## **COURSE SYLLABUS**

## **COURSE SPECIFICATIONS**

#### • What is the course title and number?

MAT265: Calculus for Engineers I SLN #41834

## • How many credits is the course?

You get three (3) credit hours for this course, even if you may think you should get more.

## • What are the prerequisites for this course?

MAT170 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 88 or higher (or ALEKS score of 67% or higher). Credit is allowed for only MAT265 or MAT 270.

#### • What will I learn in this course?

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.

#### • What is the textbook for this course?

Essential Calculus Early Transcendentals, 2nd Edition by James Stewart

- You can purchase a hard copy of the textbook and the access code for WebAssign as a bundle from the ASU bookstore, or
- you can purchase the e-book and code from <u>WebAssign</u> Our course key for WebAssign is asu 5450 9205 (WebAssign has a free trial period, but you will eventually need to purchase an account), or
- you can patch together an access code and/or book from an independent dealer.
  HOWEVER, IF YOU PLAN TO PURCHASE A USED TEXTBOOK FROM ANOTHER SOURCE THAT CONTAINS AN ACCESS CODE, MAKE SURE THAT THE CODE IS STILL ACTIVE.

## • Who is my instructor?

Hi! My name is Carla van de Sande, and I am a mathematics education professor at ASU. I've been at ASU since 2008, and teach both face-to-face and online engineering calculus courses. I've organized and structured the course to help you make sense of the content, as you learn and practice procedures that follow from the big ideas that make calculus so important. I'm excited about helping you experience calculus this session!

## IMPORTANT CONTACT INFORMATION

## • How can I contact my instructor?

You can contact me through email (carla.vandesande@asu.edu) or by phone (480-965-1877). \*\*\* In case of an urgent course situation, you can call or text me using my personal phone number (480-310-8633). \*\*\* Always email me from your ASU email account and put MAT265 in the subject line. Please realize that FERPA regulations prohibit me from discussing your grade via email. Always email me directly: Do not contact me through any communication tools found in the homework site or request extensions from the homework site.

## • What if I need technical help while I'm taking an exam?

Contact the ASU Help Center by phone 855-278-5080 or <u>live chat</u>. They are available to assist students 24/7, and will provide you with a case number which can be used for documentation purposes. If they are unable to assist you, they will escalate the issue to the proctoring company's (RPNow) support line.

## How can I monitor the status of campus networks and services?

Visit the **System Health Portal**.

#### • How can I get technical help for homework issues?

- o Information for how to get help is available on the student support web page
- o If you need to call them, the toll free phone number is 800.955.8275 The local phone number is 919.829.8181

## **REQUIRED RESOURCES**

## • What technology do I need to access the course?

A computer with Internet access

- o A web browser (<u>Chrome, Internet Explorer, Mozilla Firefox, or Safari</u>)
- o Adobe Acrobat Reader (free)
- o Adobe Flash Player (free)
- Microphone and speaker
- See <a href="http://clientportal.softwaresecure.com/support/index.php?/Knowledgebase/Article/View/252/0/system-requirements-remote-proctor-now">http://clientportal.softwaresecure.com/support/index.php?/Knowledgebase/Article/View/252/0/system-requirements-remote-proctor-now</a> for the technical requirements for taking exams

## What kind of graphing calculator can I use?

Highly recommended models are the TI-*n*spire & TI 83/84 or Casio 9850GB Plus. Calculators that do symbolic algebra, such as the Casio FX2, Casio 9970Gs, TI-89, TI-92, or TI-*n*spire CAS **cannot** be used during a quiz or test. <a href="https://www.desmos.com/calculator">https://www.desmos.com/calculator</a> is a nice online graphing calculator that you can use for homework...but not exams.

#### • What do I need to access the homework and exams?

Both the homework and exams are hosted at WebAssign

Exams are accessed through RPNow, a remote proctoring service.

#### • How much time do I need to commit to this course?

This is a challenging and fast-paced course, and you are packing in an entire semester's worth of content during this session. You will probably need to spend more than an hour daily learning and practicing the content. I've made a suggested calendar (found in Staying on Track) that lays out one possible study plan that spaces out the assignments and will guarantee you have a little wiggle room before hard deadlines. If you want to adjust it to fit your own schedule and study habits, it's in Powerpoint form so you can download it and move the assignment boxes around. (Just remember that you can't move the hard deadlines!)

## **COURSE STRUCTURE**

#### • How is the instructional material structured?

Each chapter of content has sections, and each section has two videos, labeled part one and part two. You are responsible for watching the two video presentations for each section. Each video is approximately 20 minutes in length. The powerpoint slides in pdf format accompany each video so that you can work the problems and take notes while watching the videos. Some sections also have short videos that target specific problems. If the system is slow, you can access the videos at <a href="https://vidman.asu.edu/">https://vidman.asu.edu/</a>

## • How is the homework structured?

- o There are three different types of homework assignments so that you get to see and practice key problem types at least 3 times (once in a short assignment, once in a section review, and once again in the chapter review) before each exam:
  - short assignments (about 2-6 problems on a single topic from a section. These have descriptive names so that you know what you are doing.),
  - section (mixed) reviews (problems from the section taken out of order),
    and
  - chapter reviews (problems from all of the sections in the chapter taken out of order).
- The assignments are gated. The first short assignment in each section is open. Then, you need to complete at least 50% of an assignment to open the next short assignment. To open the section reviews, you need to have completed at least 50% of each of the short assignments in that section. To open the chapter review, you must have completed at least 50% of each of the short assignments in the chapter. However, even though you can progress through the assignments by only doing 50% of each assignment, your homework grade is a function of how many of points earned.
- o I recommend that you do the short assignments with your notes open and use other resources for help. Then, you should try to do the section (mixed) reviews and the chapter reviews without help at first. Then go back and review whatever problems you were unable to solve.
- o Some of the problems in the short assignments are not worth any points. These are the problems where you are walked through the solution step-by-step. If the assignment checklist has a "\*" next to the assignment, it means that it contains a problem of this type. Although these problems are not worth points, you should still use them if you need to be guided through a solution.

# DUE DATES AND DEADLINE POLICY (all times are Arizona MST)

#### • What are the due dates?

#### **Chapter 1: Limits and Continuity**

- Tuesday, May 22 at 11:59pm: All Chapter 1 Homework (short and section mixed reviews) due
- Tuesday, May 22 at 11:59pm: Chapter 1 Review due
- Tuesday, May 22 at 11:59pm: Chapter 1 Exam Due

#### Chapter 2: Derivatives (2.1 - 2.4)

- Sunday, May 27 at 11:59pm: Chapter 2.1-2.4 Homework (short and section mixed reviews) due
- o Sunday, May 27 at 11:59pm: Chapter 2 Review 1 due

#### Chapter 2: Derivatives (2.5 - 2.8)

- Monday, June 4 at 11:59pm: Chapter 2.5-2.8 Homework (short and section mixed reviews) due
- Monday, June 4 at 11:59pm: Chapter 2 Review 2 due
- Monday, June 4 at 11:59pm: Chapter 2 Exam Due

#### **Derivatives Mastery**

- Sunday, June 10 at 11:59pm: Mastery Exam Review Part 1 and Part
  2 Due
- Sunday, June 10 at 11:59pm: Mastery Exam Due

#### **Chapter 3: Inverse Functions**

- Wednesday, June 13 at 11:59pm: All Chapter 3 Homework (short and section mixed reviews) due
- Wednesday, June 13 at 11:59pm: Chapter 3 Review due
- Wednesday, June 13 at 11:59pm: Chapter 3 Exam Due

#### Derivatives Mastery Exam Two (=Mastery Exam Redo) If Required

• Sunday, June 17 at 11:59pm: Mastery Exam Two (if required) Due

#### **Chapter 4: Applications of Differentiation**

- Thursday, June 21 at 11:59pm: All Chapter 4 Homework (short and section mixed reviews) due
- Thursday, June 21 at 11:59pm: Chapter 4 Review due
- o Thursday, June 21 at 11:59pm: Chapter 4 Exam Due

#### **Chapter 5: Integrals**

- Wednesday, June 27 at 11:59pm: All Chapter 5 Homework (short and section mixed reviews) due
- Wednesday, June 27 at 11:59pm: Chapter 5 Review due
- THERE IS NO CHAPTER 5 EXAM, but the content will be covered on the final exam

#### **Final**

- o Wednesday, June 27 at 11:59pm: Final Exam Review Due
- Wednesday, June 27 at 11:59pm: Final Exam Due

#### • What if I miss a deadline?

Because answers become available after the due dates, the instructor cannot grant extensions on any assignments or exams. Therefore, 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 <u>accomodation for religious practice</u> or to accommodate a missed assignment <u>due to University-sanctioned activities</u>

## How can I plan my work so that I don't miss deadlines?

- o I've created a suggest calender (found in Staying on Track) that you can follow to make sure you get assignments done and have some wiggle room before hard deadlines. It's in Powerpoint form so you can shift assignments to alternative days to fit your own study habits. Remember that it isn't a good idea to have so many assignments due on a single day that they don't even fit on the calendar day box, and you can't shift around the ribbons that represent official deadlines (e.g., when all chapter work is due)!
- Also there is an Assignment Checklist (found in Staying on Track) that lists all of the assignments and the number of problems in each. You can use this to check off the assignments as you do them.

## **COURSE GRADES**

• What are the letter grades for this course?

A: 90% and above

o B: 80%-89%

o C: 70%-79%

o D: 60%-69%

o E: below 60%

### How is my course grade determined?

Small homework assignments: 10% all together

Section mixed reviews: 5% all together

o Chapter reviews: 10% all together

• Chapter Exams: 10% each x = 40%

Mastery Exam: 5%Final Exam: 30%

Note: All homework, reviews, and exams are graded by points earned.

Enter your grades into the spreadsheet (found in Staying on Track) to calculate and project your course grade after each exam.

## • Where are my grades posted?

Your scores can be accessed on <u>WebAssign</u> as you complete assignments and exams. I will post your exam and current homework scores on BlackBoard shortly after official due dates.

## **TAKING EXAMS**

#### • How do I access the course exams?

All exams are remotely proctored through RPNow which you access through the Exam Information link on our BlackBoard. The company RPNow will record you through your computer camera and microphone when you take each exam. When you are ready to take an exam, you will start the process of installing the software, testing your microphone, showing your photo ID, and showing the room in which you are taking the exam. After this "interview," you will take the exam in WebAssign. You do not need to know/type in the password since RPNow will fill in the password for you.

#### • What are the exam rules?

- You will need an ASU ID to take exams. Follow this link <a href="https://cfo.asu.edu/cardservices">https://cfo.asu.edu/cardservices</a> and click on Online and Extended-Campus students to get your ID.
- You will have 120 minutes for each chapter exam and for the mastery exam. You will have 180 minutes for the final exam.

- Unlike the homework assignments, you will **not** have multiple attempts on the exams.
- All exams are closed book and closed notes, and you will need to install a lock down browser before you take an exam.
- You must write down your solutions and answers on paper. The instructor may ask you to submit solutions periodically and without advance notice.
- You will be allowed to use an approved graphing calculator on the exams. (See REQUIRED RESOURCES.)

## THE MASTERY EXAM

## What is the Mastery Exam?

The Mastery Exam tests your ability to differentiate functions. You will be asked to take the derivative of 20 functions using the rules that you have learned.

## How is the Mastery Exam graded?

You have two chances to take the Mastery Exam.

- o If you score 85% or higher on the first time you take the Mastery Exam, you will receive a score of 100% in the gradebook, and you do not need to retake the exam.
- o If you score less than 85% the first time you take the Mastery Exam, you must take Mastery Exam Two within the next week. The score for this second time is capped at 85%, meaning that, even if you score 85% or higher, you will only receive a score of 85% in the gradebook. If you score less than 85% the second time you take the exam, you will receive 85% of your score in the gradebook.
- SO, IF YOU SCORE 85% OR BETTER ON THE MASTERY EXAM, YOU DO NOT HAVE TO TAKE MASTERY EXAM TWO...JUST IGNORE IT!

## HELP

## • How do I get math help in this course?

- Connect to our course forum, Connect to Piazza You can post math questions to a chapter folder on Piazza. The forum will allow you to get help from your instructor, the instructor's assistant, and other students. There is also a link to Piazza on our course BlackBoard in the area, Piazza=ASK MATH QUESTIONS. Do not use Piazza for personal messages. (such as grade discussions, illness, DRC accommodation, etc...)
  - When you post a problem on Piazza, put it in the appropriate folder ("Chapter x").

- The title of your post should be the chapter and section and number of the problem in the homework. For instance, 1.3 #2
- Since everyone has similar but not identical problems, make sure that you describe or screenshot the problem statement!

Recently, the company added a Piazza Careers service. This is something that you may choose to add to your Piazza account, but IS NOT REQUIRED for this course. You should carefully read the privacy sections from the <u>Piazza Terms of Service</u> before opting into the service.

For additional problems, you can use the WebWork system found at <a href="https://webwork.asu.edu/">https://webwork.asu.edu/</a> This is only for additional practice and will not affect your homework grade.

#### • How do I get help on non-math course-related issues?

- o There is folder on our course forum, <u>Piazza</u>, where you can post non-math but course-related issues.
- You can use email. For communicating via email, ASU email is the 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.
- Students who require disability accommodations in this course should be registered with the Disability Resource Center (DRC). The DRC Tempe office is located on the first floor of the Matthews Center Building. DRC staff can also be reached at: (480) 965-1234(V) or (480) 965-9000(TTY). For additional information, visit <u>Student Affairs</u>

## STUDENT BEHAVIOR

## • How am I expected to behave online?

You are expected to be polite to the instructor and other students. Any inappropriate or rude posts on the course forum will be subject to sanctions. You should also be patient, knowing that the instructor and the instructor's assistant cannot always respond immediately to your communications or requests for help.

## • What is ASU's policy on threatening behavior?

All incidents and allegations of violent or threatening conduct by an ASU student (whether on-or off campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. If either office determines that the behavior poses or has posed a serious threat to personal safety or to the welfare of the campus, the

student will not be permitted to return to campus or reside in any ASU residence hall until an appropriate threat assessment has been completed and, if necessary, conditions for return are imposed. ASU PD, the Office of the Dean of Students, and other appropriate offices will coordinate the assessment in light of the relevant circumstances. (Student Services Manual SSM 104-02 "Handling Disruptive, Threatening, or Violent Individuals on Campus")

## • What is ASU's policy on discrimination?

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <a href="https://sexualviolenceprevention.asu.edu/fags">https://sexualviolenceprevention.asu.edu/fags</a>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <a href="https://eoss.asu.edu/counseling">https://eoss.asu.edu/counseling</a>, is available if you wish discuss any concerns confidentially and privately.

## • What is ASU's position on academic integrity?

Academic honesty is expected of all students in all examinations, papers, and laboratory work, academic transactions, and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see <u>ASU Academic Integrity</u>

## **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.