**CONSERVATION AND ENVIRONMENTAL SCIENCES (CES)**

**CES 199 Independent Study**
1-3 cr. Undergraduate.
For further information, consult dept chair.
Prerequisites: 2.5 gpa; writ cons instr, dept chair & asst dean for SAS.
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. 2 hrs lec, 1 hr dis
Prerequisites: none.
General Education Requirements: NS
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: intro course in CES; 2.50 gpa; cons supervising faculty member.
Course Rules: One cr earned for academic work based on 40 hours in internship. Retakable to 6 cr max.
Current Offerings: https://catalog.uwm.edu/course-search/

**CES 290 Seminar: Cool Power to Slow Global Warming**
3 cr. Undergraduate.
Climate change - myth? science? Global warming causes; energy for sustainability; non-renewable (coal, oil, nuclear power), renewable (sun, wind, hydro, biomass, biogas) sources; predictions for 2050.
Prerequisites: none.
General Education Requirements: NS
Last Taught: Spring 2007.
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.
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 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. 2 hr lec, 3 hrs lab.
Prerequisites: jr st; Bio Sci 310(P) or equiv or cons instr.
Course Rules: Jointly offered with and counts as repeat of Bio Sci 451.
Last Taught: Fall 2018, Fall 2017.
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. 2 hr lec, 3 hrs lab.
Prerequisites: jr st; Bio Sci 310(P) or equiv or cons instr.
Course Rules: Jointly offered with and counts as repeat of Bio Sci 451.
Last Taught: Fall 2018, Fall 2017.
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. 2 hr lec, 3 hrs lab.
Prerequisites: jr st; Bio Sci 310(P) or equiv or cons instr.
Course Rules: Jointly offered with and counts as repeat of Bio Sci 451.
Last Taught: Fall 2018, Fall 2017.
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: jr st; CES 210(P) or cons instr.
Course Rules: CES 461, FrshWtr 461, & Global 461 are jointly offered; they count as repeats of one another.
Last Taught: Fall 2018, Spring 2015.
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: jr st; CES 210(P) or cons instr.
Course Rules: CES 461, FrshWtr 461, & Global 461 are jointly offered; they count as repeats of one another.
Last Taught: Fall 2018, Spring 2015.
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. 3 hrs lec, 1 hr dis.
Prerequisites: sr st; Bio Sci 310(P); declared CES major; or cons instr.
Last Taught: Spring 2019, Fall 2018.
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. 3 hrs lec, 1 hr dis.
**Prerequisites:** jr st; Bio Sci 310(P); declared CES major; or cons instr.
**Last Taught:** Spring 2019, Fall 2018.
**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:** jr st, 300-level or above course in Conservation & Environmental Sciences; 2.5 gpa; cons supervising faculty member.
**Course Rules:** One cr earned for academic work based on 40 hours in internship. Retakable to 6 cr max.
**Last Taught:** Spring 2019, Fall 2018, Spring 2018, Fall 2017.
**Current Offerings:** https://catalog.uwm.edu/course-search/

**CES 490 Senior Seminar: Conservation and Environmental Science**
1 cr. Undergraduate.
Examination of conservation literature and preparation, presentation, and discussion of oral reports by individual students.
**Prerequisites:** sr st; Conservation & Environmental Sciences major or Bio Sci major.
**Last Taught:** Spring 2016, Fall 2015, Spring 2015, Fall 2014.
**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:** jr st; acceptance for Study Abroad Prog.
**Course Rules:** Retakable w/chg in topic.
**Last Taught:** Fall 2018, Spring 2018, Spring 2016, Fall 2013.
**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 only dept & assoc dean approval. In exceptional circumstances, can be offered in one add'l sem.
**Prerequisites:** jr st; add'l prereqs may be assigned to specific topic.
**Course Rules:** Retakable w/chg 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:** jr st or cons instr.
**Course Rules:** Counts as repeat of CES 499 with same topic.
**Last Taught:** Spring 2019, Spring 2018.
**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:** jr st or cons instr.
**Course Rules:** Counts as repeat of CES 499 with same topic.
**Last Taught:** Spring 2019, Spring 2018.
**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:** jr st; CES 210(P) or cons instr.
**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:** jr st; CES 210(P) or cons instr.
**Last Taught:** UWinteriM 2017, UWinteriM 2015.
**Current Offerings:** https://catalog.uwm.edu/course-search/

**CES 551 Application of Science Interpretation**
3 cr. Undergraduate/Graduate.
Building upon CES 550, application of skills and knowledge to interdisciplinary environmental issues.
**Prerequisites:** jr st; CES 550(P).
**Last Taught:** Spring 2006.
**Current Offerings:** https://catalog.uwm.edu/course-search/

**CES 551G Application of Science Interpretation**
3 cr. Undergraduate/Graduate.
Building upon CES 550, application of skills and knowledge to interdisciplinary environmental issues.
**Prerequisites:** jr st; CES 550(P).
**Last Taught:** Spring 2006.
**Current Offerings:** https://catalog.uwm.edu/course-search/

**CES 571 Practical Approaches to a Sustainable Future**
3 cr. Undergraduate.
Natural ecological principles used to develop sustainable human-influenced environments. Emphasis on practical solutions to assess and develop alternative sustainable human agroecological models.
**Prerequisites:** jr st; grade C or better in CES 210(P).
**Course Rules:** Counts as a repeat of CES 499 w/similar topic.
**Last Taught:** Spring 2015, Spring 2014, Fall 2013, Fall 2012.
**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:** jr st; Bio Sci 310(P) or equiv; Math 211(P) or equiv; or cons instr.
**Last Taught:** Fall 2018, Fall 2017.
**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:** jr st; Bio Sci 310(P) or equiv; Math 211(P) or equiv; or cons instr.
**Last Taught:** Fall 2018, Fall 2017.
**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:** jr st; 2.5 GPA; writ cons instr, dept chair, & asst dean for SAS.
**Course Rules:** Retakable w/chg in topic to 9 cr max.
**Last Taught:** Fall 2018, Spring 2018, Spring 2017, Fall 2016.
**Current Offerings:** https://catalog.uwm.edu/course-search/