GEOG 181
OUR DIGITAL EARTH

FALL 2012 SYLLABUS

INSTRUCTOR

Professor Chris Bone | Condon 107D | cbone@uoregon.edu
Office Hour: Mondays 10:30am–11:30am

TEACHING ASSISTANT

Nathan Mosurinjohn | Condon 202 | mosurinj@uoregon.edu
Office Hour: Thursday 2:00pm – 3:00pm

LECTURES

Monday and Wednesdays, 8:30am – 9:50am in McKenzie Hall 240C

BACKGROUND

Welcome to OUR DIGITAL EARTH! This course introduces you to the role that geospatial data and technologies play in your life. From Google Earth to Facebook to Twitter, 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. 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.

YOUR ROLE

- Attend all lectures and assigned meetings sessions.
- Complete assigned readings before lectures so that you can actively participate in lecture and meeting discussions.
- Complete and submit all assignments by the assigned due dates.
- Visit your instructor or teaching assistant during their designated office hours or email them you have any questions regarding lecture material and assignments, or if you have any concerns regarding the course.
- Inform your instructor well ahead of time (if possible) if you will be absent from the course.
- Help provide a positive and encouraging learning environment in both lectures and meeting sessions. Respect your peers and take pride in your work!

OUR ROLE

- Provide an engaging and exciting learning experience.
- Provide an office hour each week where students can ask questions, share concerns about the course, or simply chat about how the term is progressing.
- Answer questions in a timely manner that allows students to complete assignments in time and adequately prepare for exams.
- Grade and return assignments and exams in a timely manner.
- Help students receive the best grade achievable given the effort and time committed by each student.

OUR GUIDELINES

- 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

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GRADING

TUTORIAL PARTICIPATION	5%
ASSISGNMENTS (5)	30%
FINAL PROJECT	25%
MIDTERM EXAM	15%
FINAL EXAM	25%

COURSE TEXT

Longley, P., M Goodchild, D. Maguire and D. Rhind (2011) Geographic Information Systems and Science. John Wiley and Sons, USA.

LECTURE SCHEDULE

LECTURE 1 – MONDAY, SEPTEMBER 24TH
WELCOME TO OUR DIGITAL EARTH
READING: The Digital Earth: Understanding Our Planet in the 21st Century, by Al Gore at the California Science Center, Los Angeles on January 31st, 1998. Retrieved from: http://isde5.org/al_gore_speech.htm#

LECTURE 2 – MONDAY, 1SEPTEMBER 26TH
GEOENABLED: WHERE DO LOCATIONAL DATA COME FROM?
READING: Geographic Information Systems and Science, Chapter 3: Representing Geography.

LECTURE 3 – WEDNESDAY, OCTOBER 1st
WHERE IS HERE? LOCATING YOURSELF ON THE EARTH
READING: Geographic Information Systems and Science, Chapter 5: Georeferencing.

LECTURE 4 – WEDNESDAY, OCTOBER 3RD
THE GEOSPATIAL REVOLUTION
WATCHING: Geospatial Revolution, Penn State & Public Broadcasting. Available at http://geospatialrevolution.psu.edu/episode1

LECTURE 5 – MONDAY, OCTOBER 8th
THE GEOWEB: BRINGING LOCATIONAL DATA TOGETHER
READING: Geographic Information Systems and Science, Chapter 11: The GeoWeb.

LECTURE 6 – WEDNESDAY, OCTOBER 10th
DESIGNING MAPS ON THE GEOWEB:
READING: Geographic Information Systems and Science, Chapter 12: Cartography and Map Production.

LECTURE 7 – MONDAY, OCTOBER 15th
CITIZEN SCIENCE: VOLUNTEERED GEOGARPHIC INFORMATION
READING: Goodchild (2007) Citizens as sensors: the world of volunteered geography. GeoJournal 69: 211–221.

LECUTRE 8 – WEDNESDAY, OCTOBER 17th
CROWDSOURCING FOR EMERGENCY RESPONSE
READING: Roche, Propeck-Zimmermann and Mericskay (2011) GeoWeb and crisis management: issues and perspectives of volunteered geographic information. GeoJournal DOI: 10.1007/s10708-011-9423-9

LECTURE 9 – MONDAY, OCTOBER 22nd
CHALLENGES TO DEMOCRATIZING THE GEOWEB
READING: Goodchild and Glennon (2010) Crowdsourcing geographic information for disaster response: a research frontier. International Journal of Digital Earth 3(3): 231–241.

LECTURE 10 – WEDNESDAY, OCTOBER 24th
MIDTERM

LECTURE 11 – MONDAY, OCTOBER 29th
YOUR DIGITAL EARTH: YOUR FIRST GEOWEB PROJECT
READING: Alexander and Levine (2008) Web 2.0 storytelling: emergence of a new genre. Educase Review, November/December issue.

LECTURE 12 – WEDNESDAY, OCTOBER 31st
CITIZEN JOURNALISM AND THE GEOWEB
READING: Collection of newspaper articles to be announced.

LECTURE 13 – MONDAY, NOVEMBER 5TH
LIKED AND LINKEDIN: THE ROLE OF SOCIAL MEDIA IN THE GEOWEB
READING: Kietzmann et al. (2011) Social media? Get serious! Understanding the functional building blocks of social media. Business Horizons 54: 241–251.

LECTURE 14 – WEDNESDAY, NOVEMBER 7TH
INTEGRATING SOCIAL MEDIA INTO YOUR PROJECT
WEB-SEARCHING: List of social media outlets to be announced.

LECTURE 15 – MONDAY, NOVEMBER 12th
COMMUNITY MAPPING
READING: Glocker, Mkanga and Ndezi (2004) Local empowerment through community mapping for water sanitation in Dar es Salaam. Environment and Urbanization 16(1): 185–197.

LECTURE 16 – WEDNESDAY, NOVEMBER 14th
PRIVACY AND SECURITY ON THE GEOWEB
READING: Elwood and Leszczynski (2011) Privacy, reconsidered: New representations, data practices, and the GeoWeb. Geoforum 42: 6–15.

LECTURE 17 – MONDAY, NOVEMBER 19th
THE GEOWEB ARMS RACE
READING: Haklay, Singleton and Parker (2008) Web mapping 2.0: The neogeography of the GeoWeb. Geography Compass, 2(6): 2011–2039.

LECTURE 18 – WEDNESDAY, NOVEMBER 21st
GETTING INVOLVED IN THE GEOWEB WITH GEOGRAPHIC INFORMATION SCIENCE
READING: Geographic Information Systems and Science, Chapter 1: Systems, Science and Study.

LECTURE 19 – MONDAY, NOVEMBER 26th
THE FUTURE OF OUR DIGITAL EARTH
READING: Goodchild et al. (2012) Next-generation Digital Earth. Proceedings of the National Academy of Sciences, DOI: 10.1073/pnas.1202383109

LECTURE 20 – WEDNESDAY, NOVEMBER 28th
COURSE WRAP-UP AND EXAM REVIEW

ASSIGNMENTS

ASSIGNMENT 1: MAPPING YOUR FOOTSTEPS
ASSIGNED SEPTEMBER 25TH
DUE OCTOBER 1st

ASSIGNMENT 2: FIELD WORK ON THE WILLAMETTE RIVER
ASSIGNED OCTOBER 2ND
DUE OCTOBER 8th

ASSIGNMENT 3: ASSISTING COMMUNITIES IN NEED USING THE CENSUS
ASSIGNED OCTOBER 9TH
DUE OCTOBER 15TH

ASSIGNMENT 4: CROWDSOURCING AGAINST EPIDEMICS
ASSIGNED OCTOBER 16TH
DUE OCTOBER 29th

ASSIGNMENT 5: CITIZEN JOURNALISM THROUGH ONLINE MAPPING
ASSIGNED OCTOBER 30TH
DUE NOVEMBER 12TH

ASSIGNMENT 6: YOUR DIGITAL ATLAS
ASSIGNED NOVEMBER 13TH
DUE DECEMBER 3RD