

# **Geography 2351: Geographical Sciences and Sustainability**

## **Instructors:**

Jawata Afnan Saba: <a href="mailto:jsaba@ufl.edu">jsaba@ufl.edu</a>
<i>Office hours: Thursday: 1-3 pm</i>
<i>Class meeting time: Thursday: periods 3-5 (9:35am-12:35pm)</i>
<i>You can always come speak to me after class!</i>

## **1 Course Overview & Objectives**

**Thursday: Periods 3-5 (9:35am-12:35pm)**

**Room: Weil Hall 0238**

**Overview:** Examines the most critical environmental issues facing the world today; emphasizes the sustainability of both human and physical systems in the 21st century utilizing cutting edge geographic technologies: spatial analysis, GIS and satellite imagery.

Prereq: any Biological Sciences or Physical Sciences general education course.

**Objectives:** The most critical issue facing the world today is the sustainability of both human and physical systems in the 21st century. The importance of geographical and sustainability sciences is rooted in the complexity of social and environmental problems. We live on a dynamic planet, one that is constantly changing in response to human and natural processes that are highly interconnected. Geographers study the interactions of people and their environment to better understand these intricately related processes. This course will address the human and natural systems and how interactions between these systems shape the world we live in. Cutting edge technologies, such as geographic information systems (GIS), satellite imagery, and Global Positioning System (GPS), are used to help inform decision making at geographic scales and to analyze and visualize geographic processes.

### **Learning outcomes**

- Students will be able to identify how sustainability, both of societies and the environment, is one of the most significant issues in the world today.
- Students will be able to describe the sources experts use to explore the relationship between society and sustainability, including geographic methods, techniques and theories.
- Students will demonstrate an understanding of concepts and approaches of sustainability of societies on different scales, examining local, regional and worldwide issues.
- Students will demonstrate an understanding of the dimensions sustainability, including cultural, environmental, economic, and political systems

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- Students will communicate major ideas and issues on society and sustainability through class activities, an individual project, and weekly discussions.

## **2 Instructors**

**Jawata Afnan Saba** ([jsaba@ufl.edu](mailto:jsaba@ufl.edu))

Saba is a PhD student in Geography with a B.S. in Urban Planning and an M.Sc. in Geography (specialization in GIScience). Her academic background includes natural hazards, vulnerability, uncertainty, resilience, hazard risk perception, and geospatial analysis. Her current research is focused on calculating uncertainty of vulnerability index.

## **3 Office Hours**

Office hours will be held on Thursday. Please note that Thursday office hours will be held in the Zoom conference tool on Canvas. If you need to meet outside the office hours you can take an appointment.

## **4 Emailing**

I do my best to answer e-mail questions promptly (by the next school day ~24 hours). If you do not receive a response within 36 hours, please follow up with me because I may not have received the e-mail for various reasons.

Please note that any inquiries about your grade can only be done through the Canvas messaging system, as per UF's guidelines.

## **5 Texts**

The required textbook is listed below, along with a link to get a free copy. In addition, readings and other items will be posted in canvas as needed in advance of weekly activities and assignments.

TITLE: Global Change and the Earth System: A Planet under Pressure

Series: Global Change - The IGBP Series

AUTHORS: Steffen, W., Sanderson, R.A., Tyson, P.D., Jäger, J., Matson, P.A., Moore III, B., Oldfield, F., Richardson, K., Schellnhuber, H.-J., Turner, B.L., Wasson, R.J.

1st ed. 2004. 2nd printing, 2004, XII, 332 p. 258 illus., 145 in color. With CDROM.

Hardcover, ISBN 978-3-540-26594-8



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Available free online:

<http://www.igbp.net/publications/igbpbookseries/igbpbookseries/globalchangeandtheearthsystem2004.5.1b8ae20512db692f2a680007462.html>

## 6 Assessments

**Current Event (5%)** – Each student will sign up for a day where they will briefly present a current event to the class. This current event should be related to geography and sustainability. This could be a new scientific study or discovery.

<https://docs.google.com/spreadsheets/d/1o7VIHpPNZiQMuVgI-hNxXgIq91Bgp340Wi4fqPOHJmY/edit#gid=0>

**Academic Article Presentation & Discussion (15%)** – Each student will select a peer-reviewed journal article and make a 10 minutes presentation summarizing the article to the class. The article should be chosen no less than 1 week in advance to allow classmates enough time to read the article. Every student is responsible for reading the articles selected by their peers and will be required to ask questions to presenters throughout the semester.

[https://docs.google.com/spreadsheets/d/1q5sTDEwSCKs8ZB4dj8OGkxmujPNXZX9V\\_YTMMydmqe0/edit#gid=0](https://docs.google.com/spreadsheets/d/1q5sTDEwSCKs8ZB4dj8OGkxmujPNXZX9V_YTMMydmqe0/edit#gid=0)

**In-class Activities/Participation (45%)**– You will have various class activities throughout the semester that will be completed either in groups or as individuals. Activities not finished in class will be assigned as homework.

**Final project (15%)** - TBD

**Final exam (15%)** – You will have a cumulative final exam. The final exam will be held on exam days.

**Attendance (5%)** – Attendance will be required and taken at random.

## 7 Grading

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
100-93	92-90	89-87	86-83	82-80	79-77	76-70	69-67	66-63	62-60	59-57	<57

**It is your responsibility to know how well you are doing in the class.**

There will be a Grades tab in Canvas for following your progress. Please use it to keep track of your score, and contact me if there is a discrepancy. If you are not satisfied with the score you receive on an exam or quiz or feel an error has been made, you will be permitted **two weeks** from the time

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the score was posted for a review of the assessment (exception: Part II exam will have less than a week to review as it is near the end of term). After this time the score will be entered as a permanent grade.

Please see the UF catalog grading policies for current guidelines not discussion here:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

### **8 Late Policy**

Late assignments will only be accepted 48hrs after they are due (including weekends) and there will be a 20% penalty.

If you cannot complete an assignment or an exam because of an excused reason (illness, family emergency, etc.), please contact me as soon as possible. In order for the assignment to be excused, **official documentation** must be provided to either instructor. Instructions on how to send the documents will be handled at the time I am informed of the incident.

### **9 Academic Honesty**

[Accountability to Academic Honesty](#)

You are all bound by the student academic 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 my honor, I have neither given nor received unauthorized aid in doing this assignment."*

In the Assessments, Canvas will shuffle the order of the questions and the order of the possible answers, generating a nearly unique assessment per student. **Plagiarism or cheating of any variety on any assignment will not be tolerated.** If a student is suspected of cheating and there is sufficient evidence in support of the allegation, the student will be reported to the appropriate student body, according to the University's Student Conduct and Conflict Resolution system.

### **11 Special Accommodations**

Students requesting disability-related academic accommodations must first register with the **Disability Resource Center**. <http://www.dso.ufl.edu/drc/>

- The Disability Resource Center will provide documentation to the student—each student requesting special accommodations must provide this documentation to the Instructor. We do not automatically receive this information, so the student is responsible with providing the DSO request to the Instructor.
- We will honor all requests. Please contact an instructor by e-mail to make appointment so

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that we can go through these accommodations and sign the form.

### **12 Student Support Services**

As a student in a distance learning course or program you have access to the same student support services that on campus students have. For course content questions contact your instructor(s).

- For any technical issues you encounter with your course please contact the UF computing Help Desk at 342-392-4357. For Help Desk hours visit: <http://helpdesk.ufl.edu/>.
- For a list of additional student support services links and information please visit: <http://www.distance.ufl.edu/student-services>
- In some special circumstances (when documentation is not available, for instance), we may ask you to contact the Dean of Students Office: **The Dean of Students Office**: 202 Peabody Hall, PO Box 114075, Phone: (352) 392-1261
- The Dean of Students is a resource, available to all students, for when special circumstances arise that disrupts students' abilities to maintain their academic standing. We encourage students to use this resource if necessary.
- Useful Links:
  - [Student Counseling by College](#)
  - [Student Right and Responsibilities](#)

## **Geography 2351: Geographical Sciences and Sustainability**

Tentative Schedule (subject to change as instructor deems necessary):

Week	Date	Topic
1	Thursday, August 24, 2023	Introduction to class What is Geography (readings in Canvas module)
2	Thursday, August 31, 2023	Science & the scientific method (readings in Canvas module) Cont. Scientific method
3	Thursday, September 7, 2023	Geographic tools of inquiry GIS Activity
4	Thursday, September 14, 2023	An Integrated Earth System (pages 1-9) Class Activity
5	Thursday, September 21, 2023	Planetary Machinery (pages 11-73) Student Presentations
6	Thursday, September 28, 2023	Cont. Planetary Machinery (textbook pages 11-73) Student Presentations
7	Thursday, October 5, 2023	The Anthropocene Era (textbook pages 81-135) Student Presentations
8	Thursday, October 12, 2023	Cont. The Anthropocene Era (textbook pages 81-135) Student Presentations – Deforestation and biodiversity
9	Thursday, October 19, 2023	Reverberations of Change (textbook pages 143-196) Student Presentations
10	Thursday, October 26, 2023	Living with Global Change (textbook pages 203-249) Student Presentations
11	Thursday, November 2, 2023	Living with Global Change (textbook pages 203-249) Student Presentations
12	Thursday, November 9, 2023	Towards Earth System Science and Global Sustainability (textbook pages 255-299)
13	Thursday, November 16, 2023	Guest Speaker on Economics & Environmental Sustainability Sustainability in economic systems and GIS for environmental justice
14	Thursday, November 23, 2023	NO CLASS - Thanksgiving Break NO CLASS - Thanksgiving Break
15	Thursday, November 30, 2023	What are the SDG and IPCC Exam Review
16	Thursday, December 7, 2023	Final Exam