

TCORE 112 – Sections A and B Winter 2014

**Where the water meets the road:
Examining the environmental impacts of urbanization on aquatic ecosystems**

Lecturer: Erik McDonald

| | Section A | Section B |
|-------------------------------------|--|--------------------|
| Class Times | M, W 8:00-10:05am | M, W 10:20-12:25pm |
| Class Location | BB 104 | BB 104 |
| Office Hours (or by appointment) | M, W 7:00-8:00am Office Location: Science 102D | |
| Contact | emcdonal@u.washington.edu | (253)692-4667 |

After Day 1:

- Print Pres/Paper Guide
- Read Annotated Bib. Assignment

Librarian: Carole Svensson

After Day 1:

- Read syllabus thoroughly
- Check out Canvas
- Complete the survey
- Study

COURSE DESCRIPTION

How do *your* actions impact the aquatic organisms living in Puget Sound? As the human population continues to climb, more and more people are migrating to urban areas. This in turn imposes greater stresses on adjacent water bodies and other natural resources. This class seeks to explore the growing urban centers around the world and their associated environmental impacts on neighboring aquatic ecosystems. We will also address practices that promote sustainable living in urban areas.

CORE

The Core program consists of a coordinated series of courses that represent the various disciplines in the university. This course, along with the others in your cohort, fulfills one of the university's general education requirements in each of the areas of knowledge plus composition. The courses are designed to both support and challenge you to develop the critical thinking, writing, research, and analytical skills you'll need at UWT while introducing you to relevant topics in the social sciences, humanities, and sciences.

COURSE SITE

Canvas: <https://uw.instructure.com>

We will use Canvas as our online course management program. Your instructor will post PowerPoint slides (as a .pdf), readings, assignment descriptions and drop boxes, helpful links, etc. to the course site. In most instances, you will be asked to **submit assignments for grading through our Canvas site**. Click on the link posted on Canvas if you need help using this course management system.

* Submit all documents on Canvas as a **.doc** or **.docx**.

LEARNING OBJECTIVES

In this course, you will learn to:

Communication/Self-Expression

- formulate an original thesis-driven argument and sustain it in both written and verbal communication.
- express ideas clearly in writing and speaking in order to synthesize and evaluate information before presenting it.
- identify, analyze, and summarize/represent the key elements of a text.

Global Perspective

- think outside of cultural norms and values, including their own perspectives, to critically engage the larger world.
- recognize the value of obtaining a historical perspective of events as being relevant and useful to guide future decision-making.

Inquiry and Critical Thinking

- approach complex issues by taking a large question and breaking it down into manageable pieces
- make meaningful connections among assignments and readings in order to develop a sense of the “big picture.”
- collect, evaluate, and analyze information and resources to solve problems or answer questions.

REQUIRED TEXTS

- There are no required textbooks for this class.
- All required readings will be posted on Canvas.

COURSE REQUIREMENTS

Exams

Exams will cover lectures, videos, discussions, and in-class exercises. I expect your exam answers to include as much detail as was provided in lecture. Each exam will include multiple choice, fill-in-the-blank, and short answer/essay questions. See the schedule for exam dates. No makeup exams will be given without a doctor's note. You instructor must receive notification of your absence **before the exam begins**. Only one makeup will be granted.

Use the restroom before class, especially on exam days. If you have to leave during an exam, you will need to turn in your work without the opportunity to finish upon return. The use of electronic devices is strictly prohibited during exams without DSS documentation and will result in a zero for that exam.

Lecture will follow each exam, excluding the final, unless otherwise stated.

Assignments

Read each assignment *well before* the due date and ask your instructor for clarification if needed.

Assignments are to be completed individually, unless otherwise stated and must be *typed* and *stapled* if applicable. Handwritten and/or unstapled submissions **will not be accepted**. Graded assignments cannot be redone for a grade increase. Review the last page of this document for due dates/times.

Group Presentation and Paper

The class will conclude with group presentations that provide a global context to the environmental issues faced by aquatic ecosystems near urbanized areas. In addition to an oral presentation, each group will write a concise paper (1 paper per group) summarizing the issues stated above. The focus of this paper and presentation should be on aquatic organisms, not human health concerns. Several exercises and assignments will be completed throughout the quarter to prepare each group for their presentation and paper. See the “Paper and Presentation Guide” document on Canvas for more information. Due dates are listed on the last page of the syllabus.

You will submit your rough draft via Canvas; however, your final draft will be submitted *only* as a hard copy.

Group Work

Group work is to be equally distributed among the members of your group. Please inform your instructor if a group member is not doing his/her share of the work and you have tried unsuccessfully to resolve the issue. You are still responsible for turning in a completed paper/presentation even if one or more of your group members drops the class.

Late Work

Deadlines, unless otherwise stated, are at the **beginning of class** on the due date. If you turn in the assigned material after class starts, it will be considered late. Any late assignment will receive a **deduction of 10% for each 24-hour period** that it is late. The assignment will not be graded after the fifth day.

Field Trips

Field trips provide an opportunity for students to connect lecture topics with ‘real-world’ issues through experiential learning. Please show up on time and come prepared (warm clothes, NO OPEN TOED SHOES OR SANDALS, rain gear, pencil, paper, etc.). Those who are not prepared may lose the opportunity to attend the field trip. You will be tested on information presented during our field trips, so make sure to take good notes.

Participation

Students must be prepared for lectures, student-led discussions, and in-class exercises. In order to earn full credit for participation students must ask/answer questions, contribute to class discussions and collaborative work, complete “**Pre-lecture Assignments**” posted on Canvas above that unit’s lecture, and turn in all in-class exercises. Refer to the participation rubric posted on Canvas for a more detailed description of how this will be assessed.

Extra Credit (Optional)

Participate in at least 4 hours of volunteer-work on a habitat restoration project or other approved activity, and write a two to three page paper about your experience. In return, you will receive **up to a 2% increase in your overall grade**. Your paper should explain what the project was, who sponsored/organized the project, and what the broad goals were for the project. Your paper should also include a reflection on your experience (What did you take away from this experience? How does your volunteer experience relate to this class?). This paper must be turned in by the last class meeting before the final exam. No exceptions will be made regarding the due date. See the “*Volunteer Opportunities*” link on Canvas for some possible events.

GRADING

| | |
|------------------------|-----------------------------------|
| Exams | 240 pts. (4 exams @ ~60 pts each) |
| Quiz | 15 pts. |
| Watershed Assignment | 10 pts. |
| Annotated Bibliography | 10 pts. |
| LID Assignment | 10 pts. |
| Paper: | |
| Rough Draft | 10 pts. |
| Final Draft | 25 pts. |
| Presentation | 20 pts. |
| Participation | 10 pts. |
| Total | 350 pts. |

Grades for the class will be based on the summed percentage for all assignments and assessments combined, according to the following breakdown:

| | | | | | | | |
|-----|------|-----|------|-----|------|-----|---------|
| 4.0 | ≥95% | 3.0 | 85 % | 2.0 | 75 % | 1.0 | 65 % |
| 3.9 | 94 % | 2.9 | 84 % | 1.9 | 74 % | 0.9 | 64 % |
| 3.8 | 93 % | 2.8 | 83 % | 1.8 | 73 % | 0.8 | 63 % |
| 3.7 | 92 % | 2.7 | 82 % | 1.7 | 72 % | 0.7 | 60-62 % |
| 3.6 | 91 % | 2.6 | 81 % | 1.6 | 71 % | 0.6 | <60 % |
| 3.5 | 90 % | 2.5 | 80 % | 1.5 | 70 % | | |
| 3.4 | 89% | 2.4 | 79 % | 1.4 | 69 % | | |
| 3.3 | 88 % | 2.3 | 78 % | 1.3 | 68 % | | |
| 3.2 | 87 % | 2.2 | 77 % | 1.2 | 67 % | | |
| 3.1 | 86 % | 2.1 | 76 % | 1.1 | 66 % | | |

RESOURCES AND OTHER INFORMATION

Teaching and Learning Center

The TLC provides a wide variety of instructional resources and support for teaching and learning at UW Tacoma. Teaching and learning are ongoing processes that take practice, commitment, and time. We are here to assist you in achieving your goals and provide math/quantitative, writing, science, and other tutoring services.

<http://www.tacoma.washington.edu/tlc/>

Academic Standards/Plagiarism

All student work must be free of plagiarism. Plagiarism is defined in the University catalog and in the Student Handbook. Consult your professor if you have any questions. A major part of your experience in the class will be reading, synthesizing, and using the knowledge and ideas of others. It is the responsibility of the faculty to help you in this process and to be certain you learn to credit the work of others upon which you draw. To plagiarize is to appropriate and to pass off, as one's own ideas, writing or works of another. Plagiarism is no less of a misconduct violation than vandalism or assault. Ignorance of proper documentation procedures is the usual cause of plagiarism. This ignorance does not excuse the act. Students are responsible for learning how and when to document and attribute resources used in preparing a written or oral presentation.

For more information, please refer to the Academic Honesty: Cheating and Plagiarism document prepared by the Committee on Academic Conduct in the College of Arts and Sciences, UW Seattle:

http://www.tacoma.uw.edu/interdisciplinary-arts-sciences/undergraduate-resources#academic_honesty

Library

The UWT Library provides resources and services to support students at all levels of expertise. We guide students through the research process, helping them learn how to develop effective research strategies and find and evaluate appropriate resources. For more information about the Library and its services, see:

<http://www.tacoma.washington.edu/library/>

Electronic Devices

Electronic devices (including, but not limited to, cell phones, pagers, laptops, and personal digital assistants) may NOT be used in the classroom unless otherwise stated by the instructor. Those interested in using a laptop must first obtain permission from the instructor.

Disability Support Services

The University of Washington Tacoma is committed to making physical facilities and instructional programs more accessible to students with disabilities. Disability Support Services (DSS) functions as the focal point for coordination of services for students with disabilities. In compliance with Title II or the Americans with Disabilities Act, any enrolled student at UW Tacoma who has an appropriately documented physical, emotional, or mental disability that substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning and working], is eligible for services from DSS. To schedule an appointment with a counselor, please call (253) 692-4522. Consult the web page below for a complete description of services.

http://www.tacoma.washington.edu/studentaffairs/SHW/dss_about.cfm

Campus Safety Information

http://www.tacoma.washington.edu/safety/emergency/Emergency_plan.pdf

Safety Escorts

Safety Escorts are available Monday - Thursday 5:00pm - 10:30pm. They can be reached either through the duty officer or by dialing #300 from a campus phone.

In case of a fire alarm

Take your valuables and leave the building. Plan to return to class once the alarm has stopped. Do not return until you have received an all clear from somebody "official," the web or email.

In case of an earthquake

DROP, COVER, and HOLD. Once the shaking stops, take your valuables and leave the building. Do not plan to return for the rest of the day. Do not return to the building until you have received an all clear from somebody "official," the web, or email.

Inclement Weather

Call (253) 383-INFO to determine whether campus operations have been suspended. If not, but driving conditions remain problematic, call the professor's office number. This number should provide information on whether a particular class will be held or not, and/or the status of pending assignments. If the first two numbers have been contacted and the student is still unable to determine whether a class will be held, or the student has a part-time instructor who does not have an office phone or contact number, call the program office number for updated information.

UWT Email Policy:

http://www.tacoma.washington.edu/policies_procedures/E-mail_Policy.pdf

TCORE Class Schedule*

| Week | Lecture Topics and Exercises | Tasks/Due Dates |
|----------------|---|--|
| 1 M 1/6 W | Syllabus, Canvas, form groups, How to study for a college science class, Intro to science & urbanization Library research (Carole): CSE format, Writing an annotated bibliography; finish lecture on urbanization | Complete the survey on Canvas |
| 2 M 1/13 W | Quiz 1 , then lecture on ecosystems and nutrients Ecosystems and nutrients continued | Mon: Complete Pre-lecture assignment FRIDAY: Watershed Assignment Due |
| 3 M 1/20 W | NO CLASS (MLK Jr. Day) Dead Zones, Video: Poisoned Waters (Part 1) | Wed: Annotated Bibliography Due |
| 4 M 1/27 W | Field trip: Central Wastewater Treatment Plant <i>Note to student driver: bring TWO signed documents to MAT 004</i> Plankton exercise , finish video, Exam Review (time permitting) | Wed: Class in SCI 217 |
| 5 M 2/3 W | Exam 1 , then lecture on pollution Video: Poisoned Waters (Part 2), Stormwater lecture | Mon: Complete Pre-lecture assignment |
| 6 M 2/10 W | Stormwater quantity and quality; Water use and water rights Field trip – LID and nonpoint source pollution <i>Note to student driver: bring TWO signed documents to MAT 004</i> | FRIDAY: LID/Impervious Assignment Due |
| 7 M 2/17 W | NO CLASS (Presidents Day) Video: Water Undone: Puyallup R. Watershed (DVD) Finish stormwater lecture, Peer Review | Wed: Rough draft for peer-review** |
| 8 M 2/24 W | Exam 2 , then lecture on overexploitation of marine resources Presentation Tips (format and delivery) Overexploitation, Video: Net Loss, Exam Review | Wed: Rough draft due on Canvas |
| 9 M 3/3 W | Exam 3 , then discuss rough draft comments Habitat alterations | Mon: Bring the most updated electronic copy of your paper |
| 10 M 3/10 W | Habitat alterations continued, 3 Group Presentations Review for Comprehensive Final All Remaining Group Presentations | Mon: Final Draft Due |
| 11 M 3/17 | Monday, March 17th - Comprehensive Final | FINALS WEEK |

* This is a tentative schedule and thus is subject to change. Any changes will be announced in class and on Canvas.

** *Every person* within each group should bring one **stapled** copy of your rough draft for the peer review session. Obviously, those in the same group will bring copies of the same paper. This is NOT the due date for your rough draft submission on Canvas.

Central Wastewater Treatment Plant (253) 591-5588 or (253)-404-6965

When are assignments due?

| Assignment | Due Date |
|---|--|
| Watershed Assignment | Friday January 17 th @ 8:00am |
| Annotated Bibliography | Wednesday January 22 nd @ 8:00am |
| LID and % Impervious Assignment | Friday February 14 th @ 8:00am |
| Rough draft for peer-review – Bring a stapled hard copy to class. DO NOT SUBMIT ON CANVAS. | Wednesday February 19 th in class |
| Rough draft (Submit on Canvas) | Wednesday February 26 th @ 8:00am |
| Hard copy of Final Draft | Monday March 10 th in class |

What lectures, worksheets, exercises, etc. should you study for each assessment?

| Assessment | Content (What to study) |
|------------|--|
| Quiz 1 | Science & Urbanization |
| Exam 1 | Science & Urbanization, Ecosystems, Nutrients, Wastewater Field Trip, Plankton Exercise |
| Exam 2 | Pollution, Stormwater, LID, “Water Undone” Worksheet, CSE Format, Center for Urban Waters field trip |
| Exam 3 | Overexploitation of Marine Resources, “Net Loss” Worksheet |
| Final Exam | 1) Habitat Alteration and Restoration 2) Comprehensive Review of topics covered in this class |