

AUBURN UNIVERSITY
Department of Electrical & Computer Engineering

ELEC 5970/6970
Technical Document Preparation with L^AT_EX
Summer 2010 Mini-Term II
Course Information

Professor: Stanley J. Reeves
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Class Hours: MWF 9:45-11:00 (Note: Times may be adjusted as schedules require.)

Office Hours: by appointment

Objectives:

This course introduces the basic methods and tools for creating beautiful technical documents using L^AT_EX, a widely used technical typesetting system. A hands-on, student-driven approach will introduce L^AT_EX to beginners and hone the skills of more experienced users. The course will also benefit users at every level by exploring some of the most powerful tools and packages that make L^AT_EX so useful and versatile.

Web Site:

I will link from Blackboard to an external class web site at <http://www.eng.auburn.edu/~reevesj/Classes/ELEC6970-latex>. The web site will be an integral tool in the course, with overheads and example code from class posted each lecture. In addition, lectures may also be video-screen-captured for posting.

Mode of Instruction:

After one or two introductory lectures by the instructor, the classes will be led by students who have researched an assigned topic and then prepared a presentation using the L^AT_EX-beamer presentation package. Hands-on activities will be assigned for each topic outside of class. A document prepared in L^AT_EX will be prepared by each student and turned in at the end of the term.

Laptops:

You are encouraged to bring a laptop to class to examine more closely the code discussed in class, to try things out on the fly, and to take notes.

Presentation:

Each student will be required to do a presentation of 30-35 minutes based on an assigned topic

Grading Policy:

Grades will be determined on a contract basis. You will earn points based on various activities, and grades will be determined based on points earned (out of approximately 200 points available):

grade	points
A	150
B	135
C	120
D	105
F	<105

Attendance/punctuality — up to 75 points (5 per class) Participation is key to this course. The material will be almost entirely from lecture notes. Tardiness will result in reduced attendance credit (loss of at least 2 points). Please be thoughtful of the professor and the other students, and do not walk in late if possible.

Presentations — up to 40 points Each student will be assigned a topic and will give a presentation of 30-35 minutes to the class using the \LaTeX -`beamer` presentation package. A template will be provided. Overheads, code used to produce them, and all code presented in class must be made available prior to class for posting on the class web site. Students are encouraged to download and look at the code during class.

Homework — up to 60 points (3 per topic) The student presenting a topic will assign a homework exercise related to that topic that should take no more than 15-20 minutes outside of class. Homework will be turned in the next class period. The student who created the exercise will grade all the homework on the following scale: 3 - complete; 2 - incomplete but significant effort; 1 - minimal effort; 0 - not turned in. Students will be assigned individual codes, and these will be used instead of names on assignments to assure objective grading.

Individual document produced in \LaTeX — up to 25 points Students will produce a new document in \LaTeX that meets a current writing need in their degree program. To obtain full credit, the document must contain significant equations in number or complexity, multiple figures, a table, and a bibliography. A target length is 5-10 pages, though shorter, more complex documents are acceptable. The document must be accompanied by a signed affirmation that the work is new and original to the author.

Students with Disabilities:

See me.

Contingency:

Since this is the instructor's first time teaching this course and the format is a bit unusual, the instructor may modify the syllabus and other course plans and assignments to make the course and grading go more smoothly. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.

Topical Overview

1. installation and other preliminary issues
2. basic documents
3. equations
4. graphics and plotting
5. bibliographic records and citation processing
6. presentations using the `beamer` package
7. customization and special tools and packages