

# Syllabus

## Lectures and Recitations

Lectures meet on Mondays, Wednesdays, and Fridays from 10:00 to 10:53 AM in Library W4550. The instructor is Prof. Eric Malm.

Recitation	Day	Time	Location	TA
R01 40652	Fri	12:00–12:53 PM	Physics P123	Claudio Meneses
R02 46215	Wed	12:00–12:53 PM	Physics P123	Xuan Chen
R03 47877	Mon	11:00–11:53 AM	Physics P116	Claudio Meneses

## Websites

We will use Blackboard (<http://blackboard.stonybrook.edu>) to send course announcements and to post materials, solution sets, and homework and exam grades. Students are responsible for checking the site daily for announcements and course materials. Additional course information may appear on the instructor's and TAs' websites.

## Office Hours and Contact Information

**Eric Malm**, Instructor

Office Hours: Mon 2–3 pm, Wed 3–4 pm, Fri 1–2 pm, in Simons Center 502, or by appointment

E-mail: [emalm@scgp.stonybrook.edu](mailto:emalm@scgp.stonybrook.edu)

Website: <http://ericmalm.net/ac/teaching/mat303/>

**Xuan Chen**, Teaching Assistant, R02

Office Hours: Mon 4–5 pm, Math Tower S-240C; Wed 1–3 pm, MLC

E-mail: [chenx@math.sunysb.edu](mailto:chenx@math.sunysb.edu)

Website: <http://www.math.sunysb.edu/~chenx/>

**Claudio Meneses**, Teaching Assistant, R01 and R03

Office Hours: Tue 5–7 pm, MLC; Fri 11 am–noon, Math Tower 2-115

E-mail: [claudio@math.sunysb.edu](mailto:claudio@math.sunysb.edu)

Website: <http://www.math.sunysb.edu/~claudio/>

Students should feel free to attend the office hours of the instructor, either teaching assistant, or the Math Learning Center (Math Tower S-240A), open Mon-Thu 10 AM to 6 PM, Fri 10 AM to 2 PM.

## Course Description

**Overview:** Homogeneous and inhomogeneous linear differential equations; systems of linear differential equations; series solutions; Laplace transforms; Fourier series. Applications to economics, engineering, and all sciences with emphasis on numerical and graphical solutions; use of computers. May not be taken for credit in addition to AMS 361, MAT 305, or MAT 308. 4 credits.

**Prerequisites:** C or higher in MAT 127 or 132 or 142 or AMS 161 or level 9 on the mathematics placement examination. Familiarity with complex numbers and the basic concepts of linear algebra will be important, so the 200-level classes MAT 203/205 (Calculus III) or AMS 261/MAT 211 (Linear Algebra) are strongly recommended.

**Text:** The required course textbook is *Differential Equations and Boundary Value Problems: Computing and Modeling*, Fourth Edition (2008), by C.H. Edwards and D.E. Penney. (ISBN 978-0-13-156107-6) Copies are available from the SBU Bookstore and from online retailers.

## Assessment

**Homework:** Homework will be due weekly on Wednesdays by 4 PM, and will typically focus on lecture and reading material from the previous week. You may submit your assignment to either the instructor or your TA at any time before the due date. Solution keys will be posted on Blackboard shortly after the due date, so late assignments are not accepted. The lowest two homework scores will be dropped when computing the homework average.

Your name, recitation section, assignment number, and date must be printed at the top of the front page of each homework assignment. Assignments with multiple pages *must* be fastened together with a staple in the upper left-hand corner of the page. Students should make their assignments legible and should show work when appropriate. The course staff reserves the right not to grade assignments that do not follow these policies.

Discussing and working together on assignments is strongly encouraged, but you must be sure to write up your assignment on your own.

**Exams:** There will be a total of three exams: two midterms and a comprehensive final exam. Calculator use will *not* be allowed on exams. Exam dates:

- Midterm #1: Wednesday, Mar 6, 10:00–10:53 AM, in lecture
- Midterm #2: Friday, Apr 12, 10:00–10:53 AM, in lecture
- Final Exam: Tuesday, May 21, 8:00–10:45 AM

There is no provision for making up exams or dropping exam scores, so it is *critically important* that you be able to attend each exam. If you absolutely cannot attend one or more of the exams, you should take this course during a different term.

**Grading:** The scores from the homework and the exams will be weighted as follows to determine the overall course grade:

Midterm I: 20%

Midterm II: 20%

Final: 40%

Homework: 20%

## How to Get Help

Your first resource for help in the class should be the office hours of the instructor, the teaching assistants, and the Math Learning Center. Your fellow students are also an excellent resource for help, and we strongly encourage students to work and study together in small groups.

**Stony Brook University Policies**

**Americans with Disabilities Act:** If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, Room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

**Academic Integrity:** Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>.

**Critical Incident Management:** Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of University Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.