

GEOGRAPHY 4/585: Remote Sensing I

Fall 2021

SYLLABUS

Instructors:

Professor: Johnny Ryan (he/him/his) (jryan4@uoregon.edu)

Office: 165 Condon Hall

Office hours: Monday 15:00-17:00 (or by appointment)

GE: Adriana Uscanga Castillo (adrianau@uoregon.edu)

Office: 247 Columbia

Office hours: Monday 10:00-11:00 (or by appointment)

SSIL Liaison: Shelby Weiss (sweiss2@uoregon.edu)

Office: SSIL Labs – Room 460H

Office hours: Monday 13:00-15:30, Tuesday and Thursday 13:00-16:45

Course objectives:

- to understand the principles and concepts of remote sensing
- to understand the advantages and limitations of remote sensing for specific problems
- to gain a foundation in the methods and techniques of remote sensing
- to develop the ability to carry out fundamental methods required in a typical remote sensing project

Weekly schedule:

Lecture: Monday and Wednesday at 9:00-9:50 in 285 LIL

Lab: Wednesday at 10:00-11:50 or 13:00-14:50 in 442 MCK

Grading:

- **Lab assignments (50%):** Turn in assignments on Canvas. Lab assignments are due the day before the start of the next lab (i.e. **Tuesday 11:59 pm**). Late assignments will be penalized 10% per day late. Assignments will not be accepted after 7 days past the submission deadline.
- **Quizzes (20%):** Three quizzes will be given during the quarter (see schedule). Quizzes will be posted on Canvas after the lab (i.e. Wednesday afternoon) and will be due the day before the start of the next lab (i.e. **Tuesday 11:59 pm**).
- **Final (20%):** There will be a final exam at the end of the quarter.
- **Participation (10%):** Half graded by GE and half by the Professor. Credit can be earned through attendance, participation in class discussion, visiting Professor and GE during office hours, and helping other students in labs.

Class website:

- **Canvas:** all lecture slides and quizzes will be posted on the Canvas class site and students will turn in lab assignments (pdfs) and quizzes here.
- All lab worksheets and data will be hosted on the R: \GEOG485_585_8\Class_Data\
Working assignments should be saved on R: \GEOG485_585_8\Student_Data\
Your_Username.

Course materials:

- We will rely mainly on *Principles of Remote Sensing: an Introductory Textbook*. K. Tempfli, G.C. Huurneman, W.H. Bakker, L.L.F. Janssen, et al. Fourth edition which is available here: https://webapps.itc.utwente.nl/librarywww/papers_2009/general/principlesremotesensing.pdf
- Download and save somewhere accessible, it is a large file.

Absences:

We will conduct activities in class which will factor into your *Participation* grade. These activities may include quizzes, group discussion, online question/answer and group activities. There is no make-up of missed class activities.

However, if you know in advance that you will miss a class, a lab, or an examination for academic reasons (i.e. for another class or program), athletic travel, the observance of a religious holy day, or other legitimate reason, you should inform the instructor as far in advance of the absence as possible. The Professor and GE will take that in account for the *Participation* grade.

Classroom behaviour:

Meaningful and constructive dialogue is encouraged in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view. Respect for individual differences and alternative viewpoints will be maintained at all times in this class. One's words and use of language should be temperate and within acceptable bounds of civility and decency. Since every student is entitled to full participation in class without interruption, all students are expected to come to class prepared and on time, and remain for the full class period. All phones or other electronic devices that generate sound must be turned off or to silent mode during class. Disruptive behaviors, including excessive talking, arriving late to class, sleeping, reading newspapers, or extensive use of phones or other unauthorized electronic devices during class is not permitted.

The University Student Conduct Code (available at conduct.uoregon.edu) defines academic misconduct. Students are prohibited from committing or attempting to commit any act that constitutes academic misconduct. By way of example, students should not give or receive (or attempt to give or receive) unauthorized help on assignments or examinations without express permission from the instructor. Students should properly acknowledge and document all sources of information (e.g. quotations, paraphrases, ideas) and use only the sources and resources authorized by the instructor. If there is any question about whether an act constitutes academic misconduct, it is the students' obligation to clarify the question with the instructor before committing or attempting to commit the act.

Accessible Education:

Please let me know within the first two weeks of the term if you need assistance to fully participate in the course. Participation includes access to lectures, web-based information, in-class activities, and exams. The Accessible Education Center (<http://aec.uoregon.edu/>) works with students to provide an instructor notification letter that outlines accommodations and adjustments to class design that will enable better access. Contact the Accessible Education Center for assistance with access or disability-related questions or concerns.

COVID Containment Plan for Classes:

As the University of Oregon returns to in-person instruction, the key to keeping our community healthy and safe involves **prevention**, **containment**, and **support**. Here is information critical to how the UO is responding to COVID-19.

Prevention: To prevent or reduce the spread of COVID-19 in classrooms and on campus, all students and employees:

1. Must to be comply with vaccination policy
2. Must wear face coverings in all indoor spaces on UO campus
3. Complete weekly testing if not fully vaccinated or exempted
4. Wash hands frequently and practice social distancing when possible
5. Complete daily self-checks
6. Stay home/do not come to campus if feeling symptomatic
7. Complete the UO COVID-19 case and contact reporting form if you test positive or have been in close contact with a confirmed or presumptive case.

Containment: If a student in class tests positive for COVID-19, all relevant classes will be notified via an email by the Corona Corps Care Team with instructions for students and staff based on their vaccination status. Specifically:

1. **Vaccinated and Asymptomatic students:** Quarantine not required, but daily self-monitoring before coming on campus is advised; sign up for testing through MAP 3-5 days after exposure if advised you are a contact.
2. **Unvaccinated or partially vaccinated students:** 14-day quarantine advised – do not come to class – and sign up for testing 3-5 days after notification through MAP, if asymptomatic, or through University Health Services (541-346-2770) or your primary care provider, if symptomatic.
3. **Symptomatic students:** stay home (do not come to class/campus), complete the online case and contact form, and contact University Health Services (541-346-2770) or your primary care provide to arrange for immediate COVID-19 testing.

Students identified as a **close contacts** of a positive case will be contacted by the Corona Corps Care Team (541-346-2292).

Support: The following resources are available to you as a student.

- University Health Services or call (541) 346-2770
- University Counseling Center or call (541) 346-3277 or (541) 346-3227 (after hrs.)
- MAP Covid-19 Testing
- Corona Corps or call (541) 346-2292
- Academic Advising or call (541) 346-3211
- Dean of Students or call (541)-346-3216

Good Classroom Citizenship

- Wear your mask and make sure it fits you well
- Stay home if you're sick
- Get to know your neighbors in class, and let them know if you test positive
- Get tested regularly
- Watch for signs and symptoms with the daily symptom self-check
- Wash your hands frequently or use hand sanitizer

Complete the UO COVID-19 **case and contact reporting form** if you test positive or are a close contact of someone who tests positive.

Inclement Weather:

It is generally expected that class will meet unless the University is officially closed for inclement weather. If it becomes necessary to cancel class while the University remains open, this will be announced on Canvas and by email. Updates on inclement weather and closure are also communicated in other ways described here:

<https://hr.uoregon.edu/about-hr/campus-notifications/inclement-weather/inclement-weather-immediate-updates>

Academic Disruption due to Campus Emergency:

In the event of a campus emergency that disrupts academic activities, course requirements, deadlines, and grading percentages are subject to change. Information about changes in this course will be communicated as soon as possible by email, and on Canvas. If we are not able to meet face-to-face, students should immediately log onto Canvas and read any announcements and/or access alternative assignments. Students are also expected to continue coursework as outlined in this syllabus or other instructions on Canvas. In the event that the instructor of this course has to quarantine, this course may be taught online during that time.

Reporting Obligations:

For information about my reporting obligations as an employee, please see Employee Reporting Obligations on the Office of Investigations and Civil Rights Compliance (OICRC) website. Students experiencing any form of prohibited discrimination or harassment, including sex or gender-based violence, may seek information and resources at safe.uoregon.edu, respect.uoregon.edu, or investigations.uoregon.edu or contact the non-confidential Title IX office/Office of Civil Rights Compliance (541-346-3123), or Dean of Students offices (541-346-3216), or call the 24-7 hotline 541-346-SAFE for help. I am also a mandatory reporter of child abuse. Please find more information at [Mandatory Reporting of Child Abuse and Neglect](#).

Mental Health and Wellness:

Life at college can be very complicated. Students often feel overwhelmed or stressed, experience anxiety or depression, struggle with relationships, or just need help navigating challenges in their life. If you're facing such challenges, you don't need to handle them on your own--there's help and support on campus.

As your instructor if I believe you may need additional support, I will express my concerns, the reasons for them, and refer you to resources that might be helpful. It is not my intention to know the details of what might be bothering you, but simply to let you know I care and that help is available. Getting help is a courageous thing to do—for yourself and those you care about.

University Health Services help students cope with difficult emotions and life stressors. If you need general resources on coping with stress or want to talk with another student who has

been in the same place as you, visit the Duck Nest (located in the EMU on the ground floor) and get help from one of the specially trained Peer Wellness Advocates. Find out more at health.uoregon.edu/ducknest.

University Counseling Services (UCS) has a team of dedicated staff members to support you with your concerns, many of whom can provide identity-based support. All clinical services are free and confidential. Find out more at counseling.uoregon.edu or by calling 541-346-3227 (anytime UCS is closed, the After-Hours Support and Crisis Line is available by calling this same number).

Basic Needs:

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in the course is urged to contact the Dean of Students Office (346-3216, 164 Oregon Hall) for support.

This UO webpage includes resources for food, housing, healthcare, childcare, transportation, technology, finances, and legal support: <https://blogs.uoregon.edu/basicneeds/food/>

Accommodation for Religious Observances:

The university makes reasonable accommodations, upon request, for students who are unable to attend a class for religious obligations or observance reasons, in accordance with the university discrimination policy which says “Any student who, because of religious beliefs, is unable to attend classes on a particular day shall be excused from attendance requirements and from any examination or other assignment on that day. The student shall make up the examination or other assignment missed because of the absence.” To request accommodations for this course for religious observance, visit the Office of the Registrar’s website (<https://registrar.uoregon.edu/calendars/religious-observances>) and complete and submit to the instructor the “Student Religious Accommodation Request” form prior to the end of the second week of the term.