

Course Change Request

New Course Proposal

Date Submitted: 10/22/20 11:03 am

Viewing: **EVPP 381 : Nature and Culture in Global Wetlands**

Last edit: 10/22/20 11:03 am

Changes proposed by: slister1

Are you completing this form on someone else's behalf?

No

Effective Term: Spring 2021

Subject Code: EVPP - Environmental Science & Policy

Course Number: 381

Bundled Courses:

Is this course replacing another course? Yes

Equivalent Courses:

Catalog Title: Nature and Culture in Global Wetlands

Banner Title: Nature/Culture Global Wetlands

Will section titles vary by semester? No

Credits: 4

Schedule Type: Lecture w/Lab

Hours of Lecture or Seminar per week: 3

Hours of Lab or Studio per week: 3

In Workflow

1. **ESP Chair**
2. **SC Curriculum Committee**
3. SC Associate Dean
4. Assoc Provost- Undergraduate
5. Registrar-Courses
6. Banner

Approval Path

1. 10/22/20 11:05 am
A. Alonso Aguirre (aaguirr3):
Approved for ESP Chair

Repeatable: May only be taken once for credit (NR)
GRADUATE ONLY

Default Grade Mode: Undergraduate Regular

Recommended Prerequisite(s):
EVPP 108 or BIOL 103, or permission of instructor.

Recommended Corequisite(s):

Required Prerequisite(s) / Corequisite(s) (Updates only):

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

And/Or	(Course/Test Code	Min Grade/Score	Academic Level)	Concurrency?

Registration Restrictions (Updates only):

Registrar's Office Use Only - Registration Restrictions:

Field(s) of Study:

Class(es):

Level(s):

Degree(s):

School(s):

Catalog Description:

A study of internationally important wetland ecosystems of varying types (i.e., Ramsar wetlands). Emphasizes the link between nature and culture of wetlands in different global regions and focuses on understanding its critical role in the conservation and wise use of global wetlands. The course aims to train the next generation of higher education in the field of eco-cultural literacy and resilience of global wetlands. It provides students with an opportunity to learn about the environmental history and the changes in the ecology of global wetland ecosystems over the decades of human impacts. The course covers different types of wetland systems and their services to and relationship with humanity. The course includes field

trips to local wetlands and nature centers, and one final field trip to a Ramsar wetland - a wetland of an international importance.

Justification:

Wetlands are often associated with long-standing cultural practices that enable human societies to thrive, to adapt to environmental change, and to use nature in a sustainable way. Nearly all Ramsar Sites (i.e., Wetlands of International Importance) provide both natural and cultural ecosystem services. Integrating both nature and culture in the management of wetlands can therefore play a powerful role in their conservation and wise use. This is an interdisciplinary course that provides both literature-based knowledge and field experiences of wetland ecosystems. The course will help students develop an integrated understanding of the inevitable linkage between nature and culture in various types of internationally important wetlands.

Does this course cover material which crosses into another department? Yes

Impacted Departments:

Department
BIOL - Biology
SINT - School of Integrative Studies

Learning Outcomes:

The course will prepare students to become knowledgeable about the linkage among ecology, environmental history, cultural values, and community resilience in global wetlands. The course intends to provide students with:

- 1) A firm grasp of fundamentals of ecology in several types of global wetlands;
- 2) An understanding of the key role that humans and cultural values have played and still do in the conservation and wise use of global wetlands;
- 3) A good deal of environmental history of global wetlands and their associated traditional ecological knowledge

Attach Syllabus

[EVPP 381 Syllabus.pdf](#)

Additional Attachments

Staffing:

Dr. Changwoo Ahn

No course has ever been offered at the undergraduate level that would provide students with a basic understanding of wetland ecology and management, especially from a global perspective. In particular, the course aims to train the next generation of higher education in the field of eco-cultural literacy and resilience of global wetland ecosystems and their governance. Environmental literacy of a global citizen needs deep understanding of both natural and cultural resources and their inevitable associations. The

course will provide students with an opportunity to study the environmental history, the changes in the ecology of internationally important wetland ecosystems/habitats and their relationship with humanity.

Relationship to Existing Programs:

The course will be an undergraduate course for majors in the new BS and BA programs of ESP and an elective for the B.A. and B.S. degrees in Biology.

Relationship to Existing Courses:

The course proposed fits well with basic courses (i.e., ecology, biodiversity, and environmental science) that are currently provided under ESP. Students should be able to apply the knowledge acquired previously through prerequisites in this course while gaining new knowledge and field experiences.

Additional Comments:

Reviewer Comments

Key: 16962

Nature and Culture in Global Wetlands

INSTRUCTOR: Dr. Changwoo Ahn
Professor of Environmental Science and Policy
OFFICE: 3034 DK (office hour: after class until 2:15 pm or by appointment)
PHONE: (703) 993-3978
E-MAIL: cahn@gmu.edu
WEBSITE: <http://www.changwooahn.com>
CLASS TIME: Lecture: 10:30 AM to 1:10 PM or 1:30 PM -4:10 PM, Wednesdays
Lab/Field work/trips: Fridays 10:30 AM-1:15 PM
CREDIT HOURS: 4
PREREQUISITE: EVPP 108 or BIOL 103, or permission of instructor

COURSE DESCRIPTION:

Wetlands are often associated with long-standing cultural practices that enable human societies to thrive, to adapt to environmental change, and to use nature in a sustainable way. Nearly all Ramsar Sites (i.e., Wetlands of International Importance) provide both natural and cultural ecosystem services. Integrating both nature and culture in the management of wetlands can therefore play a powerful role in their conservation and wise use. The course aims to train the next generation of higher education in the field of eco-cultural literacy and resilience of global wetland ecosystems. The course will provide students with an opportunity to study the environmental history and the changes in the ecology of global wetland ecosystems over the decades of human impacts. It includes different types of wetland ecosystems and their services to and relationship with humanity, including water quality, coastal protection, flood mitigation, food production, and biodiversity. People are at the heart of wetland conservation. The Ramsar Convention on Wetlands supports governments to protect not only the ecological, but the cultural values of wetlands, the livelihoods they provide, and the rights of indigenous peoples and local communities to participate in their management. Students will learn about and enhance their understanding of the link between natural and culture of wetlands. The course includes field trips to local wetlands and nature centers, and one final field trip to a Ramsar wetland - a wetland of an international importance.

REQUIRED TEXT: Mitsch WJ. 2009. Wetland Ecosystems. John Wiley & Sons, Inc., New York, NY. (or Mitsch WJ. 1994. Global Wetlands: Old World and New. Elsevier Science). Many additional materials will be provided throughout the semester.

SUPPLEMENTAL TEXT: Mitsch, W. J. and J. G. Gosselink. 2015. Wetlands 5th Edition. John Wiley & Sons, Inc., New York, NY., - Ahn, C. 2015. Wetlands, 5th Edition (Book review), William J. Mitsch, James G. Gosselink, Wiley, New York, 736 pp., *Ecological Engineering* 82: 649-650.

Culture and wetlands in the Mediterranean: evolving story, MediNA, edited by Thymio Oaoayannis and Dave Prichard, 2018.

Ramsar Convention (2012). An integrated framework and guidelines for avoiding, mitigating and compensating for wetland losses. Resolution XI.9. Available at

<http://www.ramsar.org/sites/default/files/documents/library/cop11-res09-e.pdf> [Verified 13 April 2016].

Ramsar Convention Secretariat (2010*a*). 'Managing Wetlands: Frameworks for Managing Wetlands of International Importance and other Wetland Sites. Ramsar Handbooks for the Wise use of Wetlands', 4th edn, vol. 18.(Ramsar Convention Secretariat: Gland, Switzerland)

Ramsar Convention Secretariat (2010*b*). 'Inventory, Assessment, and Monitoring: an Integrated Framework for Wetland Inventory, Assessment, and Monitoring. Ramsar Handbooks for the Wise use of Wetlands', 4th edn, vol. 13. (Ramsar Convention Secretariat: Gland, Switzerland)

COURSE OBJECTIVES

The course will prepare students to become knowledgeable about the linkage among ecology, environmental history, cultural values, and community resilience in global wetlands. The course intends to provide students with:

- 1) A firm grasp of fundamentals of ecology in several types of global wetlands;
- 2) An understanding of the key role that humans and cultural values have played and still do in the conservation and wise use of global wetlands;
- 3) A good deal of environmental history of global wetlands and their associated traditional ecological knowledge

COURSE FORMAT: Class will be a mixture of lecture, literature reviews, group discussion, projects and presentations, and field trips. I expect you to complete the assigned readings prior to each class. Each class participant will be required to conduct a class project and prepare presentations on the outcomes of the project. The theme will be discussed earlier in the semester. Grades will be based on paper review summary, mid-term, homework, final paper and presentation, and field trip reports.

HANDOUTS: Copies of papers and other documents will be e-mailed or handed out in conjunction with class lectures. Unless otherwise noted, students are generally responsible for material contained in these handouts for course examinations.

CLASS PARTICIPATION

I hope to foster a classroom of active exchange among students and between students and the instructor. I will facilitate these through class discussions, active learning in groups, and fieldtrips/fieldwork outside the classroom. However, I cannot do this alone – you must all participate. Successful class participation requires preparation. Successful class discussions also require the right atmosphere, we must all remember to be courteous in our comments and criticisms and open to contrasting ideas from others.

CLASS DISCUSSION

Discussion will be facilitated based on the questions from reading summaries for each chosen topic. The instructor will provide students with reading materials at least a week before the subject matter will be discussed. Every student must participate individually or as a group in discussion.

STUDENT PAPER PRESENTATIONS:

Each student is required to read papers or book chapters assigned before class, submit a summary of the paper (2 pages, 800- < 1,000 words limit, single spaced, 1' for all margins –DO NOT copy and paste from the paper for your summary), and get ready for lecture and/or group discussion. Your summary of the chosen paper should include **two** questions of yours at the end of the summary on terminology, concepts and interpretation of the content presented in each paper. This will require you to do some research on-line or through library materials to share the answers with the rest of the class. One group will present the summary of the paper chosen for your review (individual or group activity) in class for 15-20 minutes (**ppt presentation**) to be followed by guided discussion. The ppt file should be sent to the instructor

before class presentation. The group that presents a paper summary will lead a discussion session after the presentation with instructor's moderation. In addition, we will read some papers/book chapters together more thoroughly along with lectures in an investigative mode.

LET ME KNOW if you have any documented learning or other disability and wish to discuss academic accommodations. The Disability Resource Center can also help you or direct you toward help with a wide range of learning, studying, mental health, career, and physical disability issues (located in Student Union Building I, Room 2500; Tel: 703- 993-2474; <http://ods.gmu.edu/>).

CLASS E-MAIL AND COMMUNICATIONG WITH ME:

I will frequently e-mail to remind you of deadlines or to clarify points from a lecture. Please use GMU e-mail (**@gmu.edu) to facilitate any communication or discussion. Please check your e-mail **daily**. When you email your assignments be sure to label your file with your name, date, and course number (e.g., [ahn0205-380](#)). If you email a question of general interest, I will likely send my response to the entire class list. Be sure to take full advantage of your classmates, the library, and the web as learning resources. Finding answers and solutions among yourselves by tapping into the multitude of resources available to you is generally a more gratifying and educationally valuable approach than seeking answers from a single authority.

LABS & FIELD TRIPS:

Students are required to participate in scheduled field trips and/or fieldworks, and to do lab assignment as necessary. Field trips are scheduled for Fridays 10:30 AM – 1:10 PM. Instructor will discuss about the field trips before they occur. Limited yet laboratory space for your class project work, if needed, can be made available in Ahn Wetland Ecosystem Lab (3071 and 3079a David King Hall). Coordination with Dr. Ahn on lab and equipment use is imperative. For most field trips/work you may want to wear shoes that can get wet or soiled. Transportation will not be provided for local field trips, car-pooling is strongly recommended. The cost of food (water and lunch) and your share of the transportation costs (i.e., gas) are at your own expense. We will discuss earlier in the semester for a longer trip to a Ramsar wetland as a class.

Also needed for field trips may include field notebook (e.g., paper or electronic –phone, pads), camera (or your smartphone that can take pictures and videos). Old clothes and boots/shoes for fieldwork, rain gear upon weather conditions may be needed in some situations.

LAB REPORT

Each field lab will require a short written report with photos when possible (1000 words limit with photos/videos) that will be due by next field/lab session. For field site visits each group will participate in writing a factsheet about the site and its natural and cultural characteristics, including mostly “natural history” of the site. Specific instruction will be provided per each field site with addresses and directions for the location prior to the trip. A longer trip to an internationally important wetland (a Ramsar site) will be discussed earlier in the semester for activities and reports.

GRADING: (subject to minor changes)		% of Grade
Lecture GRADING:		
Mid-term (I)		20
Reading assignment summary (G)		20
Homework	(G)	10
Final Paper and Presentation (I)		20

Lab

Lab/Field trip reports (I)	15
Trip to a Ramsar wetland	15

TOTAL POINTS **100**

*I = Individual; **G = Group (2 people max.)

- Failure to meet deadlines for reading summaries, assignments, and project paper will result in losing 2pts per day in the final grade.
- Your course will be determined using the following straight scale: A+ (97-100), A (94-96), A- (90-93), B+(85-89), B (80-84), C (70-79), D (60- 69), F(<60).

A LIST OF LECTURE TOPICS

1. Nature and Culture in Wetlands: General Guidance
2. Global Wetlands – Distribution, Wetland loss, and Status (Chaps 1 and 2 in *Wetland Ecosystems*)
3. Fundamentals of Wetland Ecology (Wetlands 5th edition- Chaps 1-2)
4. Cultural Approaches to Wise Use of Wetland Resources –Past, Present and Future
 - 4.1. Primary Use of Wetland Resources (Agriculture and stockbreeding, fishing and aquaculture, hunting, salt extraction, & water supply and use – Ramsar documents/films)
 - 4.2. Secondary Use of Wetland Resource (Food, craftsmanship, traditional building material, tourism and leisure, social/cultural practices)
5. Wetlands and People – History of Human Interaction with Wetlands around the World (Ramsar documents, MediNA reports)
6. Nature and Culture in Different Types of Global Wetlands - Freshwater Wetlands (*Wetland Ecosystems*)
7. Nature and Culture in Different Types of Global Wetlands - Coastal Wetlands (*Wetland Ecosystems*)
8. Nature and Culture in Different Types of Global Wetlands - Peatlands & Mangroves (*Wetland Ecosystems*)
9. Swamp People - Indigenous Peoples and Local Communities on Wetland Management (Smithsonian Magazine- <https://www.smithsonianmag.com/history/deep-swamps-archaeologists-fugitive-slaves-kept-freedom-180960122/>, *A Desolate Place for a Defiant People: The Archaeology of Maroons, Indigenous Americans, and Enslaved Laborers in the Great Dismal Swamp*)
10. Traditional Ecological Knowledge of Global Wetlands and its Potential Applications in Science Research and Education (Ramsar documents)
11. Biocultural Diversity and Gastronomic Heritage of Global Wetlands (Culinary Heritage of Wetlands by MediNA)
12. Art and Wetlands -Human Aesthetic Responses to Wetland Environments (Reclaiming wetland values: marsh, mud and wonder by Valuing Nature and Wetland Life)
13. Global Wetlands and Human Health
14. International Organizations and Governance for Wetland Conservation and Wise Use (e.g., Migratory waterfowl management over the East Asian Australian Flyway)
15. UNESCO World Heritage Wetlands & Global Wetland Education Centers -Management of Multi-Internationally Designated Areas (MIDAs) of the Ramsar Wetlands
16. Integrating Cultural Values in Global Wetland Ecology & Management- the Ramsar Culture Network (RCN)