

# Syllabus

Fall 2019

Engineering Mathematics 1 (MAP 3305) 3 credits

Instructor:	Dr. Yuandan Lin	CRN:	12270
Office:	SE 220	Office Hours:	TR 2:00 – 4:00pm
Email Address:	<a href="mailto:lin@fau.edu">lin@fau.edu</a>	Phone Number:	(561) 297-3343
Lecture Time:	TR 12:30 – 1:50pm	Lecture Room:	BU 410

**Prerequisite:** MAC 2312 or MAC 2282 with a minimum grade of C.

**Description:** Topics to be covered include complex numbers, ordinary differential equations (primarily linear, constant coefficient equations), Laplace transforms, systems of linear equations.

**Objectives, Learning Outcome Goals:** Upon successful completion of the course the student will be able to:

1. solve first order differential equations
2. solve second order linear differential equations
3. solve equations by Laplace transforms
4. solve linear systems of differential equations

Moreover, upon completing this course, students should be able to apply the presented mathematical techniques to solve engineering problems.

**Materials:** Textbook: Elementary Differential Equations with Boundary Value Problems, by William F. Trench, 2013.

*Faculty Authored and Edited Books & CDs.* 9. <https://digitalcommons.trinity.edu/mono/9>

Please note that this is a free on-line book. You may download the pdf file from the above website.

We will cover materials from Chapters 1, 2, 4, 5, 6, 8, and 9, if time permits.

**Website:** <http://math.fau.edu/lin>

**Attendance Policy:** Regular attendance is expected, including active involvement in all class sessions, and professional conduct in class. Students are responsible for arranging to make up work missed because of legitimate class absences, such as illness, family emergencies, military obligations, court-imposed legal obligations, or participation in university-approved activities, such as participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the students' responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting.

**Course Grade:** There will be regular homework assignments, *not collected*. There will be a 15–20 minute quiz every Thursday when an exam is not scheduled in that week. Your two lowest quiz scores will be dropped. Two midterm exams are scheduled on Thursdays, September 26 and November 7. A comprehensive final exam will be given in the end of the semester.

Make-up quizzes and exams will be given only under exceptional circumstances, and written, verifiable excuses must be provided, if possible in advance of the scheduled quiz/exam.

Course grade will be calculated using the following table.

Quizzes	20%
Midterm Exam 1	20%
Midterm Exam 2	20%
Final Exam	40%
Total	100%

**Exams:**

Midterm Exam 1	Thursday, September 26, 2019	BU 410
Midterm Exam 2	Thursday, November 7, 2019	BU 410
Final Exam	Sunday, December 8, 2019, 6:45pm–9:15pm	Room TBA

**Course Grading Scale:**

A: 90–100%	A-: 87–90%	B+: 84–87%
B: 80–84%	B-: 77–80%	C+: 74–77%
C: 70–74%	C-: 67–70%	D+: 64–67%
D: 60–64%	D-: 57–60%	F: 0–57%

The Grade of I (incomplete) can only be given under the conditions specified in the “Incomplete Grades” section of the FAU Catalog, and supporting documentation will be required.

**Classroom Etiquette Policy:** University policy on the use of electronic devices states: “In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as *cellular telephones* and pagers, *are to be disabled in class sessions.*” Please refer to the FAU Student Code of Conduct available at the link:

<http://www.fau.edu/artsandletters/new-pdfs/4.007.Student%20Code%20of%20Conduct.pdf>

**Disability Policy Statement:** In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodation due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all ASA procedures. SAS has offices across three of FAU’s campuses — Boca Raton, Davie, and Jupiter — however, disability services are available for students on all campuses. For more information, please visit the SAS website at

<http://www.fau.edu/sas/>

**Code of Academic Integrity Policy Statement:** Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 at the link:

<https://www.fau.edu/ctl/AcademicIntegrity.php>

**Counseling and Psychological Services (CAPS) Center:** Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services — individual counseling, support meetings, and psychiatric services, to name a few — offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

**Free Mathematics Tutoring for FAU Students:** The MLC provides the following FREE academic support services for FAU students.

1. Drop-in tutoring in the SAM LAB (Succeed At Methods) in GS 207 during all hours of operation:
  - (a) **ALL METHODS TUTORING is done in the SAM Lab except on Sundays.** On Sundays, please visit the MLC as the SAM Lab is closed.
  - (b) Monday – Thursday: 10am – 5pm and Friday: 10am – 4pm
2. Drop-in tutoring in the MLC (GS 211) during all hours of operation:
  - (a) Monday – Thursday: 10am – 5pm, Friday: 10am – 4pm, and Sunday: 1pm – 5pm.
3. Drop-in tutoring in the Residence Halls:
  - (a) Get Wise in Glades Park Tower (GPT 102): Sunday – Thursday: 5pm – 9pm
  - (b) Parliament (Library): Sunday – Thursday: 5pm – 9pm
  - (c) Floor Lounges in Indian River Towers and Heritage Park Towers: Sunday – Thursday: 6pm – 9pm
4. Small group tutoring by appointment:
  - (a) Appointments for the MLC and SAM Lab can be made in TutorTrac. Go to <https://tutoring.fau.edu> and log in with your FAU ID and password and click on “Search for Availabilities”. For Center, choose “SAM Lab” for Methods of Calculus and “Math Learning Center” for everything else. Choose your Section (Class) and click “Search”. Choose your time and then click “Save”. If there are no appointments listed for your course, please email [mlc@fau.edu](mailto:mlc@fau.edu) and request an appointment.
5. Online tutoring in College Algebra and Methods of Calculus via Skype for Business:
  - (a) Find scheduled times and courses here: <http://www.math.fau.edu/mlc/remote/index.php>

**This syllabus is subject to reasonable changes at the discretion of the instructor.**