: A Field Survey**

2 cr. Undergraduate.

Field approaches across the natural sciences, survey of diversity of living and non-living components of systems studied by scientists over time, features of Wisconsin's representative plant communities and animal habitat near campus.

**Prerequisites:** declared CES major or consent of instructor.

**Course Rules:** Counts as a repeat of CES 451 or BIO SCI 451.

**Last Taught:** Fall 2025.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 451 Field Methods in Conservation**

3 cr. Undergraduate/Graduate.

Introduction to methods, techniques and tools for natural area management, including plant/animal surveys, vegetation/habitat description, and incorporating hands-on experience.

**Prerequisites:** junior standing and BIO SCI 310(P) or equivalent; or consent of instructor.

**Course Rules:** 2 hr lec, 3 hrs lab. BIO SCI 451 and CES 451 are jointly offered and count as repeats of one another.

**Last Taught:** Fall 2022, Fall 2021.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

### **CES 451G Field Methods in Conservation**

3 cr. Undergraduate/Graduate.

Introduction to methods, techniques and tools for natural area management, including plant/animal surveys, vegetation/habitat description, and incorporating hands-on experience.

**Prerequisites:** junior standing and BIO SCI 310(P) or equivalent; or consent of instructor.

**Course Rules:** 2 hr lec, 3 hrs lab. BIO SCI 451 and CES 451 are jointly offered and count as repeats of one another.

**Last Taught:** Fall 2022, Fall 2021.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 461 The Politics and Policy of Sustainability**

3 cr. Undergraduate/Graduate.

Principles of environmental policy, governance, and management for global sustainability.

**Prerequisites:** junior standing; CES 210(P) or consent of instructor.

**Course Rules:** CES 461, FRSHWTR 461, & GLOBAL 461 are jointly offered; they count as repeats of one another.

**Last Taught:** Fall 2021, Fall 2020.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 461G The Politics and Policy of Sustainability**

3 cr. Undergraduate/Graduate.

Principles of environmental policy, governance, and management for global sustainability.

**Prerequisites:** junior standing; CES 210(P) or consent of instructor.

**Course Rules:** CES 461, FRSHWTR 461, & GLOBAL 461 are jointly offered; they count as repeats of one another.

**Last Taught:** Fall 2021, Fall 2020.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 471 Practicum in Natural Resources Management**

4 cr. Undergraduate/Graduate.

Preparation and presentation of a natural resource or environmental management plan for a real-world client.

**Prerequisites:** senior standing, BIO SCI 310(P), declared CES major, and at least 6 credits of CES approved upper-level electives; or consent of instructor.

**Course Rules:** 2 hr lecture, twice per week.

**Last Taught:** Fall 2025, Spring 2025.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 471G Practicum in Natural Resources Management**

4 cr. Undergraduate/Graduate.

Preparation and presentation of a natural resource or environmental management plan for a real-world client.

**Prerequisites:** senior standing, BIO SCI 310(P), declared CES major, and at least 6 credits of CES approved upper-level electives; or consent of instructor.

**Course Rules:** 2 hr lecture, twice per week.

**Last Taught:** Fall 2025, Spring 2025.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 489 Internship in Environmental Studies, Upper Division**

1-6 cr. Undergraduate.

Application of advanced principles of environmental studies in a business, organizational, educational, political, or other appropriate setting.

**Prerequisites:** junior standing; 300-level or above course in conservation and environmental science; 2.5 GPA and consent of supervising faculty member.

**Course Rules:** One cr earned for academic work based on 40 hours in internship. Retakable to 6 cr max.

**Last Taught:** Fall 2025, Summer 2025, Spring 2025, Fall 2024.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 497 Study Abroad:**

1-12 cr. Undergraduate.

Designed to enroll students in UWM sponsored program before course work level, content, and credits are determined and/or in specially prepared course work.

**Prerequisites:** junior standing and acceptance for Study Abroad Program.

**Course Rules:** Retakable with change in topic.

**Last Taught:** Spring 2023, Fall 2019, Fall 2018, Spring 2018.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 499 Ad Hoc:**

1-6 cr. Undergraduate.

Course created expressly for offering in a specified enrollment period.

Requires department and associate dean approval. In exceptional circumstances, can be offered in one additional semester.

**Prerequisites:** junior standing; additional prerequisites may be assigned to specific topic.

**Course Rules:** Retakable with change in topic.

**Last Taught:** Spring 2016, Fall 2015, Fall 2014, Fall 2011.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 515 Environmental Law for Natural Resource Managers**

3 cr. Undergraduate/Graduate.

Overview of United States environmental and natural resource law.

**Prerequisites:** junior standing or consent of instructor.

**Course Rules:** Counts as repeat of CES 499 with same topic.

**Last Taught:** Spring 2025, Spring 2024.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 515G Environmental Law for Natural Resource Managers**

3 cr. Undergraduate/Graduate.

Overview of United States environmental and natural resource law.

**Prerequisites:** junior standing or consent of instructor.

**Course Rules:** Counts as repeat of CES 499 with same topic.

**Last Taught:** Spring 2025, Spring 2024.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 550 Introduction to Science Interpretation**

3 cr. Undergraduate/Graduate.

Concepts and practices of presenting science information for audience understanding of impact of science on daily life. Interpretation techniques for science content in nonformal settings.

**Prerequisites:** junior standing and CES 210(P); or consent of instructor.

**Last Taught:** UWinteriM 2017, UWinteriM 2015.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 550G Introduction to Science Interpretation**

3 cr. Undergraduate/Graduate.

Concepts and practices of presenting science information for audience understanding of impact of science on daily life. Interpretation techniques for science content in nonformal settings.

**Prerequisites:** junior standing and CES 210(P); or consent of instructor.

**Last Taught:** UWinteriM 2017, UWinteriM 2015.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 651 Principles of Stream Management and Restoration**

3 cr. Undergraduate/Graduate.

Stream management and restoration, open-channel hydraulics, stream geomorphology, stable channel design, sediment transport, and in-stream aquatic ecology and riparian corridor habitats.

**Prerequisites:** junior standing, BIO SCI 310(P), and MATH 211(P) or equivalents; or consent of instructor.

**Last Taught:** Fall 2025.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 651G Principles of Stream Management and Restoration**

3 cr. Undergraduate/Graduate.

Stream management and restoration, open-channel hydraulics, stream geomorphology, stable channel design, sediment transport, and in-stream aquatic ecology and riparian corridor habitats.

**Prerequisites:** junior standing, BIO SCI 310(P), and MATH 211(P) or equivalents; or consent of instructor.

**Last Taught:** Fall 2025.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>

**CES 699 Advanced Independent Study**

1-3 cr. Undergraduate.

Advanced level independent work under the supervision of CES faculty or academic staff member.

**Prerequisites:** junior standing, 2.0 GPA, and consent of instructor, department chair, and Assistant Dean for Student Academic Services.

**Course Rules:** Retakable with change in topic to 9 cr max.

**Last Taught:** Fall 2022, Spring 2020, Fall 2019, Fall 2018.

**Current Offerings:** <https://catalog.uwm.edu/course-search/>