AMAT100 PRECALCULUS SYLLABUS

UNIVERSITY AT ALBANY
State University of New York

Course Instructor:
Name:
Email:
Office:
Office Hours:

Course Coordinator:
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Office hours by appointment

Course Description

This three-credit course provides a background in those topics that are needed for success in calculus and in understanding real world phenomena through mathematics. The course begins with basic rules and definitions about real numbers, equations, and the coordinate plane. It then proceeds with developing an understanding of both the geometric and algebraic properties of the five fundamental functions (polynomial, rational, exponential, logarithmic, and trigonometric functions), solving equations involving such functions, and with an emphasis on their usefulness for problem solving and modeling real-world situations.

Course Structure

Each lecture is eighty minutes long, meeting twice a week, and comprised of mathematical concepts, applications, and problems. There will be a total of four exams, three midterms and a final exam, given during the course of the semester all based closely on the lecture content, online homework and in-class practice assessments.

Prerequisites

Three years of high school mathematics or permission of department.

Learning Outcomes

By the end of the course students will be able to:

- Manipulate and solve algebraic, exponential, logarithmic, and trigonometric expressions
- Identify and describe properties of polynomial, exponential, logarithmic, and trigonometric functions
- Apply transformations and algebraic operations of functions
- Apply knowledge of Precalculus to solve problems in, but not limited to, engineering and science.

Recommended Textbook

Precalculus 2e by OpenStax
(Freely available for download at https://openstax.org/details/books/precalculus-2e)

• Homework

There are a total of 12 online homework assignments, all typically due at 11:59pm on there assigned date. Please see the course Lecture Schedule for their corresponding due dates. All homework assignments are accessible via Brightspace. There are 10 submissions (or attempts) for each open ended question and for multiple choice questions the number of submissions is the number of choices minus one or two.

• Assessment Tools

There are three assessment tools in the course:

‣ **Exams** are comprehensive and test both understanding of course material, critical thinking, and problem solving skills.

‣ **In-Class Practice Assessments** focus on concepts, common errors, and misconceptions as well as aim at developing problem solving and critical thinking skills.

‣ The **Online Homework** are exercises used to reinforce and check understanding of course material.

• Course Schedule

Class No	Days	Times	Room	Intructor
5904	MW	08:00AM - 09:20AM	ES0139	A. Chilelli
5905	WF	08:00AM - 09:20AM	ES0144	F. Ji
5906	MW	11:40AM - 1:00PM	ES0140	A. Ramey
5907	WF	11:40AM - 1:00PM	ES0139	X. Dong
5908	MW	1:10PM - 2:30PM	ES0140	S. Spellman
5909	WF	1:10PM - 2:30PM	ES0139	J. Cordes
5910	MW	3:00PM - 4:20PM	ES0139	J. Hults
5911	MW	3:00PM - 4:20PM	AS0014	S. Gurses
5912	TTH	4:30PM - 5:50PM	AS0014	S. Canzone

• Grade Calculation

Three formulas are used to calculate the student's course score. The formula that yields the highest score will be the one used to determine the final score (FS).

- **Formula 1: All exams included**

FS = 15% Homework + 20% Exam 1 + 20% Exam 2 + 20% Exam 3 + 25% Final Exam

- **Formula 2: Drop lowest midterm**

FS = 15% Homework + 25% Highest Midterm + 25% Second-highest Midterm + 35% Final Exam

- **Formula 3: No final exam**

FS = 15% Homework + 28.3% Exam 1 + 28.3% Exam 2 + 28.3% Exam 3

We will convert this score to a letter grade beginning with these values as cutoffs:

Cutoff	Letter Grade
90	A
87	A-
83	B+
80	B
77	B-
74	C+
70	C
67	C-
64	D+
60	D
55	D-
Below 50	E

- **Exam Policies**

During exams, no calculators, no cell phones, iPads or other devices that can communicate with the internet or with others may be used. Any such equipment found with the power on may well be interpreted as "cheating". The Department of Mathematics and Statistics reserves the right to impose the strongest academic sanctions for violations of Academic Integrity*.

> **Academic Integrity:*
> *"Every student has the responsibility to become familiar with the standards of academic integrity at the University. Faculty members must specify in their syllabi information about academic integrity, and may refer students to this policy for more information. Nonetheless, student claims of ignorance, unintentional error, or personal or academic pressures cannot be excuses for violation of academic integrity. Students are responsible for familiarizing themselves with the standards and behaving accordingly, and UAlbany faculty are responsible for teaching, modeling and upholding them. Anything less undermines the worth and value of our intellectual work, and the reputation and credibility of the University at Albany degree." (University's Standards of Academic Integrity Policy, Fall 2013)*
> *Click here for more information.*

Click here for the University's final exam policy and additional related information.

- **Policy on missed in-class assignments or exams**

It is University policy that an out-of- sequence exam can be administered only if there is prior authorization by the Mathematics and Statistics Department or due to a medical, religious, or family emergency reason. In all of these cases, you must provide written documentation to the Mathematics and Statistics Department in order to schedule a make-up exam within 2 days of the missed exam, or upon your first day returning to class if the documentation excuses a longer absence. **Make-ups will not be granted to students who do not notify the Mathematics and Statistics Department in a timely manner**. Students may be asked to seek additional approval.
Click here for the University's Medical Excuse Policy.

> ▸ **Event**
> In the case of a University sponsored event such as an athletic tournament, a play, or a musical performance, **please have your coach, conductor, or other faculty advisor contact your instructor** (*athletic practices and rehearsals do not fall into this category).*

‣ **Travel**

We cannot accommodate out-of- sequence exams, quizzes, and finals for reasons of convenience of travel, even if you have already purchased tickets. Please note carefully the date of your exams and final and plan your travel schedule accordingly.

‣ **Religious Observance**

Based on New York State Education Law (Section 224-A), students are required to be excused, without penalty, because of religious beliefs, and will be provided equivalent opportunities for make-up examinations, study, or work requirements missed because of such absences. Faculty will work directly with students to accommodate religious observances. However, **students should notify the instructor of record by emailing them during the first two weeks of classes**.

• Disability Disclosure Statement

Reasonable accommodations will be provided for students with documented physical, sensory, systemic, medical, cognitive, learning and/or mental health (psychiatric) disabilities. If you believe you have a disability and require accommodation in this class, please register with Disability Access and Inclusion Student Services (DAISS). You can contact DAISS at daiss@albany.edu, 518-442 -5501 or www.albany.edu/disability. O nce you have registered with DAISS, they will provide you with an accommodation letter that you can send to your instructors to receive your approved accommodation.

• Mental Health Resources

As a student, there may be times when personal stressors interfere with your academic performance and/or negatively impact your daily life. The University at Albany Counseling and Psychological Services (CAPS) provides free, confidential services including individual and group psychological counseling and evaluation for emotional, social and academic concerns. Students may consult with CAPS staff remotely by telephone, email or Zoom appointments regarding issues that impact them or someone they care about.

‣ For questions or to make an appointment, call (518) 442-5800 or email consultation@albany.edu. Visit www.albany.edu/caps for hours and additional information.

‣ If your life or someone else's life is in danger, please call 911. If you are in a crisis and need help right away, please call the National Suicide Prevention Lifeline at 988.

‣ Students dealing with heightened feelings of sadness or hopelessness, increased anxiety, or thoughts of suicide may also text "HOME" to 741741 (Crisis Text Line).
https://988lifeline.org/? scrlybrkr=4617837b
https://www.albany.edu/health-well- being/emergencies