## WATER 777 ECOLOGY AND MANAGEMENT OF THE LAURENTIAN GREAT LAKES SECTION 1 FALL SEMESTER 2019, 3 CREDITS

- *Instructor:* Justin VanDeHey, Ph.D. Office: TNR 178 Office Hours: 9-10 Tu., and 2-3 Wed and by appointment. Office Phone: 715-346-2090 Email: Justin.vandehey@uwsp.edu (best way to reach me)
- *Format:* This course will be taught 100% on-line
- Objectives: At the completion of the course, students will have an understanding of important policies related to the management of the Great Lakes, be able to explain how invasive species have negatively affected native flora and fauna and water quality within the Laurentian Great Lakes, and how species invasions within the Great Lakes have contributed to the spread of invasive species throughout North America. Students will also develop an understanding of the principles of fishery and aquatic sciences within the Laurentian Great Lakes. Students will work collaboratively through case studies related to fisheries and aquatic management, water resources, and policies, related to the management of the Laurentian Great Lakes. Students will develop issue briefs related to contemporary problems within the Great Lakes.
- *Textbooks:* Egan, Dan. 2017. The Death and Life of the Great Lakes.

Annin, Peter. 2018. The Great Lakes Water Wars. Island Press, Washington, D.C.

Supplemental info: Additional peer-reviewed articles and selected book chapters will be available on the course Canvas site.

Canvas site: https://uwstp.instructure.com/courses/222852

*Format:* The course is completely online. The course cover topics ranging from the history of the Great Lakes, to major contemporary and historical policy decisions, the effects of invasive species on Great Lakes ecosystems, and fisheries management in the Great Lakes including management of the biota, habitat, and human users.

Grading:	Assignments will not be accepted if they are turned in after the due date, other than
	for extenuating circumstances such as a family or health emergency. Final grades for
	the course will be awarded as follows:

А	93.0-100%	B+	87.0-89.9%	C+	77.0-79.9%	D+	67.0-69.9%
A-	90.0-92.9%	В	83.0 -86.9%	С	73.0-76.9%	D	60.0-66.9%
		B-	80.0-82.9%	C-	70.0-72.9%	F	<60%

Graded Materials		
Policy Resolutions $(n = 2)$	=	100 points
Case Studies $(n = 2)$	=	100 points
Issue Briefs $(n = 2)$	=	100 points
Discussions	=	<u>100 points</u>
Total	=	400 points

#### **Tentative Schedule:**

Weeks 1-3: Course Introduction and History of the Great Lakes

Discussion – Is water a good or a resource?

Geological formation

Watersheds and historical diversions

The re-plumbing of Lake Michigan

Weeks 4-8: Important Policies

Great Lakes Compact

Water Resources Development Act (WRDA)

**Riparian** Doctrine

Commerce Clause

Great Lakes Charter and Annex

Discussion - Water diversions in the Great Lakes region

Weeks 9-13: Fisheries and Aquatic Management

**Commercial Fisheries** 

**Recreational Fisheries** 

Invasive species

Sea Lamprey

Asian Carps

Microcystis and HABs

# Weeks 14-16: Emerging Issues

Climate Change

Ecological and Hydrological Separation

Discussion – Ecological and Hydrological separation

Discussion – Effects of Climate Change

#### **Important Links and Information**

#### UWSP Community Bill of Rights and Responsibilities

UW-Stevens Point values a safe, honest, respectful, and inviting learning environment. In order to ensure that each student has the opportunity to succeed, we have developed a set of expectations for all students and instructors. This set of expectations is known as the *Rights and Responsibilities* document, and it is intended to help establish a positive living and learning environment at UWSP. For more information visit:

http://www.uwsp.edu/stuaffairs/Pages/rightsandresponsibilities.aspx

Academic integrity is central to the mission of higher education in general and UWSP in particular. Academic dishonesty (cheating, plagiarism, etc.) is taken very seriously. Don't do it! The minimum penalty for a violation of academic integrity is a failure (zero) for the assignment. For more information, see the UWSP "Student Academic Standards and Disciplinary Procedures" section of the *Rights and Responsibilities* document, Chapter 14, which can be accessed here:

http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf

#### Americans with Disabilities Act (ADA) Statement

The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for students with disabilities. For more information about UWSP's policies, check here:

http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/ADA/rightsADAPolicyInfo.pdf

If you have a disability and require classroom and/or exam accommodations, please register with the Disability and Assistive Technology Center and then contact me at the beginning of the course. I am happy to help in any way that I can. For more information, please visit the Disability and Assistive Technology Center, located on the 6th floor of the Learning Resource Center (the Library). You can also find more information here:

http://www4.uwsp.edu/special/disability/

# University of Wisconsin Stevens Point College of Natural Resources-Principles of Professionalism

The College of Natural Resources at the University of Wisconsin – Stevens Point prepares students for success as professionals in many fields. As a professional, there are expectations of attainment of several personal characteristics. These include:

#### Integrity

Integrity refers to adherence to consistent moral and ethical principles. A person with integrity is honest and treats others fairly.

## **Collegiality**

Collegiality is a cooperative relationship. By being collegial you are respecting our shared commitment to student education through cooperative interaction. This applies to all involved in the process: students, staff, faculty, administration and involved community members. You take collective responsibility for the work performed together, helping the group attain its goals.

#### **Civility**

Civility refers to politeness and courtesy in your interactions with others. Being civil requires that you consider the thoughts and conclusions of others and engage in thoughtful, constructive discussion to express your own thoughts and opinions.

### Inclusivity

Inclusivity requires you to be aware that perspective and culture will control how communication is understood by others. While many values are shared, some are quite different. These differences in values should be both considered and respected.

## **Timeliness**

Timeliness is the habit of performance of tasks and activities, planned in a way that allows you to meet deadlines. This increases workplace efficiency and demonstrates respect for others' time.

## **Respect for Property**

Respect for property is the appreciation of the economic or personal value an item maintains. Maintaining this respect can both reduce costs (increase the operable life of supplies and equipment) as well as demonstrate respect for others rights.

## Communication

Professional norms in communication require that you demonstrate the value of your colleagues, students, professors or others. The use of appropriate tone and vocabulary is expected across all forms of communication, whether that communication takes place face to face, in writing or electronically.

## **Commitment to Quality**

Quality is the ability to meet or exceed expectations. By having a commitment to quality, we intend to provide a learning environment that is conducive to learning. Intrinsic to this commitment to quality is defining expectation (committed to in a syllabus through learning

outcomes), implementation (with quality control in place) and assessment (where meeting of learning outcomes is determined).

#### **Commitment to Learning**

Learning is a lifelong process. By being committed to learning you are providing a model for all to follow. This model is not only professor to student but involves all combinations of people within our university and broader community

Adherence to this compact is required of the faculty and staff of the College of Natural Resources and of all students enrolled in College of Natural Resources courses.