



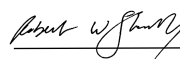
 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Graduate Programs		UGPC Approval _____ UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner _____ Catalog _____
	Department College Science		
Current Course Prefix and Number EVR6931		Current Course Title Paleoenvironmental Reconstruction	
Syllabus must be attached for ANY changes to current course details. See Template . Please consult and list departments that may be affected by the changes; attach documentation.			
Change title to: Change prefix From: _____ To: _____ Change course number From: _____ To: _____ Change credits* From: _____ To: _____ Change grading From: _____ To: _____ Academic Service Learning (ASL) ** Add <input type="checkbox"/> Remove <input type="checkbox"/>		Change description to: Change prerequisites/minimum grades to: Change corequisites to: Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade.	
Effective Term/Year for Changes: Spring 2025		Terminate course? Effective Term/Year for Termination:	
Faculty Contact/Email/Phone Erik Johanson - ejohanson@fau.edu / 561-297-4153			
Approved by Department Chair  College Curriculum Chair _____ College Dean  UGPC Chair  UGC Chair  Graduate College Dean  UFS President _____ Provost _____		Date 4/29/24 _____ 11/05/2024 11/05/2024 11/06/2024 _____ _____	

Email this form and syllabus to UGPC@fau.edu 10 days before the UGPC meeting.

~~Paleoenvironmental Reconstruction~~ Records of Environmental Change

Graduate Seminar

Monday 2:00 – 4:50 PM *

Room: SE 413

EVR 6931

3 credit hours

Instructor Contact Information

Dr. Erik N. Johanson

ejohanson@fau.edu | 561-297-4153

Office: Science Building, Room 473

Office Hours: M 12:00–2:00pm

Course Objective

This course broadly examines environmental change research with a focus on **the methodology of reconstructing environmental conditions and climate change from the recent past to today. We explore a series of environmental records from microplastics to pollen and learn their broad applications.** ~~reconstructing environmental conditions and climate change across the recent past. We will also consider anthropogenic impacts related to changes in environments, fire histories, and climate stress over time. Class discussions will focus on familiarizing students with a variety of environmental proxies and their application in published research. We will introduce key concepts and methodologies associated with reconstructing environmental conditions and developing environmental baselines as relevant to management and restoration efforts.~~

Semester schedule, syllabus, readings, and assignments are posted on Canvas (canvas.fau.edu).

There is no text for this class. Readings to be uploaded throughout the semester. Check Canvas often!



Format

The course will be taught as a seminar. Classes will typically consist of abstract summaries and reading questions for students to submit before class time. During the assigned class period, a student-led discussion of the assigned readings occurs with set discussion leaders changing each week. The assignments also include a Midterm Project and an end-of-term Semester Project that includes a poster component.

Readings

This is a reading-focused seminar with round table discussions in-class. Expect 4–6 readings per week posted at least a week in advance on Canvas.

Prerequisites & Degree Requirements

This course assumes no prior background. Graduate students from any related discipline are encouraged to register. Advanced undergraduate students may register with permission from the professor. This course is thematically connected with Paleoenvironments and People (EVR 6417).

Grade Breakdown

A: 93-100

A-: 90-92

B+: 87-89

B: 83-86

B-: 80-82

C+: 77-79

C: 73-76

C-: 70-72

D: 60-69

No extra credit is accepted in this course.

Course Evaluation

Seminar Leadership	20%
Project - Paper & Evaluations	40%
Midterm Activity	20%
Participation & Abstracts	20%

Seminar Leading (20%)

Seminar leadership will be structured as students leading discussion for that module's articles, which are organized topically. Each student will be responsible for leading *at least* once during the semester, but most likely twice. All students are expected to read closely all readings for every class meeting, but the student(s) charged with leading a given week's seminar is expected to do whatever additional work necessary to present that week's ideas in their proper context with appropriate comments and questions. All students are expected to help steer the conversation and share interesting thoughts.

Seminar discussions should, in general, follow this format: introduce the main author(s) with a short biography, then very briefly setup or review the content and concepts of the reading, followed by posing questions to your classmates to draw out the interesting aspects and key finding highlights or limitations of that research. Connecting an article to larger research themes, current issues, or prior assigned articles is also fine. The discussion leaders should work on developing questions to enhance and promote conversation and they are expected to steer the discussion appropriately for their articles.

Seminar leaders will meet outside of class ahead of the upcoming class time to develop a strategy for the discussion of the articles for their assigned module. Seminar leaders should prepare 4-5 leading questions for their assigned leadership article to include with their abstract summaries. These are due prior to the start of the scheduled class. Discussion leaders are encouraged to use their submitted questions during our in-class seminar but should also be prepared to ask new questions as the conversation flows. Classmates may jump in and ask their own questions, so be prepared to answer when needed and add your own interesting thoughts to the conversation. The seminar conversation is encouraged to be dynamic, but with the discussion leader guiding the conversation for their assigned article.

See my discussion advice section at the end of the syllabus!

Semester Project (40% = Poster Presentation 35% & Peer-Evaluations 5%)

Your end-of-the-term project is a narrated digital poster posted for the class to view on Canvas and a confidential peer-evaluation assignment. Students are assigned a region during the semester. You'll then research that region as related to its environmental and climate histories. After studying the literature extensively for a variety of environmental proxies, you should provide background for your region, a synthesis of recent environmental research including details on proxies used, critiques of research in that region, a focus on environmental change issues, and discussion on how people have altered their environment and have been affected by change over time and today.

Posters should be thoughtfully organized to convey your researched findings with other classmates not familiar with the region. Your poster should use PowerPoint since there is a narrated portion and it should be a single large format poster with high resolution. Alternatively, you can produce a digital poster with several slides if this is absolutely needed, but remember this is a digital poster and not a presentation. No prior poster making experience is needed to do well as there are many guides for creating research posters. Figures and/or brief tables are needed in the poster, but sufficient text—both in paragraph and bullet format—should be present. In-text citations are required along with a reference section. Presenting research in a poster format is a valuable skill and you can think of this project as training for that.

To complete the poster presentation, you'll record your narration over your electronic poster. Within this module on Canvas, guides are available to instruct students how to record narration within PowerPoint to create a PowerPoint show. The narration of your project is critical to supplement your poster. Approach recording your narration as if you are standing next to your poster at an academic conference and someone approaches you asking for a quick explanation of your work. Target 5 minutes (4–6-minute range) and ensure that you introduce your researched region, provide background, summarize the extant research and the critical proxies for those interpretations, and highlight past and present environmental change issues. The narration should complement your poster, so be sure to add to what is on your poster rather than reading it verbatim (not encouraged). Remember, your fellow students will view and confidentially evaluate these presentations digitally. To complete the required peer-evaluations, you'll complete the provided peer-evaluation template for all posted presentations by the deadline and submit that form electronically through Canvas.

Midterm Data Project (20%)

You will gain the opportunity to analyze and interpret a sample dataset provided to you and produce a detailed report. Note that one class period is assigned to this activity during the middle of the semester since this activity is primarily completed outside of class time. The midterm module will open in advance of the middle of the semester, and it will include all data, instructions, and software needed to complete the prompt. You'll have considerable time to complete this activity but start early to ensure that you have no issues accessing the data or software. Due electronically on Canvas.

Seminar & Discussion Board Participation (20%)

This grade is based on (1) *attendance*, (2) *engagement*, and (3) *weekly discussion board responses*. Outstanding attendance and engagement are expected. Given that this class meets only once per week, significant learning is only possible if you attend regularly and engage actively with the professor and class. Consistent attendance and active engagement also indicate that you care about the course, which is a factor that matters for evaluating borderline grades at the end of the semester. Engagement further implies that you read all the required readings and supported the other students leading class discussion. Be prepared to say something valuable each week and put significant effort into responding to the discussion board questions!

Weekly abstract summaries are one paragraph, personalized reviews of each of the week's readings and 2-3 questions that you can use during the seminar discussion—discussion leaders should steer the conversations, but other students may jump-in and pose questions as well. These abstracts relate the student's understanding of the main points of the readings, and any associated questions or criticisms that the student may have. Completing your abstracts will improve your in-class performance. It is strongly recommended that you bring a printout of your abstracts with you to class with additional comments, notes, and ideas to further stimulate your contribution to the seminar discussion.

A good general outline for the abstracts is as follows:

1. What is the thesis of the individual article?
2. How does the author(s) argue the thesis and what notable methods or theories are used?
3. What are your positive reactions to the individual reading (if any)?
4. What are your negative reactions to the individual reading (if any)?

Discussion Leadership & Participation Advice

It is challenging to lead discussion and actively participate in conversations in a seminar course. It is something that many of us struggle with, especially when starting graduate school. I'd like to offer you some advice on leading discussion and participating since it is a portion of your course grade:

- 1) Writing out "talking points" or interesting observations about each article ahead of time can make it easier to speak up and share your thoughts. Discussions often flow quickly, so being able to reference some of your ideas that you prepared earlier can help while also giving you confidence in speaking about something you've had the chance to calmly think through.
- 2) While serving as a discussion leader, please ensure that you have numerous classroom questions prepared and easily accessible for each article. You can have some very specific questions about a method, etc., but try to also have larger questions that can prompt more conversation. Connecting topics back to previous articles can be interesting at times. There are many strategies, but having prepared questions is critical to doing well.
- 3) It is also nice to introduce an article with some general thoughts about it before asking one of your prepared questions. This should avoid being too long and covering all of the interesting talking points, but it can help refresh the memories of other students on some of the topics of the article.
- 4) The discussion leaders should discuss the articles ahead of time with each other outside of class time. I encourage both discussion leaders to be prepared with some questions and comments for all articles, rather than dividing them and only speaking/helping during some articles. There should be a flow between the co-leaders, and you should expect assistance from each other when needed. Differing perspectives are welcome!

My Goal as a Teacher

My goal is to make this course as enjoyable and beneficial to you as possible. You will leave this course with useful knowledge that I hope will provide you with a new outlook on the world around you. I am here to assist and support you through the learning process. When you are away from campus, do not hesitate to e-mail any questions you may have, but allow for my response within 24 hours (sometimes longer). If you have any questions about anything discussed in class, please ask me during or after class, or email to setup a meeting in my office.

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/.

Academic Integrity (Honor Code 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 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.

Scholastic dishonesty includes, among other things: plagiarism (which includes copying and pasting written material from the internet), copying other's work during a test, and using notes during a test. The instructor reserves the right to use the Turn-it-in service to check all written work for plagiarism. Any test or written assignment for which you are caught cheating will be marked as a zero grade, and the incident will be reported in accordance with Honor Code regulations.

CAPS

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>

Classroom Etiquette

University policy on the use of electronic devices states: "In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions." The only exception will be determined and announced by the instructor for special purposes, as indicated.

Civility Statement

Civility is genuine respect and regard for others: politeness, consideration, tact, good manners, graciousness, cordiality, affability, amiability and courteousness. Civility enhances academic freedom and integrity, and is a prerequisite to the free exchange of ideas and knowledge in the learning community. Our community consists of students, faculty, staff, alumni, and campus visitors. Community members affect each other's well-being and have a shared interest in creating and sustaining an environment where all community members and their points of view are valued and respected.

Attendance Policy Statement

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.

Student's Responsibility	Instructor's Responsibility
<ul style="list-style-type: none"> • Be prepared for all classes 	<ul style="list-style-type: none"> • Be prepared for all class
<ul style="list-style-type: none"> • Be respectful of others 	<ul style="list-style-type: none"> • Be respectful of the students
<ul style="list-style-type: none"> • Actively contribute to the learning activities in class 	<ul style="list-style-type: none"> • Create and facilitate meaningful learning activities
<ul style="list-style-type: none"> • Abide by the Honor Code 	<ul style="list-style-type: none"> • Evaluate all fairly and equally

THE INSTRUCTOR RESERVES THE RIGHT TO REVISE, ALTER AND/OR AMEND THIS SYLLABUS, AS NECESSARY. STUDENTS WILL BE NOTIFIED IN CLASS, CANVAS, AND/OR BY EMAIL OF ANY SUCH REVISIONS, ALTERATIONS AND/OR AMENDMENTS.

EVR 6931 – Paleoenvironmental Reconstruction – Schedule

Module	Date	Content/Topic	Discussion Leaders
0	1/8	Intro, Discussion Leaders, and Syllabus	Johanson
-	1/15	<i>FAU Closed (MLK Day)</i>	
1	1/22	Environmental Proxies Introduced	Johanson
2	1/29	Sediment Proxies I (<i>Pollen microfossils, Micro- and Macro- Charcoal, Diatoms, Chironomids</i>)	1. _____ 2. _____
3	2/05	Sediment Proxies II (<i>XRD, Elemental Contamination, Storm Events</i>)	1. _____ 2. _____
4	2/12	Stable Isotopes, Biomarkers, and Peat Humification	1. _____ 2. _____
5	2/19	Plastics and Modern Markers	1. _____ 2. _____
6	2/26	Dendrochronology and Hazards <u>Midterm Assignment Distributed</u>	1. _____ 2. _____
-	3/04	<i>FAU Closed (Spring Break!)</i>	
7	3/11	Dendroclimatology and Speleothems	1. _____ 2. _____
8	3/18	<u>No Class</u> - Midterm Project Work Period	

		<u>Due: Midterm Project on Friday by midnight</u>	
9	3/25	Glaciers and Ice Sheets	1. _____ 2. _____
10	4/01	Marine Sediments and Coral	1. _____ 2. _____
11	4/08	Environmental Baselines Over Time	1. _____ 2. _____
12	4/15	<u>No Class – Semester Project Work Period</u>	
12	4/22	<u>Due: Poster Presentations</u>	
12	4/24	<u>Due: Peer Evaluations</u> (Remember, no Final Exam)	












cc-evr6931-paleo-reconstruction

Final Audit Report

2024-11-06

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