

# MAT 266

# Summer B 2018

## MAT 266 Calculus for Engineers II

Class #: 42945

TWTh 6:10 - 8:15 PM

Room: WXL R A302

**Note:** The syllabus is tentative and should not be considered definitive. The instructor reserves the right to modify it (including the dates of the tests) to meet the needs of the class. It is the student's responsibility to attend class regularly and to make note of any change. The Instructor also reserves the right to change class policies.

Revised June 25, 2018.

**Instructor:** Jennifer Elder      **Office:** WXL R 746 Located in the "tower" portion of the building.

**Email:** [Jennifer.E.Elder@asu.edu](mailto:Jennifer.E.Elder@asu.edu)

**Office Hours:** TWTh 5:30 - 6 pm and by appointment

**Course Materials:** You *must* have the textbook listed below.

NOTE: Access code is **NOT required**; you are not required to do anything in We-bassign.

- Hard back text: Essential Calculus, Early Transcendentals, 2nd Edition, by James Stewart (Brooks/Cole) ASU edition available in the bookstore.
- Access to the web; most of the homework is online. <https://webwork.asu.edu/> under MAT 266 and Elder.

**Prerequisites:** \*MAT 265 - Calculus for Engineers I with grade C or better or equivalent.

**Do not expect prerequisite materials to be covered in the class.** If you are having a problem with the prerequisites, you may either see me in my office during my office hours, or go to a tutor center on campus for help. **You are particularly expected to be fluent with intermediate algebra and trigonometry.**

### Class Expectations

- Come to class on time daily with notes, paper, writing implement, and a calculator.
- Ask questions or come to office hours if you'd like further explanation or examples.
- Review your notes daily to prepare for quizzes and upcoming tests.
- Read the text in advance to prepare for the next day's new material.
- Leave cell phones or other electronics off and put away while in the classroom.

### Recommended Resources

- Khan Academy is an excellent resource if you are not available during office hours or tutoring center hours. Signing up is free.
- The Calculus Lifesaver: All the Tools You Need to Excel at Calculus (Princeton Lifesaver Study Guides) by Adrian Banner. Contains hundreds of problems from Calculus 1 and 2.
- The Humongous Book of Calculus Problems by W. Michael Kelley. Even more problems for Calculus 1 and 2.

## Tentative Syllabus:

Topics covered: Chapters 5–9 (but skip sections 7.6, 8.3, and 8.8. Sections 5.1–5.4 are review)

Test Dates	
Test 1	Thur. 7/12; location - Class
Test 2	Wed. 7/25; location - Class
Test 3	Thur. 8/2; location - Class
Final	Thur. 8/9, 6:10 to 8:15PM; location - Class

- Chapter 5:
  - 5.5 Substitution in integrals
- Chapter 6:
  - 6.1 Integration by parts
  - 6.2 Trig integrals and substitutions
  - 6.3 Partial fractions
  - 6.4 Integral tables
  - 6.5 Approximate integration
  - 6.6 Improper integrals
- Chapter 7:
  - 7.1 Area
  - 7.2 Volume
  - 7.3 Volume by cylindrical shells
  - 7.4 Arc length
  - 7.6 Work
- Chapter 8:
  - 8.1 Sequences
  - 8.2 Series
  - 8.4 Convergence tests
  - 8.5 Power series
  - 8.6 Representing functions as power series
  - 8.7 Taylor and Maclaurin series
- Chapter 9:
  - 9.1 Parametric curves
  - 9.2 Calculus with parametric curves
  - 9.3 Polar coordinates
  - 9.4 Area and length in polar coordinates

**All internet-capable devices must be turned off and be made inaccessible during all exams. Anyone who access such a device during an exam for any reason will receive a score of 0 for that exam and possible further disciplinary measures.**

### Grading Rubric:

Grade Allocations	
Tests	50%
Homeworks	25%
Final Exam	25%
Total	100%

Grade Assignment	
A	90%+
B	80% - 89.99%
C	70% - 79.99%
D	60% - 69.99%
E	<60%

**Email:** All email is to be sent using your ASU email address following proper email etiquette.

**Homework:** Homework problems will be online via WeBWorK, <https://webwork.asu.edu>. Due dates appear on WeBWorK. [Extensions are not granted for ANY reason; for this reason, your 3 lowest homework scores are dropped.](#)

Additional homework may be assigned to be turned in on paper at the start of a class. The assignment will be announced in class, along with due date. Again, no extensions will be granted for any reason.

**Attendance Policy:** Students who exceed the number of allowed absences will receive a grade of E. An absence is an absence no matter whether it is excused or not. Students who are late to class or who leave early are counted absent. This class will be very fast paced, and missing even one day can set you back. For this reason, [the maximum allowable number of absences is 2.](#)

**Absences related to religious observances/practices or to university-sanctioned events and activities:** If you will be absent from class due to a religious observance or practice or university-sanctioned events and activities, it is your responsibility to inform the instructor ahead. Your instructor will work with you on alternative and reasonable arrangements for any time missed.

**Technology:** Unless your instructor has given permission, you may not use your personal technology in the classroom. This means cell phones, tablets, and personal computers are put away. In all cases, cell phones must be *turned off at all times* in the classroom. Violation of this policy results in your being dropped from the class, no further warnings will be given. Graphing Calculator: A graphing calculator is recommended for this course. Examples of highly recommended models are the TI-nspire, TI 83/84 or Casio 9850GB Plus. Calculators that do symbolic algebra, such as the Casio FX2, Casio 9970Gs, TI-89, I am Groot, TI-92, or TI-nspire CAS cannot be used during an exam for which calculator use is allowed.

**Exams:** There will be three midterms, one mastery exam and one final exam given during the semester. Exams are usually given in your class on the date indicted elsewhere in this syllabus. No calculators will be allowed on exams. You will be required to show a picture ID in which you are clearly recognizable in the picture (i.e. no faded out pictures or extremely old IDs will be accepted); failure to have your picture ID for an exam will result in no score. Makeup exams are given at the

discretion of the instructor and only in the case of *verified* medical or other emergency, which *must* be documented. The instructor must be notified *before* the test is given. Call the Math Department Office (480-965-3951) and leave a message or directly notify your instructor.

### Important Dates:

Add/Drop Deadline .....	July 2
Fourth of July – NO CLASSES .....	July 4
First Test .....	July 12
Course Withdrawal Deadline .....	July 19
Second Test .....	July 25
Third Test .....	August 2
Complete Withdrawal Deadline .....	August 9

Note: It is the student's responsibility to verify that (s)he  
has in fact withdrawn from the class.

Course Final ..... August 9

**Extra Help:** Do not hesitate to come to my office during office hours or by appointment to discuss a homework problem or any aspect of the course.

You can also seek free help:

- Tutor Center: The Math Tutor Center in PSA116 (free of charge). See the website for information on hours.  
(<http://math.asu.edu/fym/TutorCenter/TutorCenter.html>)
- The LSS, <http://www.asu.edu/studentaffairs/lss/> provides counseling, tutoring in math (and many other subjects), supplemental instruction, and other types of support to students. LRC resources are available in many residence halls and in the Memorial Union, Room 14. See the LRC web page for further information.
- Engineering Tutor Center in ECF 102. See the website for information on hours.  
([http://www.fulton.asu.edu/fulton/students/sas/tutoring\\_center.php](http://www.fulton.asu.edu/fulton/students/sas/tutoring_center.php))

**Disability Accommodation:** You *must* schedule an appointment to see me or come during office hours if you have a disability that will require accommodations in this class. This must be done as early as possible. Note: To qualify for disability accommodations at ASU, students must qualify for services through the Disability Resource Center (DRC), which is located on the 1st floor of the Matthews Center Building. 480.965.1234 (V), 480.965.9000 (TTY). Please complete this process as soon as possible.

**Academic Integrity Statement:** Academic honesty is expected of all students in all examinations, papers, 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 <http://provost.asu.edu/academicintegrity>.

## SoMSS and University Policies and Procedures

For semester deadlines related to enrollment, withdrawal or payments, see the academic calendar available at <http://students.asu.edu/academic-calendar>

**The grade of Incomplete:** A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents the student who is doing acceptable work (C or better) from completing a small percentage of the course requirements. (I use no more than 15% of the work remaining, including the final.) The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed.

**Instructor-Initiated Drop:** At the instructor's discretion, any student who has not attended class during the first week of classes may be administratively dropped from the course. However, students should be aware that non-attendance would NOT automatically result in being dropped from the course. Thus, a student should not assume they are no longer registered for a course simply because they did not attend class during the first week. It is the student's responsibility to be aware of their registration status.

**Final Exam Make-up Policy:** The final exam schedule listed in the Schedule of Classes will be strictly followed. Except to resolve those situations described below, no changes may be made in this schedule without prior approval of the Dean of the college in which the course is offered.

1. religious conflict (e.g., the student celebrates the Sabbath on Saturday)
2. the student has more than three exams scheduled on the same day as the math final
3. there is a time conflict between the math final and another final exam.

Make-up exams will NOT be given for reasons of a non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule before making end-of-semester travel plans. The Dean of the students college must approve any exceptions to these rules.

**The grade of EN:** A grade of EN is reserved for "failure due to excessive absences." The grade goes on the student's transcript.

See the Student Academic Integrity Policy at the following web address:  
<http://provost.asu.edu/academicintegrity>

**ACADEMIC DISHONESTY!:** In the Student Academic Integrity Policy manual, ASU defines Plagiarism [as] using another's words, ideas, materials or work without properly acknowledging and documenting the source. Students are responsible for knowing the rules governing the use of another's work or materials and for acknowledging and documenting the source appropriately. You can find this definition at: <http://provost.asu.edu/academicintegrity>. Academic dishonesty, including inappropriate collaboration, will not be tolerated. There are severe sanctions for cheating, plagiarizing and any other form of dishonesty.