


 FLORIDA ATLANTIC UNIVERSITY	NEW COURSE PROPOSAL Undergraduate Programs		UUPC Approval <u>2/26/24</u> UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department Department of Geosciences College Charles E. Schmidt College of Science <i>(To obtain a course number, contact erudolph@fau.edu)</i>		
Prefix EVR Number 4322	<i>(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)</i> Lab Code	Type of Course <div style="border: 1px solid red; padding: 2px;">Lecture</div>	Course Title Introduction to Coastal Freshwater Resources
Credits <i>(See Definition of a Credit Hour)</i> 3	Grading <i>(Select One Option)</i> Regular <input checked="" type="radio"/> Sat/UnSat <input type="radio"/>	Course Description <i>(Syllabus must be attached; see Template and Guidelines)</i> In this course, we will explore the intricacies of freshwater resources in coastal areas, examine the effects of natural and human activities on these resources, and delve into the scientific and technological aspects associated with water resource development and conservation. Coastal freshwater systems in Florida, in particular, face numerous challenges such as global warming, sea-level rise, hurricane flooding, draughts, over-pumping, seawater intrusion, and more.	
Effective Date <i>(TERM & YEAR)</i> Fall 2024	Prerequisites, with minimum grade* No.		Corequisites
		Registration Controls <i>(Major, College, Level)</i>	
*Default minimum passing grade is D-. Prereqs., Coreqs. & Reg. Controls are enforced for all sections of course			
WAC/Gordon Rule Course <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to proposal. See WAC Guidelines .		Intellectual Foundations Program (General Education) Requirement <i>(Select One Option)</i> None General Education criteria must be indicated in the syllabus and approval attached to the proposal. See Intellectual Foundations Guidelines .	
Minimum qualifications to teach course Masters degree (with 18 credit hours of relevant coursework).			
Faculty Contact/Email/Phone xiaolangzhang@fau.edu		List/Attach comments from departments affected by new course	
Approved by Department Chair  College Curriculum Chair  College Dean  UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Maaroff</u> UFS President _____ Provost _____		Date 1/31/24 2/15/24 <u>2/16/24</u> <u>2/26/24</u> <u>2/26/24</u>	

Email this form and syllabus to mianning@fau.edu seven business days before the UUPC meeting.



EVR 4322
Intro to Coastal Freshwater Resources
SE413, Monday, 2:00 – 4:50 pm
3 credits
Fall 2024

Dr. Xiaolang Zhang
Office hours: Monday, 9:00 – 11:00 am (by appointment)

Email: xiaolangzhang@fau.edu

Course Description

In this course, we will explore the intricacies of freshwater resources in coastal areas, examine the effects of natural and human activities on these resources, and delve into the scientific and technological aspects associated with water resource development and conservation. Coastal freshwater systems in Florida, in particular, face numerous challenges such as global warming, sea-level rise, hurricane flooding, draughts, over-pumping, seawater intrusion, and more. By enrolling in this course, you will gain valuable insights into the freshwater resources found in Florida and other coastal regions, understand the dominant factors, and enhance your understanding of this critical issue.

Course Objectives

To explore the freshwater resources in coastal areas, we need to:

- Understand water cycle and ocean-groundwater dynamics in the coastal areas.
- Understand the interactions between groundwater and surface water.
- Understand how storm surge, droughts, floods, and climate change affect water resources.
- Understand coastal water pollution and seawater intrusion.

Canvas

This course uses Canvas (<https://canvas.fau.edu>) as a course management system where you will find the course syllabus, announcements, grades, and other course information.

Recommended Text and Materials

Jiao, J., & Post, V. (2019). Coastal hydrogeology. Cambridge University Press.

Course Prerequisites: *none*

Course Co-requisites: *none*

Course Delivery Mode

This is an in-person course in SE413. The course is taught in an active learning format. Time spent in class is centered around reading, group discussions, and seminars.

TECHNOLOGY AND COMPUTER REQUIREMENTS

Computer Requirement - Basic computer specifications for Canvas [Link to Specifications](#)

Operating System

- A computer that can run Mac OSX or Win 7.0 or higher.

Peripherals

- A backup option should be available to minimize the loss of work. This can be an external hard drive, a USB drive, cloud storage, or your folder on the FAU servers.

Software

- Once logged in to Canvas make sure your Internet browser is compatible.

Technical Support

If a problem occurs, it is essential you take immediate action to document the issue so your instructor can verify and take appropriate action to resolve the problem. Please take the following steps when a problem occurs:

****Most issues in Canvas can be resolved by clicking on the “Help” tab on the menu bar. ****

By clicking the “Help” tab you will be able to:

- Report a Problem
- Search Canvas Guides

1. Complete a Help Desk ticket [Link to Help Desk](#). Make sure you complete the form entirely and give a full description of your problem so the Help Desk staff will have the pertinent information in order to assist you properly. This includes:
 - a. Select “Canvas (Student)” for the Ticket Type.
 - b. Input the Course ID.
 - c. In the Summary/Additional Details section, include your operating system, Internet browser, and Internet service provider (ISP).
 - d. Attach the Print Screen file, if available.
2. If you do not hear back from the Help Desk within a timely manner (48 hours), it is your responsibility to follow up with the appropriate person until a resolution is obtained.
3. Once you have submitted a Help Desk Ticket, inform your instructor. Include all pertinent information of the incident (3b-d above). Keep your instructor informed of the status.

COURSE ASSESSMENTS, ASSIGNMENTS, GRADING POLICY, AND COURSE POLICIES

Course Structure

The course is taught in an active learning format. Students will work in groups to discuss the assigned readings. Students should come to class prepared with 2-3 discussion questions (per reading) and take notes on the discussion. Groups will be responsible for presenting a summary of the group discussion to the class before the end of the meeting period (2-4:50 pm).

Course Evaluation

Course performance (or grades) for this course will be determined based on 1) discussion questions and notes (individual); 2) summary of discussion (group); 3) a technical report (individual).

Discussion questions and group participation (240 points): During weeks with assigned reading, 2-3 discussion questions per reading are required and will be used to navigate the small group breakout discussions. Questions should be geared towards generating appropriate and thoughtful discussion of content and application. Notes should be taken during the discussion and submitted at the end of class. Active group participation will also be assessed as part of this grade. 20 points x 12 weeks = 240 points

Summary of group discussion (240 points): A summary of the group discussion will be presented to the class after the breakout group discussions. The summary should include important concepts discussed and/or questions for discussion with the entire class (e.g., was there something that the group still doesn't understand or found in need of further discussion?). This is a chance to reflect on what was gained from the different group discussions. (Informal) presentations can be provided by a representative member of the group or by all members of the group. It is highly encouraged that everyone presents at least once. 20 points x 12 weeks = 240 points.

Technical Report (520 points): A technical report consolidating data and comparing the three different coastal environments analyzed will be due at the end of the semester. The technical report should include the following sections: Introduction, Study Area, Methods, Results, Discussion, and Conclusion/Summary (with references, figures, and tables as applicable). Students may use the assigned reading materials and/or other peer-reviewed journal articles, technical reports, and "grey" literature. More details on report requirements are provided in a separate document posted to Canvas.

Assignments

All assignments are due on time. No late assignments will be accepted. Only missed assignments accompanied by documentation for an excused absence will be considered for make-up.

Examinations

No exams will be administered in this course.

<u>Assessment</u>	<u>Points</u>	<u>Percent</u>
Discussion	240 points	24%
Summary	240 points	24%
Technical report	520 points	52%
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TOTAL	1000 points	100%

Grading

Letter grades will be assigned based on total points as follows:

940-1000 : A	900-939 : A-	
870-899 : B ⁺	840-869 : B	800-839 : B-
770-799 : C ⁺	740-769 : C	700-739 : C-
670-699 : D ⁺	640-669 : D	600-639 : D-
< 600 : F		

No individual extra credit will be given.

Grades will be posted to Canvas. You should also keep a record of your own grades earned in this course. Incomplete grades will be given only when a student is unable to complete the course within the semester due to unforeseen circumstances, with a considerable impact on the student's life, and beyond the student's control. An incomplete or "I" grade shall ONLY be given for the reasons listed and under the conditions specified in the FAU course catalog (<http://www.fau.edu/academic/registrar/catalog/academics.php>).

NOTE: No make-up assignments, examinations or grade disputes will be considered after the last day of classes specified by FAU. The only exception to this will be the use of "Reading Days" in the case of emergencies or approved documentation for missing the final exam in the case of an emergency.

Code of Academic Integrity Policy Statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university's mission to provide a high-quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

Attendance

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in university approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a university-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Classroom Etiquette/Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as “... *activities which interfere with the educational mission within classroom.*” Students who behave in the face-to-face and/or virtual classroom such that the educational experiences of other students and/or the instructor’s course objectives are disrupted are subject to disciplinary action. Such behavior impedes students’ ability to learn or an instructor’s ability to teach. Disruptive behavior may include but is not limited to: non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor’s expectations for classroom conduct.

For more information, please see the FAU Office of Student Conduct: [Link to Student Conduct Policy](#)

COMMUNICATION POLICY

Correspondence Policy:

- For more efficient email correspondences, please include your course number in the subject line of all email correspondences ([GLY6934](#))
- For questions regarding the course schedule, grading, expectations, etc., first review the [syllabus](#) for the requested information.
 - FAU student privacy policy prohibits discussion of individual grades via email; a virtual office visit is required.
- Please use your FAU account when emailing; otherwise, an unrecognizable email account may be deemed junk or spam (and not read).
- **Under State of Florida law, all e-mails to or from FAU are public records. Do not say anything in an e-mail you would not want to see in a newspaper, etc.**

Instructor’s Plan for Classroom Response Time & Feedback

- Email Policy: Except for Saturdays, Sundays, and holidays, instructor typically, will respond to messages within 48 hours.
- Assignment Feedback Policy: Feedback will be provided on submitted assignments within one week of the submission date. Some assignments may require a longer review period, which will be communicated to students by the instructor.
- Course-Related Questions: Except Saturdays, Sundays, and holidays, questions will, generally, be answered by instructors within 48 hours.

SELECTED UNIVERSITY AND COLLEGE POLICIES

Disability Policy Statement

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU’s campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

Note on course credit and expected workload

FAU policy grants one semester hour of credit for every hour of (weekly) meeting time for *lecture* courses. As a general rule, students are expected to spend two hours per credit working outside of class. Work outside of this class will consist of class preparation, supplemental reading, group project work, writing assignments, field trips, studying for and taking exams, and completion of other activities assigned by the instructor.

Drops/Withdrawals

Students are responsible for completing the process of dropping or withdrawing from a course. Please click on the following link for more information on dropping and/or withdrawing from a course. [Link to FAU Registrar Office](#)

COURSE SCHEDULE

A tentative course schedule is provided. The instructor reserves the right to make changes in the class and course schedule during the semester as necessary for the smooth functioning of the class. You are strongly encouraged to check Canvas frequently for the most current course schedule.
In-class schedule: 2:00 to 4:50 pm

Week	Date	Topic	Homework
1	21-Aug	Course Introduction	Review syllabus
2	28-Aug	The Water Cycle & Water Budgets	• Reading • Lecture
3	4-Sep	<i>Labor Day, no class</i>	• Reading • Lecture
4	11-Sep	Climate and weather	• Reading • Lecture
5	18-Sep	Floods	• Reading • Lecture
6	25-Sep	Droughts	• Reading • Lecture
7	2-Oct	Coastal Surface Water	• Reading • Lecture
8	9-Oct	Ground Water – Introduction	• Reading • Lecture
9	16-Oct	Coastal Groundwater	• Reading • Lecture
10	23-Oct	Interactions Between Groundwater and Surface Water	• Reading • Lecture
11	30-Oct	Water Wells and Pumping Impacts	• Reading • Lecture
12	06-Nov	Seawater Intrusion	• Reading • Lecture
13	13-Nov	Introduction to Water Pollution	• Reading • Lecture
14	20-Nov	Issues in Water Pollution – Nutrients	• Reading • Lecture
15	27-Nov	<i>Technical report (no final)</i>	Report due