

SOS5234

Syllabus and Schedule 2008

[Instructors](#) | [Times](#) | [Room](#) | [Credit Hours](#) | [Section No.](#) | [Enrollment Cap](#)
[Material and Supply Fee](#) | [Prerequisite](#) | [Required Texts](#) | [Course Objectives](#) |
[Grading](#) | [Scale](#)
[Distance Education Participation](#)
[Work Expected](#) | [Bibliography](#) | [Tentative Course Schedule for 2008](#) | [Academic](#)
[Honesty](#)
[UF Counseling Services](#) | [Accommodations for Students with Disabilities](#) |
[Software Use](#)

ENVIRONMENTAL SOIL, WATER AND LAND USE -- SOS 5234
FALL SEMESTER, 2008

INSTRUCTOR:

Dr. [E.A. Hanlon, Jr.](#), Professor, Soil and Water Science Department, Southwest Florida Research and Education Center, 2686 SR 29 North, Immokalee, FL 34142-9515, phone 239-658-3400; email hanlon@ifas.ufl.edu ; office hours by appointment.

[\(back to top\)](#)

TIMES:

All 40 Lessons ("lectures") will be posted on E-Learning at the beginning of the Fall Semester. Student Bulletin board postings in E-Learning (constituting an on-line facsimile of a Discussion Session) are an integral part of the learning process and are a graded portion of this course. The instructor shall respond in a timely fashion throughout the term.

Chat sessions are planned from 6 p.m. to 7 p.m. (Eastern Time) on Tuesdays during the regular semester using the Web-based system, Adobe Connect. Chat sessions will be held based upon need and possible participation of most of the class. Participants may interact with the instructor through typed questions and comments. The instructor will respond via voice through the Adobe Connect System.

[\(back to top\)](#)

ROOM:

N/A (taught via distance education only, via E-Learning, in Fall 2008)

[\(back to top\)](#)

CREDIT HOURS: 3

[\(back to top\)](#)

SECTION NO.:

1326 and 2763 (Distance Education only!)

[\(back to top\)](#)

ENROLLMENT CAP:

None.

[\(back to top\)](#)

MATERIAL AND SUPPLY FEE:

None.

[\(back to top\)](#)

PREREQUISITE:

SOS 3022, or SOS 5050, or equivalent

[\(back to top\)](#)

REQUIRED TEXTS:

1. *Mirage: Florida and the Vanishing Water of the Eastern US.*, by Cynthia Barnet. The University of Michigan Press. 2007. ISBN-13: 978-0-472-11563-1 (Cloth: Alkaline Paper).
2. *Plan B 3.0: Mobilizing to Save Civilization*, by Lester Brown. W. W Norton and Company. 2008 ISBN 978-0-393-33087-8 (Paperback).
3. *Water Follies: Groundwater Pumping and the Fate of America's Fresh Waters*, by R.J. Glennon. Island Press, Washington. 2004. ISBN 1-55963-400-6 (Paperback).

NOTE: Textbooks can be ordered through the UF Bookstore by going to www.ufl.bkstr.com, then clicking on "Books," and then "Textbooks." From there, the ordering/shipping information is self-explanatory.

[\(back to top\)](#)

COURSE OBJECTIVES

1. To develop an appreciation for differences among soils and their suitability for selected uses.
2. To study the relationships between land use and the behavior of water in the soil and the landscape.
3. To explore historical and current water allocation techniques.
4. To develop or improve skills in using soil survey reports, contour maps, and other information having potential for application in planning the use and management of land and water.
5. To become familiar with methods of rating soils to determine suitability for selected uses.

[\(back to top\)](#)

GRADING:

Examination A = 250 points (25%)

Examination B = 250 points (25%)

Final Examination = 250 points (25%)

Projects and reports = 100 points (10%)

Participation in discussion threads (bulletin boards) = 150 points (15%)

Total = 1000 points (100%)

[\(back to top\)](#)

SCALE:

90-100% A

85-89% B+

80-84% B

75-79% C+

70-74% C

65-69% D+

60-64% D

<60% F

[\(back to top\)](#)

DISTANCE EDUCATION PARTICIPATION:

Participants will access lectures, discussion threads, exams, etc. via the Internet.

[\(back to top\)](#)

WORK EXPECTED:

1. Exams consist of computations, essay questions, and/or short answer questions, alone or in combination.
 - a) When True/False or Multiple Choice questions are asked, students are expected to select a choice and provide short explanations describing the reason(s) for that choice.
2. Students are expected to understand and to be able to work with all material from lectures, discussions, and assigned readings. Emphasis is on understanding the processes, not on memorization of information.
3. Project reports (usually one project) involve such subjects as interpretation of soil maps and topographic maps; understanding and use of soil survey reports; interpretation of hydrographs and other water-related information and data; explorations of water rights and water allocation; and development of soil potential ratings for urban and agricultural land uses.
4. Assignments handed in after the designated turn-in time automatically receive a reduction in grade at the rate of 20 percent per day after the due date. An assignment turned in five or more days late will result in a grade of zero for that project.
5. Since discussion threads are integral to the course, students are expected to ask questions, provide examples from their own experiences, and discuss concepts after students have read the summarized discussion documents for each lecture. Courtesy and tolerance are cornerstones of learning, especially in the written words found in discussions.

[\(back to top\)](#)

BIBLIOGRAPHY:

1. *Mirage: Florida and the Vanishing Water of the Eastern US.*, by Cynthia Barnet. The University of Michigan Press. 2007. ISBN-13: 978-0-472-11563-1 (Cloth: Alkaline Paper). **(Required Text)**
2. *Plan B 3.0: Mobilizing to Save Civilization*, by Lester Brown. W. W Norton and Company. 2008 ISBN 978-0-393-33087-8 (Paperback). **(Required Text)**
3. *Water Follies: Groundwater Pumping and the Fate of America's Fresh Waters*, by R.J. Glennon. Island Press, Washington. 2004. ISBN 1559634006 (Paperback). **(Required Text)**

4. *Water Crisis: Myth or Reality?* Marcelino Botin Water Forum 2004, by [Peter P. Rogers](#), [M. Ramon Llamas](#), and [Luis Martinez Cortina](#). Fundacion Marcelino Botin. 2004.
5. *Cadillac Desert: The American West and Its Disappearing Water*, by M. Reisner. Penguin Books, New York, NY. 1993.
6. *Rivers of Eden: The Struggle for Water and the Quest for Peace in the Middle East*, by D. Hillel. Oxford University Press, New York, NY. 1994.
7. *Out of the Earth: Civilization and the Life of the Soil*, by D.J. Hillel. University of California Press. 1992.
8. *Soil and Civilization*, by E. Hyams. Harper Colophon Books, New York, NY.
9. *The Florida Experience: Land and Water Policy in a Growth State*, by L.J. Carter. The Johns Hopkins University Press, Baltimore, MD. 1974.
10. *The Day the House Fell*, by R.L. Handy. ASCE Press, New York, NY. 1995.
11. *Water Wars: A Story of People, Politics & Power*, by H. Rand. Xlibris Corporation, Philadelphia. 2003.
12. *Soil Survey of Alachua County, Florida*, by B.P. Thomas, E.Cummings, and W.H. Wittstruck. U.S. Government Printing Office, Washington, D.C. 1985.
(Distance education students to have the option of using comparable soil survey reports from their own geographic areas)
13. Selected USGS 7-1/2 minute topographic quadrangles
14. *Soil and Water Science: Key to Understanding Our Global Environment*, Edited by R.S. Baker, G.W. Gee, and C. Rosenzweig. SSSA Special Publication No. 41. Soil Science Society of America, Inc., Madison, WI. 1994.

[\(back to top\)](#)

**COURSE SCHEDULE FOR ENVIRONMENTAL SOIL, WATER AND LAND USE, SOS 5234,
FALL 2008:**

<u>Date</u>	<u>Lecture</u>	<u>Exam</u>	<u>Topic/Remarks</u>	<u>Book</u>	<u>Chapter(s)</u>	<u>To be read by</u>
25 Aug	1		Soil and water in the landscape			
27 Aug	2		Soil and water in the landscape/Soil survey			
29 Aug	3		Soil survey	<i>Water Follies</i>	Intro plus Ch. 1, 2, 3 & 5	12 Sep
				<i>Mirage</i>	<i>Prologue</i> Ch. 1 & 2	12 Sep
1 Sep	--		No class -- Labor Day			

<u>Date</u>	<u>Lecture</u>	<u>Exam</u>	<u>Topic/Remarks</u>	<u>Book</u>	<u>Chapter(s)</u>	<u>To be read by</u>
3 Sep	4		The map units of soil surveys			
5 Sep	5		Soil map units continued			
8 Sep	6		Landscape variability			
10 Sep	7		Soil variability			
12 Sep	8		Soil variability continued	<i>Water Follies</i>	Ch. 6, 7, 8, and 9	26 Sep
				<i>Mirage</i>	Ch. 3, 4, & 6	26 Sep
15 Sep	9		Map scales and scale hierarchies			
17 Sep	10		Topographic (contour) maps			
19 Sep	11		Behavior of water in soils			
22 Sep	12		Movement of water in soils continued			
24 Sep	13		Measurement of soil water			
26 Sep	14		Soil drainage classes/Hydrologic soil groups/Surface hydrology	<i>Water Follies</i>	Ch. 10, 11, 12, 13, and 14	11 Oct
				<i>Mirage</i>	Ch. 8, 9, and 10	10 Oct
29 Sep	15		Leaching and runoff ratings and an application			
01 Oct	16		Total maximum daily loads (TMDLs)			
03 Oct		A	EXAMINATION "A" includes Lectures 1 through 15			
06 Oct	17		Minimum flows and levels (MFLs)			
08 Oct	18		Water allocation ***Return Exam A***	<i>Water Follies</i>	Ch. 15	24 Oct
				<i>Mirage</i>	Ch. 11 and 12	24 Oct
10 Oct	19		Water quality ***Begin Term Project***			
13 Oct	20		Best management practices			

<u>Date</u>	<u>Lecture</u>	<u>Exam</u>	<u>Topic/Remarks</u>	<u>Book</u>	<u>Chapter(s)</u>	<u>To be read by</u>
			(BMPs)			
15 Oct	21		Nutrient management			
17 Oct	22		Soil erosion by water			
20 Oct	23		Soil erosion by water continued			
22 Oct	24		Soil erosion continued	<i>Plan B 3.0</i>	1: pgs 3-20 3: pgs 48-56 4: pgs 68-80 5: 85-97	7 Nov
24 Oct	--		No class -- Homecoming			
27 Oct	25		Wind erosion			
29 Oct	26		Other sorts of soil erosion and "land degradation" (Parts I and II) [2 separate files to open/download]			
31 Oct	27		Engineering properties of soils: Part 1			
3 Nov	28		Engineering properties of soils: Part 2			
5 Nov	29		Engineering properties of soils: Part 3			
7 Nov	30		Engineering properties of soils: Part 4 (finally!) ***Term Project Due***			
10 Nov			EXAMINATION "B" includes Lectures 16 through 29	<i>Plan B 3.0</i>	6: pgs 115-117 8: pgs 152-162 9: pgs 165-169 9: pgs 176-182 10: pgs 202-209	21 Nov
12 Nov	31	B	Soil interpretations ***Return Exam B***			
14 Nov	32		Soil interpretations continued			
17 Nov	33		Soil potential ratings			

<u>Date</u>	<u>Lecture</u>	<u>Exam</u>	<u>Topic/Remarks</u>	<u>Book</u>	<u>Chapter(s)</u>	<u>To be read by</u>
19 Nov	34		Soil potential ratings continued; Prime and unique farmland	<i>Plan B 3.0</i>	12: pgs 239-245; 252-259	5 Dec
21 Nov	35		Farmland and other land/water use issues			
24 Nov	36		Domestic wastewater disposal			
26 Nov	37		Domestic wastewater disposal continued			
28 Nov			No class -- Thanksgiving break			
1 Dec	38		Rules for land application of effluent, biosolids, and septage			
3 Dec	39		World soil and water resources			
5 Dec	40		Government conservation programs (distribute FINAL EXAM via VISTA email)			
8 Dec	41					
10 Dec	42					
12 Dec			No class -- Reading Day			
15 Dec		FINAL	Return completed FINAL EXAM by 5:00 PM			
22 Dec			Grades Submitted			

[\(back to top\)](#)

ACADEMIC HONESTY

In fall 1995, the University of Florida student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by the students:

Preamble: In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. A student-run Honor Court and faculty support are crucial to the success of the honor code. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor Code: **We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.**

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**

Matters of violations of academic honesty are adjudicated by the Student Honor Court, the Health Center Student Conduct Standards Committee, the Student Conduct Committee, the College of Law Honor Committee and faculty.

See a current Undergraduate Catalog for definitions of Plagiarism, Bribery, Misrepresentation, Conspiracy, and Fabrication.

[\(back to top\)](#)

UF COUNSELING SERVICES

Resources are available on-campus for students having personal problems or lacking clear career and academic goals. These resources include:

1. University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling;
2. SHCC Mental Health, Student Health Care Center, 392-1171, personal counseling;
3. Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling; and
4. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

[\(back to top\)](#)

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

[\(back to top\)](#)

SOFTWARE USE

All faculty, staff and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

[\(back to top\)](#)