Course Syllabus

Course Information

Course Number
MAT 265

Course Title
Calculus for Engineers I

Credits
3

Prerequisites
- Prerequisite(s): MAT 170 with C or better OR Mathematics Placement Test with a score of 60% or higher and the Advanced Mathematics Placement test with a score of 38 or higher (or ALEKS score of 67% or higher). Credit is allowed for only MAT 265 or MAT 270

Faculty

Name: Jay Abramson
Office: ECA 204
Phone: (480)965-7375
Email address: jabramso@asu.edu

Catalog Description

Limits and continuity, differential calculus of functions of one variable, introduction to integration.

Course Overview

The purpose of the course is to gain a working understanding of limits and continuity, differential calculus of functions of one variable and integration. You will be introduced to the derivative as a function, differentiation formulas, and will investigate applications of differentiation. Both definite and indefinite Integrals are introduced, with sigma notation as needed. The Fundamental Theorem of Calculus is presented, and an emphasis is placed on the meaning of integrals.
Course Topics, Schedule, & Grading

Course Topics, Schedule, & Grading

MAT 265 Course Format and Homework Statement

Students are responsible for watching the video presentation(s) for the section(s).

Online homework and all exams will be submitted online via the internet using the online homework system, Webwork.

Below is a table of all due dates and times. Exact due dates for each assignment will be in webwork. NOTE: All times are listed in Mountain Standard Time (MST).

Course Schedule and Assignments

Tentative Lecture and Test Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Section</th>
<th>Concepts/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 0</td>
<td>Intro to WW</td>
<td>Start Up Week</td>
</tr>
<tr>
<td>Week 1</td>
<td>1.3, 1.4</td>
<td>Introduction, Functions; Limits: Numerically, One-Sided, Algebraically</td>
</tr>
<tr>
<td>Week 1</td>
<td>1.5, 1.6</td>
<td>Continuity; Limits involving Infinity, Asymptotes</td>
</tr>
<tr>
<td>Week 2</td>
<td>2.1, 2.2</td>
<td>Derivatives and Rates of Change; Derivative as a Function</td>
</tr>
<tr>
<td>Week 2</td>
<td>2.3, 2.4</td>
<td>Basic Derivative Formulas; Product Rule, Quotient Rule</td>
</tr>
<tr>
<td>Week 3</td>
<td>2.5, 2.6</td>
<td>Test 1 Chain Rule; Implicit Differentiation;</td>
</tr>
<tr>
<td>Week 3</td>
<td>2.7, 2.8</td>
<td>Related Rates; Linear Approximation, Differentials;</td>
</tr>
<tr>
<td>Week 4</td>
<td>3.1, 3.2</td>
<td>Exponential Functions; Inverse Functions and Logarithms</td>
</tr>
<tr>
<td>Week 4</td>
<td>3.3, 3.5</td>
<td>Derivatives of Exponential and Logarithmic Functions, Inverse Trigonometric Functions</td>
</tr>
<tr>
<td>Week 5</td>
<td>3.7, 4.1</td>
<td>Indeterminate Forms and L'Hospital's Rule; Test 2 Maximum and Minimum Values (Extrema);</td>
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<tr>
<td>Week 5</td>
<td>4.2, 4.3</td>
<td>Mean Value Theorem; Derivatives and the Shapes of Graphs;</td>
</tr>
<tr>
<td>Week 6</td>
<td>4.4</td>
<td>M #1 Curve Sketching</td>
</tr>
<tr>
<td>Week 6</td>
<td>4.5, 4.7</td>
<td>M #2 Optimization Problems; Antiderivatives</td>
</tr>
</tbody>
</table>
Important Dates and Points Allocations

<table>
<thead>
<tr>
<th>Test</th>
<th>Covering through</th>
<th>Date</th>
<th>Location</th>
<th>Tests*</th>
<th>Min. % for Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.3-1.6, 2.1-2.3</td>
<td>9/8</td>
<td>Webwork</td>
<td>Homework &amp; Notes</td>
<td>A 90%</td>
</tr>
<tr>
<td>2</td>
<td>2.4-2.8, 3.1-3.3, 3.5, 3.7</td>
<td>9/25</td>
<td>Webwork</td>
<td>Final Exam, 10/9</td>
<td>B 80%</td>
</tr>
<tr>
<td>3</td>
<td>4.1-4.5, 4.7, 5.1, 5.2</td>
<td>10/5</td>
<td>Webwork</td>
<td>Total</td>
<td>C 70%</td>
</tr>
<tr>
<td>M</td>
<td>Mastery of Differentiation</td>
<td>9/28 10/2</td>
<td>Webwork</td>
<td>* No test will be dropped</td>
<td>D 60%</td>
</tr>
</tbody>
</table>

Grading Procedure

Grades reflect your performance on assignments and adherence to deadlines. Graded assignments will be available immediately in Blackboard.

Course Policies & Procedures
Communicating With the Instructor

This course uses a discussion board called "Hallway Conversations" for general questions about the course. Prior to posting a question, please check the syllabus, announcements, and existing posts. If you do not find an answer, post your question. You are encouraged to respond to the questions of your classmates.

Email questions of a personal nature to your instructor or assigned TA. You can expect a response within 48 hours.

Online Course

This is an online course. There are no face-to-face meetings.

Email and Internet

ASU email is an official means of communication among students, faculty, and staff. Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly.

All instructor correspondence will be sent to your ASU email account.

Course Time Commitment

This three-credit course requires approximately 135 hours of work. Please expect to spend around 18 hours each week preparing for and actively participating in this course.

Late or Missed Assignments

Notify the instructor BEFORE an assignment is due if an urgent situation arises and the assignment will not be submitted on time. Published assignment due dates (Arizona Mountain Standard time) are firm. Please follow the appropriate University policies to request an accommodation for religious practices or to accommodate a missed assignment due to University-sanctioned activities.

Submitting Assignments

All assignments, unless otherwise announced, MUST be submitted to the designated area of LearningStudio. Do not submit an assignment via email.

MAT 265 Course Format and Homework Statement Fall 2015

1. Each section has two videos, labeled part one and part two. Students are responsible for watching the 2 long video presentations for each section. Ppts in pdf form accompany each video.
2. There are more videos, these are short videos, located in some of the folders that target specific problems.

3. There are more videos, these are short videos, that target specific problems and located at http://math.asu.edu/first-year-math/mat-265-example-problems-video

Textbook Information


Note taking portion of your grade

5% of your grade, under Homework and Notes, is taking notes of the videos with a predetermined rubric.

Click on the below video for a video to describe the process.

Click here for a pdf of the video.

Click here for a sample of the notes.

Online homework

Online Homework will be submitted online via the internet using the online homework system, WebWork.

Firefox is the recommended browser.

The homework is online in Webworks: http://webwork.asu.edu All sections are now open.

Be aware of all due dates. I do not give extensions.

Testing

Firefox is the recommended browser.

Be aware of all due dates. I do not give extensions.

There are 5 exams, 2 that require proctoring. Each exam is in Webworks as well.

Exams 2 and The Final Exam are proctored, exam 1, exam 3 and the Mastery Exam is not proctored.
Online Students should sign up for ProctorU at least two weeks in advance for Exam 2 and the Final.

All tests will be available from 12:00AM MST to 11:59PM MST on the day of the test. You can access the test any time during this 24-hour period, however, once you open the test, you will have 1 hour and 30 minutes to complete it (provided you access the test before 10:29PM MST)

You will have two submissions available.

• IMPORTANT:

1. To avoid accidentally clicking on the test and starting the timer, the test is password protected. The password for exam 1 is: billy1

2. Each problem in the test contains a Preview Problem button. It is recommended you click on Preview Problem after you enter each answer so that it will be recorded in the log files (in case the internet goes down or there are other technical issues).

3. The Grade Test button is located at the end of the test. After clicking on Grade Test for your first attempt, you will be able to see which questions are incorrect. WRITE DOWN WHICH QUESTIONS ARE INCORRECT BEFORE YOU START WORKING ON FIXING THEM. From this point on do not click Preview or Enter. Just finish answering the test and click Grade Test.

4. You should not log out or click on the Back button while taking the test.

5. While taking the test, do not leave the test website and open WeBWorK in another tab. If you do have webwork open in another window, you will be logged out from the test and all the answers you entered will disappear.

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You should not log out or click on the Back button while taking the test.

Mastery Exam: The Mastery Exam shows proficiency in taking a derivative.

1st attempt: To pass you need an 85%. If you pass, a grade of 100 is recorded. Do not take the 2nd attempt if you pass.

2nd attempt: To pass you need an 85%. If you pass, a grade of 85 is recorded. If you do not pass, 85% of the score you earn is recorded.

**Final Exam**

The final exam will need to be proctored at an educational institution. For the final exam, it is the student’s responsibility to have a designated contact from the institution contact me in advance for the exam.

**Piazza - Class Discussion**

We will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. Content related questions and comments only are to be posted. If you have any problems or feedback for the developers email team@piazza.com.

**Drop and Add Dates/Withdrawals**

This course adheres to a compressed schedule and may be part of a sequenced program, therefore, there is a limited timeline to drop or add the course. Consult with your advisor and notify your instructor to add or drop this course. If you are considering a withdrawal, review the following ASU policies: Withdrawal from Classes, Medical/Compassionate Withdrawal, and a Grade of Incomplete.

**Grade Appeals**

Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the department chair per the University Policy for Student Appeal Procedures on Grades.

**Student Conduct and Academic Integrity**

ASU expects and requires its students to act with honesty, integrity, and respect. Required behavior standards are listed in the Student Code of Conduct and Student Disciplinary
Procedures, Computer, Internet, and Electronic Communications policy, ASU Student Academic Integrity Policy, and outlined by the Office of Student Rights & Responsibilities. Anyone in violation of these policies is subject to sanctions.

Students are entitled to receive instruction free from interference by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per Instructor Withdrawal of a Student for Disruptive Classroom Behavior.

Appropriate online behavior (also known as *netiquette*) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor.

The Office of Student Rights and Responsibilities accepts incident reports from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

**Prohibition of Commercial Note Taking Services**

In accordance with ACD 304-06 Commercial Note Taking Services, written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the notetaker's name as well as the instructor's name, the course number, and the date.

**Course Evaluation**

Students are expected to complete the course evaluation. The feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available.

**Syllabus Disclaimer**

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Please remember to check your ASU email and the course site often.

**Accessibility Statement**

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act of 1990, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities.
Qualified students with disabilities may be eligible to receive academic support services and accommodations. Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are responsible for requesting accommodations and providing qualifying documentation to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities.

Qualified students who wish to request an accommodation for a disability should contact their campus DRC.

Tempe Campus
http://www.asu.edu/studentaffairs/ed/drc/
480-965-1234 (Voice)
480-965-9000 (TTY)

Polytechnic Campus
http://www.asu.edu/studentaffairs/ed/drc/
480-727-1165 (Voice)
480-727-1009 (TTY)

West Campus
http://www.west.asu.edu/drc/
University Center Building (UCB), Room 130
602-543-8145 (Voice)

Downtown Phoenix Campus and ASU Online
http://campus.asu.edu/downtown/DRC
University Center Building, Suite 160
602-496-4321 (Voice)
602-496-0378 (TTY)

Technical Requirements & Support

Computer Requirements

This course requires a computer with Internet access and the following:

- A web browser (Chrome, Internet Explorer, Mozilla Firefox, or Safari)
- Adobe Acrobat Reader (free)
- Adobe Flash Player (free)
- Microphone (optional) and speaker

Technical Support

This course uses LearningStudio to deliver content. It can be accessed through MyASU at http://my.asu.edu or the LearningStudio home page at http://ecollege.asu.edu.

To monitor the status of campus networks and services, visit the System Health Portal at http://syshealth.asu.edu.

To contact the help desk you have two options:
chat/email: http://247support.custhelp.com/
call toll-free at 1-855-278-5080, option 3

Student Success

Student Success

This is an online course. To be successful:

- check the course daily
- read announcements
- read and respond to course email messages as needed
- complete assignments by the due dates specified
- communicate regularly with your instructor and peers
- create a study and/or assignment schedule to stay on track