Sample Syllabus for GEOS 436/636

Instructors:

things with them that are fun for you. The more you do, the more you will learn.

What it is not:

Complete.

Prerequisites:

GEOS 436: Senior standing or permission of instructor.

GEOS 636: Graduate standing.

Textbook:

No textbook exists for this course. Handouts and lecture slides will be provided, and we will guide you to some of the many reference sources available on the web.

Student Learning Outcomes:

By actively participating in this course you will become significantly more proficient at:

- Breaking problems down into a series of steps
- Organizing data and tools to make automated work easier
- Writing and understanding how to read computer programs in MATLAB
- Writing and understanding how to read Unix/Linux shell scripts
- Making publication-quality maps and figures using GMT (Generic Mapping Tools)
- Using HTML and CSS for web pages

Grading:

This 2 credit class is pass/fail. The class assignments are primarily lab exercises, specifically computer programs written in the computer lab. We use software that is available to students at no cost (for use within the UAF network), so all students could also install and use it on their own computer if they wish. The computer lab is also available for students to use at other times, if they need to finish an assignment outside of lab. During the first third of the semester, additional short homework assignments will be given outside of lab (these do not require any particular computer or software).

Grading is based on weekly lab exercises, homework assignments, a final project, and the presentation of that project in the form of a web page or pages. There will be a total of 12 graded lab assignments, equally weighted, and all other assignments except for the final project itself are scored points equivalent to a lab assignment or a fraction of that.

Graduate Students

Labs+Homework+Project Presentation	**70% of total**
Each Lab assignment	1 Lab
Each Homework assignment	1/2 Lab
Final Project Presentation	1 Lab

Final Project	**30% of total**
Passing (graduate)	***>= 65%***

Undergraduate Students

Labs+Homework+Final Presentation	**100% of total**
Each Lab assignment	1 Lab
Each Homework assignment	1/2 Lab
Final Presentation	1 Lab
Passing (undergraduate)	***>= 65%***

The homework and lab exercises consist of basic application of methods and practices presented in class. The labs help you apply things taught in class. The complexity of the labs varies. Usually they consist of a simple introduction problem to get you used to the

presentation

Prior to each lecture you will find handouts, examples, and problem sets here. The problem