

Course Prefix/Number/Title: ENVT 270 - WATER RESOURCE MANAGEMENT (2011)

Credits: 4 credits

Course Description:

This course is designed to assist students in integrating the interdisciplinary aspects of biological, chemical and physical sciences into a holistic approach to managing water resources. Focus is on regulations, education, and best management practices to protect and conserve water resources for future generations.

Instructor: Larry Brooks

Office: Nelson Science Center 111

Office Hours: 9-10 am M, W, & F and by appointment

Phone: 228-5457

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Lecture Schedule: 2:00 - 2:50 pm MWF in NSC 105

Lab Schedule: By arrangement

Textbooks: None

Course requirements:

Grading is based on a standard college curve, where students earn a grade based upon the percent of total possible points they obtain. The lecture component of this course consists of approximately 450 points (12 drop quizzes worth 5 points each, 4 lecture exams worth 100 points each). Lecture points are added to laboratory point (approximately 150 points) to obtain the total points possible for the course (approximately 600). Drop quizzes may not be made up, but students will be able to drop their two lowest scores of the twelve drop quizzes given during the semester. There is a one week grace period to makeup any missed exam or work. Any missed exam/work not made up within the allotted time will be given a zero. Makeup exams may be of an essay nature and are usually considered more difficult. Letter grades are assigned based on the following criteria:

- A = 90-100% of the total points
- B = 80-89% of the total points
- C = 70-79% of the total points
- D = 60-69% of the total points
- F = <60% of the total points

Course Outline (Tentative):

<u>DATE</u>	<u>TOPIC</u>
8-24	Introduction
8-25	NO LAB
8-26	Chemistry Review and Properties of Water
8-29	Properties of Water
8-31	Water Math
9-1	LAB 1 - Properties of Water
9-2	The Hydrologic Cycle
9-5	NO CLASS - LABOR DAY
9-7	Physical Properties of Water
9-8	LAB 2 - Field Trip
9-9	Biology of Water
9-12	Biology of Water
9-14	Biology of Water and Exam Review
9-15	LAB 3 - Field Trip
9-16	EXAM I
9-19	Rivers and Stream
9-21	Rivers and Stream
9-22	LAB 4 - Field Trip
9-23	Rivers and Streams
9-26	Lakes and Reservoirs
9-28	Lakes and Reservoirs
9-29	LAB 5 - Field Trip
9-30	Wetlands
10-3	Wetlands
10-5	NO CLASS – ASSESSMENT DAY
10-6	LAB 6 - Field Trip
10-7	Ground Water
10-10	Ground Water
10-12	Exam Review
10-13	LAB 7 - Field Trip
10-14	EXAM II
10-17	Surface Water Management
10-19	Surface Water Management
10-20	LAB 8 - Rapid Bioassessment
10-21	Ground Water Management

10-24	Legal Aspects of Water (Water Law)
10-26	Legal Aspects of Water (Water Law)
10-27	LAB 9 - Rapid Bioassessment
10-28	Legal Aspects of Water (Water Law)
10-31	Economic Aspects of Water
11-2	Economic Aspects of Water
11-3	LAB 10 - Rapid Bioassessment
11-4	Social Aspects of Water
11-7	Social Aspects of Water
11-9	EXAM III
11-12	LAB 11 - Water Education
11-11	NO CLASS - VETERAN'S DAY
11-14	Global Water Issues
11-16	Global Water Issues
11-17	LAB 12 - Water Education
11-18	Global Water Issues
11-21	Water Issues in the Dakotas (and Canada)
11-23	Water Issues in the Dakotas (and Canada)
11-24	NO LAB - THANKSGIVING HOLIDAY
11-25	NO CLASS - THANKSGIVING HOLIDAY
11-28	Water Management Plans
11-30	Water Management Plans
12-1	LAB 13 - Classroom Visits
12-2	Water Management Plans
12-5	Water Management Plans
12-7	Water Management Plans - Student Presentations
12-8	LAB 14 - Classroom Visits
12-9	Water Management Plans - Student Presentations
12-12	Review for Final Exam
12-16	FINAL EXAM (9:00 - 11:00 AM)

General Education Goals and Objectives:

None

Relationship to Campus Theme:

This course aligns with the campus theme of *Nature, Technology and Beyond* by fostering a deep sense of respect and an ethic of concern for our natural resources. Student will learn about best management practices to protect and conserve watersheds and water resources.

Classroom Policies

- 1) Cell phone and related technology are prohibited in the classroom at all times. It is recommended that you do not bring your cell phone into the classroom or, at the very least, turn it off.
- 2) Food and beverages are permitted in accordance with IVN classroom policy.
- 3) Be respectful of other students, technicians, instructors, and guests.

Academic Integrity

All students are expected to adhere to the highest standards of academic integrity. Dishonesty in the classroom or laboratory and with assignments, quizzes and exams is a serious offense and is subject to disciplinary action by the instructor and college administration. For more information, refer to the Student Handbook.

Disabilities and Special Needs

If you have a disability for which you need accommodations, you are encouraged to contact your instructor and the Learning Center (228-5479 or 1-888-918-5623) to request disability support services as early as possible during the beginning of the semester.