Math 322: Analysis for Enginners

Monday-Wednesday-Friday 10:00 am - 10:50 am.
Education Bldg. Room 337.
Section 002, Spring 2020.

Instructor: Dr. Houssam Abdul-Rahman
Office Hours: Monday 11:00 - noon, Friday 1:15-2:15 pm, and by appointment .
MTL hour: Wednesday 11-noon pm in MTL 121.
Office: Mathematics building, room 715.
Email: houssam@math.arizona.edu.
Instructor Homepage: http://math.arizona.edu/∼houssam.
Course Materials: at http://math.arizona.edu/∼houssam/Teaching.html.

Textbook: Advanced Engineering Mathematics by Erwin Kreyszig, 10th Edition.

Important points about course materials on D2L:

- Course materials are being delivered digitally via D2L through the Inclusive Access program. Please access the material through D2L on the first day of class to make sure that there are no issues with delivery so any problems can be addressed quickly.
- You automatically have access to the course materials **FREE through 01/28/2020**.
- **You must take action (even if you have not accessed the materials) to opt-out if you do not wish to pay for the materials, and choose to source the content independently. The deadline to opt-out is 01/28/2020**. If you do not opt-out and choose to retain your access, the cost of the digital course materials will appear on your February account.
- Please refer to the Inclusive Access FAQs at https://shop.arizona.edu/textbooks/Inclusive.asp for additional information.

Overall Course Objectives and Expected Learning Outcome:

- Learn and review selected topics in mathematical analysis important to engineering.
- Gain deeper understanding of the role advanced mathematics plays in selected and important engineering applications.
- Improve problem-solving skills, combining several mathematical fields in one problem, such as calculus, complex numbers, linear algebra and differential equations.

Material to be Covered:

Complex Numbers and Functions: from Ch. 13.
Linear Algebra: from Ch. 7 and Ch. 8.
Ordinary Differential Equations: from Ch. 2, Ch. 3. and Ch. 4.
Fourier Analysis: from Ch. 11.
Partial Differential Equations: from Ch. 12.

Exam dates: Three exams are tentatively scheduled for

Test 1: Monday, February 10.
Test 2: Wednesday, March 18.
Test 3: Monday, April 20.

and a comprehensive final exam scheduled on **Friday, May 8, from 10:30-12:30 pm**.

Homework and Quizzes: Homework assignments will be posted in my teaching website. Even though homework will not be collected, all students are expected to work on the homework assignments. Weekly quizzes will be given based on the homework problems.

Grading Policy: The final grade will consist of homework/Quizzes, three in-class exams, and the final exam.

HWs/Quizzes	100 points	You are guaranteed a grade of:	
Test 1	200 points	A	if you earn at least 900 points.
Test 2	200 points	B	if you earn at least 800 points.
Test 3	200 points	C	if you earn at least 700 points.
Final Exam	300 points	D	if you earn at least 600 points.

Cell Phones, Laptops, and tablets: No electronic devices other than calculators are allowed during class with the exception for note taking.

Incompletes: Must be made in accordance with University policies, which are available at http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete

Other Important Information:

- **Students with disabilities:** Contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For information on the Disability Resource Center and reasonable accommodations, please visit http://drc.arizona.edu . If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.
- **Students withdrawing from the course:** Must be made in accordance with University policy http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal.
  You may **drop the class without a W through January 28** using UAccess. The class will appear on your UAccess record, but will not appear on your transcript.
  You may **withdraw with a W through March 31** using UAccess.
  The University allows withdraws after March 31 but only with the Dean's approval. Late withdraws are dealt with on a case by case basis, and requests for late withdraw without a valid reason may or may not be honored.
- **Threatening Behavior Policy:** The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students.
- **Academic Integrity policy:** Integrity and ethical behavior are expected of every student in all academic work. This Academic Integrity principle stands for honesty in all class work. See https://deanofstudents.arizona.edu/policies/code-academic-integrity

- **Nondiscrimination and Anti-harassment policy:** the University prohibits discrimination, including harassment and retaliation, based on a protected classification, including race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information. https://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

Note: Information contained in the course syllabus, other than the grade policy, may be subject to change with advance notice, as deemed appropriate by the instructor.