Welcome to OUR DIGITAL EARTH! This course is about you and your place in the map. We will examine how geospatial data are collected and used, how geospatial technologies have transformed the way we think and make decisions, and the important societal issues that result from the proliferation of new technologies. We will discuss the use of online mapping, satellite images, crowd sourcing, and mobile technologies for responding to natural disasters, galvanizing underrepresented communities, and embedding spatial information into our daily activities.

Over the next 10 weeks, you will have an opportunity to learn different geospatial technologies such as web-based mapping software applications that allow you to create custom maps and create websites to communicate your work with the world over the Web. You will be empowered with the necessary skills to:

- create a mapping application for the campus community,
- develop a website that investigates the presence of food deserts in a US city,
- learn about disease outbreaks and geospatial analysis
- tell a GeoStory about something, somewhere.

I hope you enjoy the course!

INSTRUCTOR
Nicholas Perdue | Condon 161 | perdue@uoregon.edu
Office Hours: Monday and Wednesday- 1:00-2:00 in Condon 161

Kuan Wang | Condon 161 | Office Hours:
Labs Tuesday 12-12:50 / 1-1:50 | Condon 206

Joe Bard | Condon 161 | Office Hours:
Labs Tuesday 2-2:250 / 3-3:50 | Condon 206

LECTURES
Monday and Wednesday, 2:00pm – 3:20pm in McKenzie 129

TEXTBOOK

GRADING
Class Participation 10%
Labs 50%
Midterm Exam 20%
Final Exam 20%
EXPECTATIONS

- Submit your assignments on time. Late assignments will be penalized 5% per day. Assignments will not be accepted after 10 days past the submission deadline.
- Your final project will not be accepted after the submission deadline. You will receive a 0% if it is not submitted on the assigned deadline.
- We will not be providing a study guide for exams. It is your responsibility to create your own study guide by combining information from lectures, tutorial sessions and the readings.
- Do not plagiarize your work. Make sure that you give credit where credit is due. Please visit UO’s Plagiarism website for more details: http://library.uoregon.edu/guides/plagiarism/students/index.html

SCHEDULE

WEEK 1 - INTRODUCTION
March 28
Lecture 1: Introduction to Course, Syllabus Overview

March 30th
Lecture 2: New Technologies – Film:
Reading: Chapter 1: Geospatial Data and GPS

WEEK 2 - DATA
April 4th
Lecture 3: Digitalizing Your Earth
Reading: Chapter 2: Where in the World Are You?

April 6th
Lecture 4: Go Find Yourself!
Reading: Chapter 4: Finding Your Location with the Global Positioning System

WEEK 3 - IMAGES

April 11th
Lecture 5: Our Earth From Space
Reading: Chapter 9: Remotely Sensed Images from Above

April 13th
Lecture 6: Image Interpretation
(Read all links as well)

WEEK 4 - ANALYSIS
April 18th
Lecture 7: Analyzing the World
Chapter 5: Working with Digital Spatial Data and GIS & Chapter 7: Using GIS to Make a Map

April 20th
Lecture 8: Guest Lectures: Real-World Geospatial Projects
Reading: No reading, Attendance required!!

WEEK 5 – EVALUATION

April 25th
Lecture 9: Guest Lectures: Real-World Geospatial Projects
MIDTERM REVIEW
Reading: No reading, Attendance required!!

April 27th
MIDTERM

WEEK 6 – MAP DESIGN AND THE GEOWEB

May 2nd
Lecture 10: Map Design Principles
Reading: https://somethingaboutmaps.wordpress.com/ and https://cartastrophe.wordpress.com/

May 4th
Lecture 11: Web Mapping

WEEK 7 – CROWDSOURCING AND BIG DATA

May 9th
Lecture 12: Big Data

May 11th
Lecture 13: Geospatial Crowdsourcing for Emergency Management

WEEK 8 – LOCATION BASED SERVICES
May 16th
Lecture 14: Mobile Mapping and Location Based Services
*Reading:*
*NYT:* “Google’s Road Map to Global Domination” and
*Wired:* “How Mobile and Social Are Creating New User Personas”

May 18th
Lecture 15: Location-Aware Futures
*Film - Next Future Wearable Technology*
*Reading: The Guardian:* “The future will eat itself: digesting the next generation of wearable tech”

WEEK 9 – SOCIAL ISSUES

May 23rd
Lecture 16: The Digital Divide

May 25th
Lecture 14: Privacy, Security, and Politics of Geospatial Technologies
Film: Geospatial technology in the world of security
*Reading: Slate:* “The real problem with Google’s new privacy policy”

WEEK 10 – WRAP UP

May 30th
No Class – Memorial Day

June 1st
Lecture 18: Future Directions
Chapter 15: What’s Next for Geospatial Technology
Final Exam Review Session

FINALS WEEK

June 9th
Final Exam: Thursday, 2:45PM

LABS
Lab 1 • Mapping Your City
Assigned: Thursday, April 3rd
Due: Tuesday, April 15th at 11:59pm

Lab 2 • Assisting Communities in Need
Assigned: Tuesday, April 15th
Due: Friday, April 25th at 11:59pm

Lab 3 • Find the Source of the Outbreak
Assigned: Thursday, May 1st
Due: Friday, May 16th at 11:59pm

Lab 4 • Storytelling with Maps
Assigned: Tuesday, May 20th
Presentations: June 3rd and June 5th
Due: Thursday, June 5th at 11:59pm