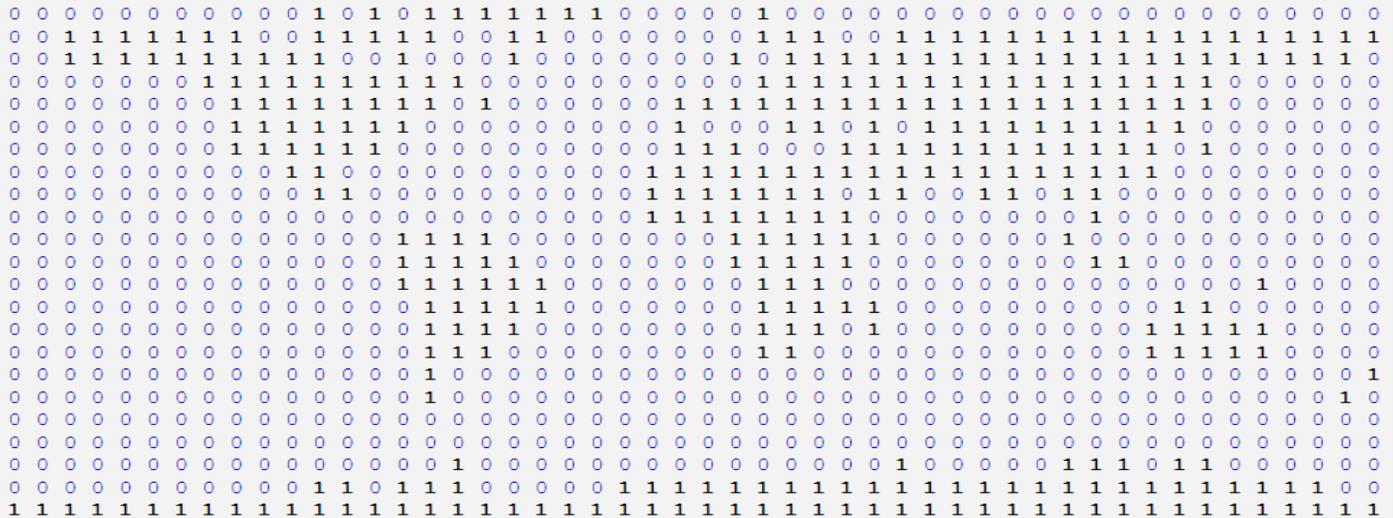


Our digital Earth

ncols 50
nrows 23
xllcorner -180
yllcorner -85
cellsize 7.2
NODATA_value -9999



Geog 181 - Our Digital Earth - Spring 2018

Tuesday and Thursday - 12:00 to 1:20pm in 125 MCK

Instructor: Dr. Nicholas Kohler

Office location: Condon 107E

GEs

Kati Perry - katip@uoregon.edu

Email: nicholas@uoregon.edu

Office hours: TBA

Chantel Saban - csaban@uoregon.edu

We are all located somewhere, and so is everything else in the world..

What does that mean?

How can location, and things about locations, be known and measured?

Why is this important?

This course introduces geographic thinking, spatial analysis and the cutting edge technologies redefining how and what we know about the world. Online mapping and mobile technologies have transformed the way people respond to natural disasters, the way scientists understand earth systems, and the way underserved communities seek justice. Spatial information is embedded in our everyday lives, and has become crucial for many of the services upon which our lives depend.

Lectures and course lab sessions in this class introduce students to the fundamental components of spatial thinking, to the science of computer mapping, and to the applications of geospatial technologies in things such as smartphones, tractors, and flying drones. Understanding where things are, how things are connected into networks and spatial systems, and how these systems interact is vital for day-to-day life in our globalized world. By exploring geospatial approaches to real-world, ongoing problems, students develop skills using spatial technologies and applying analysis approaches that are increasingly in demand in business and science.

This course counts towards a Social Science Group Elective and is required for the Geography Major and the Spatial Data Science and Technology majors.

Skills developed:

Students will collect, analyse, and visualize geospatial data in the course and learn:

- Interpretation of maps and proficiency using qualitative and quantitative data
- Understanding of geospatial data and applications
- Data integration and management
- Geographic analysis and visualization
- Creating online mapping apps, such as Storymaps, using ArcGIS online.

Learning Objectives

Students will learn about geospatial science and the related technology which is transforming the way modern societies operate. In the class students will learn to:

- Understand common methods of spatial analysis
- Integrate various types of data to tell the story of a place or phenomenon
- Develop effective spatial literacy
- Utilize spatial analysis and techniques that can assist people on the ground and in real-time

Logistics

- This course is operated through **canvas.uoregon.edu**. Please ensure that you have access to the course as soon as possible.
- The online text for this course is delivered through **TopHat** (at tophat.com). You should have received an email inviting you to join. If you have not, or if you have registered late for the course, please let the instructor know. The cost of the text includes both the app and the online textbook.
- You will also get access to **ArcGIS Online**. **DO NOT SIGN UP FOR A FREE ACCOUNT ON THE ArcGIS Online website**. You should receive an email from ESRI inviting you to sign up through the UOregon Online Group for your free account. If you haven't received it, please let the instructor know asap.
- **We will often use cell phones or other technology in class!** Although not required, we will occasionally be doing activities that use a smart phone or computer in lecture and lab. These will always be in groups where only one smart phone or other device (remember the computer?) will be needed.

Grading

Attendance and participation in class	10%
Participation in online discussions	10%
Lab grade	20%
Assignments	25%
Midterm	15%
Final	20%
TOTAL	100%

** Reminder: For each day late that you turn in any assignment (in-class, lab, or class assignments) or take an exam, you will have 10% taken off the grade for that assignment or exam unless you provide a university-approved excuse.**