# CONS 405G: Soil and Water Conservation - Spring 2017

Instructor: Dr. Joel Gruver Phone: (309) 298 – 1215
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**Office hours:** MW 9-10 11-12

Class meeting time and location: MWTF12-12:50 pm in KH 305

**Text:** No text – readings from a wide variety of sources will be assigned

#### **Course Description:**

This course explores the science and practice of natural resource management with a focus on soil and water resources in IL. The course begins with an overview of the processes that formed Illinois' natural resources and their dramatic alteration by man. Next we will discuss the historical development of a conservation ethic and the current status of IL's natural ecosystems, agro-ecosystems and urban ecosystems. The rest of the course will focus on the science and practice of soil and water resource management in a wide variety of rural and urban contexts.

# **Course Objectives:**

At the end of the course, students should be able to:

- Describe the formation, alteration and current status of IL's soil&water resources
- Describe the emergence and current status of conservation in IL
- Apply scientific principles to soil and water management problems in urban and rural environments

#### **Lecture schedule:**

Week	Dates			Topic						
1		1/18	1/19		The making and breaking of Illinois					
2	1/23		1/26		Emergence of a conservation ethic					
3	1/30	2/1	2/2	2/3	Illinois' natural ecosystems today					
4	2/6	2/8	2/9	2/10	Illinois' urban ecosystems today					
5		2/15	2/16	2/17	Illinois' agro-ecosystems today					
6	2/20	2/22	2/23	2/24	Understanding erosion processes					
7	2/27	3/1	3/2	3/3	Soil erosion control practices					
8	3/6	3/8 3	3/9	3/10	Soil conservation vs. soil health					
9	SPRING BREAK									
10	3/20	3/22	3/23	3/24	Hydrology of the Midwest region					
11	3/27	3/29	3/30	3/31	Ag drainage					
12	4/3	4/5	4/6	4/7	Stormwater management					
13	4/10	4/12	4/13	4/14	Waste management					
14	4/17	4/19	4/20	4/21	Mining impacts on soil and water resources					
15	4/24	4/26	4/27	4/28	Multi-functional rural landscapes					
16	5/1	5/3	5/4	5/5	Conservation challenges					
17	Monday 5/8 @ 1pm				TAKE HOME FINAL EXAM DUE					

# **Grade Determination:**

Interview Archive	25 %	A	93 - 100	C	73-76
Quizzes	25 %	A-	90 - 92	C-	70-72
Reading Qs	20 %	B+	87-89	D+	67-69
Final exam	10 %	В	83-86	D	63-66
Final Project	10 %	B-	80-82	D-	60-62
Attendance	10 %	C+	77-79	F <	60

Reading questions will be assigned most weeks. Answers must be submitted using Western On-line before the start of class on the due date for full credit. All steps must be shown for quantitative problems. Answers to the reading questions will be discussed at the start of class most Fridays followed by a short quiz covering the week's topic. One or more interview archive assignments will be due most weeks and must be submitted on time for full credit. The final project will be explained in detail after spring break.

#### Attendance and deadlines:

All students who miss 4 or fewer classes will receive an attendance grade of 100%. Students will lose 10% of their attendance grade for each additional class that they miss. Make-up quizzes are only an option for students who communicate in advance or have an emergency that prevents communication.

# **Academic honesty:**

The WIU academic integrity policy will be strictly followed in this class. http://www.wiu.edu/policies/acintegrity.shtml

# NO CHEATING, PLAGIARISM, OR OTHER VIOLATIONS OF THE WIU ACADEMIC INTEGRITY POLICY WILL BE TOLERATED.

#### **Student Rights and Responsibilities:**

Detailed information regarding student rights and responsibilities can be found at <a href="http://www.wiu.edu/provost/student/">http://www.wiu.edu/provost/student/</a>. It is your responsibility to be familiar with the posted information.

#### **Special Accommodations:**

In accordance with University policy and the Americans with Disabilities Act (ADA), special accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to my attention, as I am not legally permitted to inquire about the needs of specific students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should let me know the most appropriate procedures to follow in such an emergency. Contact Disability Support Services at 298-2512 for additional services.