

# STUDENT SYLLABUS

MAP 4103-01

Summer 17

WEB PAGE: <http://www.math.fsu.edu/~bellenot/class/su17/model>

MEETING TIMES: MWF 12:30-1:30 201 LOV

INSTRUCTOR Dr Steven Bellenot

OFFICE 223 Love

OFFICE HOURS MW 2-3 or by appointment.

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OFFICE PHONE 644-7405

ELIGIBILITY: MAS3105 (App. Lin. Alg 1), MAP2302 (ODE), MAC2313 (Calculus 3), PHY2048 (Calc Based Physics 1) with C- or better. This is 4000 level course so students are expect to have some mathematical maturity as well as the course pre-requisites.

TEXT: None

COURSE CONTENT: The bulletin lists the content as: *This course covers the application of mathematics to real life situations, construction of mathematical models, use of elementary and advanced mathematical methods, and case studies.*

COURSE OBJECTIVES. The purpose of this course is to introduce students to the process of mathematical modeling. It is expected that the student will learn to dervie mathematical models from basic principles and use these models to predict or analyze the behavior of “real-world” systems

This course si about the representation of physical, economic or biological phenomena by mathematical “models” for the better understanding the phenomena and for being able to make predictions regrading them. It is about the processes that one goes throught in developing models and the understanding the models derived. Modeling is thus the quintessential aspect of applied mathematics.

ATTENDANCE: Attendance and class participation will be factors in determining the final grade. No food or drinks are allowed in the classroom. Please turn off cell phones and keep them hidden during class.

COMMUNICATION: It is your responsibility to register for a (free) FSU computer account so that I can send you email, which you are expected to check regularly. If you prefer to read your email elsewhere then you can arrange to have messages forwarded, but you must still obtain an FSU account in the first instance.

GRADING: This course is pass/fail (S/U). There will be periodic graded homework projects, which will form the basis for the final grade. There will be no exams nor quizzes.

Homework will be graded on a four level scale:

**3 – Very Good** Mostly to fully correct and complete.

**2 – Good** Successful, with possibly serious but non-fatal omissions or commissions.

**1 – Poor** Some success, but incomplete or with fatal flaws.

**0 – Zero** Unsuccessful, incorrect, thrown together at the last minute, seriously flawed or not done at all.

The grading must be somewhat subjective. For example, one can generate a variety of models that have a varying degree of faithfulness to the real world. More complete and detailed analyses are more likely to be fully correct than hastily slopped together ones. The student will be required to have a 2.0 or above average on the homework to earn an “S”. Mere attendance is not sufficient for an “S”.

HOMEWORK: The list of homework problems is the class web site. Email will be sent to the class when this list is updated.

**HOMEWORK RULES:** Your **OWN** work, written in clear English. Neatly typed or written in ink on one side of standard 8.5 by 11 paper. Multiple pages must be stapled and **NOT** dog-eared or paper clipped. **Homework with a paper clip or with dog-eared pages will receive a zero score.** Discussion about the homework problems with other students or the professor is permissible and even encouraged, but the final output needs to be uniquely yours and not obtained by copying from another's solution.

**HELP:** There is wealth of information on our web pages, be sure to check them before emailing me. (If the answer is on our web pages, I will not give the answer by email.) Sorry, I will only compute your grade once at the end of the semester; but all grades are on-line and you can compute your own grade at any time. Do not hesitate to come to my office hours, or to contact me via email. (Please – no html formatted email, send text only. For files with graphics, I will look at PDF files but not word .doc files) All projects must be turned in in hard copy.

**PROJECT FORMAT:** The hardcopy needs to be your **OWN** work, written in clear English. Neatly typed or written in ink on one side of standard 8.5 by 11 paper. Multiple pages must be stapled and **NOT** dog-eared or paper clipped. **Labs with a paper clip or with dog-eared pages will receive a zero score.** You are expected to edit scilab output. There should be no false starts, nor unneeded output. Discussion about the lab or homework problems with other students or the professor is permissible and even encouraged, but the final output needs to be uniquely yours and not obtained by copying from another's solution. All labs must be submitted in hardcopy. No electronic copies will be accepted. (But if you are having problems with graphics, I will look at a PDF file.)

**REQUIRED STATEMENTS:** <http://facsenate.fsu.edu/Curriculum/Syllabus-Language>

**University Attendance Policy:** Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

**Academic Honor Policy:** The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "... be honest and truthful and ... [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://dof.fsu.edu/honorpolicy.htm>.)

**Americans With Disabilities Act:** Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; and (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center

874 Traditions Way

108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

(850) 644-9566 (voice)

(850) 644-8504 (TDD)

[sdrc@admin.fsu.edu](mailto:sdrc@admin.fsu.edu)

<http://www.disabilitycenter.fsu.edu/>

**Syllabus Change Policy** "Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice."