

Springs of Florida

FOR6934

Spring 2015

Instructors

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Meeting Times

The on campus section (073G) will meet Monday and Wednesday period 6 (12:50-1:40) and Friday period 7 (1:55pm – 2:45pm) in 302 RLA. Lectures will be available for the distance-ed section (074G) on the e-learning Canvas site (<https://lss.at.ufl.edu>).

Required Text

Scott et al. 2004. *Springs of Florida* Florida Geological Survey Bulletin No 66. A pdf version is available for free download at http://publicfiles.dep.state.fl.us/FGS/WEB/springs/bulletin_66.pdf

Course Objectives

North Florida is world-renown for its abundance of artesian springs. This course will introduce students to these ecosystems. The learning objectives of this course are as follows:

- 1) Students will understand the hydrogeologic properties of North Florida which lead to spring formation, their ecological, social and economic importance, the current threats facing these systems, and the management agencies responsible for protecting them.
- 2) Students will directly observe concepts from the classroom in the field by visiting several springs.
- 3) Students will demonstrate written communication skills through a synthesis paper. They will demonstrate written and oral communication skills as well as the ability to efficiently collaborate with colleagues through a group project

Grades

Participation –20% - A discussion forum will be created on the Canvas site each week. To receive full credit students must submit one original comment regarding that week's lectures or assigned reading, and one response comment in regard to another student's comment. The purpose of this assignment is to generate a group discussion regarding the week's topics. On-campus students should also attend lectures to facilitate in-class discussion and provide feedback to the instructors. Participation grades for on-campus students who repeatedly miss lectures will be penalized.

Field Trips – 30% total –On three Saturdays throughout the semester we will be taking field trips to visit springs. The dates of the field trips are January 17, February 14 and March 21. To receive full credit, students must attend two of the three field trips. Attending all three will earn 15% extra credit. Note for one of the field trips there will be a \$16 canoe rental fee.

Exam – 20% - Due March 20 – Take-home exam will be distributed at the end of class on March 16 and is due before the beginning of class on March 20. The exam is open-book, students are permitted to use any notes, texts and electronic resources, but may **not** complete the exam together.

Group Project – 30% - Due April 22 – Students will form groups of 3-4. Each group must include at least 1 distance-ed student. Each group will select a spring of interest to them and produce a multimedia

projects. The type multimedia product must be cleared with the instructors, but may include a narrated power point lecture, a film, and interactive website, etc. Students are encouraged to be creative in both the format and content of their projects. Group projects will then be presented to the class in the final week of the semester.

Letter grades will be determined as follows:

A = 100-90%	B+ = 89-86%
B = 85-80%	C+ = 79-76%
C = 75-70%	D+ = 69-66%
D = 65-60%	E <60%

Course Schedule

Week	Monday	Wednesday	Friday
1 5-Jan - 11-Jan	-	Course Overview	Introduction
2 12-Jan - 18-Jan	Hydrologic cycle	Recharge	Artesian springs
3 19-Jan - 25-Jan	MLK (No Class)	Geology of Florida	Karst hydrogeochemistry
4 26-Jan - 1-Feb	Floridan Aquifer	Conduit formation	"Waters Journey"
5 2-Feb - 8-Feb	Rivers in global cycles	Intro to stream ecology	Channel hydraulics
6 9-Feb - 15-Feb	Light	Primary production	Metabolism
7 16-Feb - 22-Feb	Intro to nutrient spiraling	Nitrogen	Phosphorus
8 23-Feb - 1-Mar	Other Elements	Trophic structure	Flora
9 2-Mar - 8-Mar	Break (No Classes)		
10 9-Mar - 15-Mar	Invertebrates and Fish	Larger Fauna	Top-down controls
11 16-Mar - 22-Mar	Endangered/endemic sp.	Human uses	Tourism
12 23-Mar - 29-Mar	Economic value	Stakeholders	Management agencies
13 30-Mar - 5-Apr	Management agencies	Permitting	Withdrawal and flows
14 6-Apr - 12-Apr	Nitrate contamination	Algal proliferation	Special topics
15 13-Apr - 19-Apr	Special topics	Group presentations	Group presentations
16 20-Apr - 26-Apr	Group presentations	Group presentations	Reading day (No class)

*Topics/dates of certain lectures may change slightly based on availability of guest lecturers.

UNIVERSITY OF FLORIDA POLICIES

Academic Honesty: As a result of completing the registration form at the University of Florida, every student has signed the following statement: *“I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.”*

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 the University policies and rules, disciplinary action will be taken as appropriate.

University Support Services: Students experiencing crisis or personal problems are encouraged to utilize the university’s counseling resources. Both the Counseling Center and Student Mental Health provide confidential counseling services at no cost for currently enrolled students.

1. University Counseling Center, 301 Peabody Hall, 392-1575, www.counsel.ufl.edu
2. Student Mental Health, Student Health Care Center, 392-1171, www.hsc.ufl.edu/shcc/smhs.htm
3. Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161
4. Career Resource Center, Reitz Union, 392-1601

Accommodations for Students with Disabilities: The Dean of Students Office coordinates accommodations for students with disabilities. Dean of Students Office, 202 Peabody Hall, 392-7066, www.dso.ufl.edu