## **Introductory Things**

Welcome

Sign up on the roll sheet being passed around

Meet the course GTF's, treat them kindly please!

Handing out the course syllabus and going through it

Our class website: <a href="http://blogs.uoregon.edu/fonstad/teaching/geography-141-fall-2015/">http://blogs.uoregon.edu/fonstad/teaching/geography-141-fall-2015/</a>

We also have a Canvas site, for lab work and we will also have other functions available there

My office hours and contacting me or the GTFs

Class overview

**Required Materials** 

iClickers/iClicker2, iClicker Go

You have lab this week!

Grading

Attendance Policies and Importance

Laptop policies in lecture, lab

Note-taking in Class

Academic dishonesty, Late & Make-up work, and Disability notice policies

## Unit 1

Introduction to geography, where & why questions, physical/human/GISc parts of geography, subfields such as climatology, biogeography, geomorphology, soils, marine geography, hydrology and water resources,

Scientific nature of understanding in this course, scientific method, hypotheses, observation and experiment, theory, laws

Systems, conservation laws, subsystems, open/closed systems, feedback, equilibrium, models, orders of magnitude

## Unit 2

Earth shape and size, sort-of an ellipsoid, various "spheres" (atmosphere, lithosphere, hydrosphere, biosphere, cryosphere), distribution of land and water amongst hemispheres, continents and oceans, continental shelf, continental slope, abyssal plains, mid-ocean ridges, deep-ocean trenches. What if earth stopped rotating?

## Unit 3

Maps, cartography, rotation of earth, degrees, parallels and meridians, great and small circles, equator and latitude, prime meridian and longitude, coordinate systems, vertical datums & mean sea level

Projections, scale, conformal (shape/area preserving), equal-area, orthographic, cylindrical (like Mercator), conic, planar, compromise projections like the Robinson. West Wing clip "Why are We Changing Maps?"

Isolines, contour lines, evolving technologies (GIS, GPS, RS), Story about Eratosthenes