

Calculus III – Spring Semester 2016

Section 5 Syllabus

TR 2:00 – 3:15 LSE 113

Instructor: Dr. Anthony Kable
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Basic Information

The textbook is the 2nd edition of *Calculus: Early Transcendentals* by Jon Rogawski. We shall cover much of Chapter 12 (Vector Geometry), Chapter 13 (Calculus of Vector-Valued Functions), Chapter 14 (Differentiation in Several Variables), Chapter 15 (Multiple Integration), and Chapter 16 (Line and Surface Integrals).

We are required to use the WebAssign system for some homework. You will need to self-enroll online at <https://www.webassign.net/login.html> using the class key **okstate 6306 3484**.

To succeed in Calculus III, it is essential that you be able to evaluate derivatives and elementary integrals quickly and accurately. These are the main skills that you will need to bring from your previous calculus classes. Algebra and Trigonometry will also play an important role. In particular, you may wish to review techniques for solving systems of several equations in several variables before we reach the end of Chapter 14. Good skills at visualizing objects in three dimensions and the relationships between them will be helpful in Chapter 12 and in Chapter 15.

Most students find Calculus III to be easier than Calculus II, but it does have its own challenges. The syllabus is even more overstuffed than the Calculus II syllabus. This means that you must work through the textbook on your own, because I will definitely not have time to cover every topic in every section in class. Of course, you should attend class regularly, work hard at understanding the material, and seek help when you need it to avoid getting behind.

Grades

Your grade in this class will be based on your performance on three preliminary exams, a final exam, WebAssign homework, and in-class quizzes. The weights of these categories are as follows:

PRELIMINARY EXAMS	15% EACH
FINAL EXAM	25%
HOMEWORK	18%
QUIZZES	12%

The dates of the preliminary exams and quizzes are shown on the course schedule. The final exam will be held in LSE 113 on Tuesday, May 3, from 2:00 – 3:50. There will be ten quizzes in class; the quiz score will be based on the best six of these. There will be twenty-six homework assignments; the homework score will be based on the best twenty-one of these.

A total score of at least 90% will ensure an A, a score of at least 80% will ensure at least a B, a score of at least 70% will ensure at least a C, and a score of at least 60% will ensure at least a D.

Calculators and Other Technology

You will require a scientific or graphing calculator for this class, and will be permitted to use this calculator during quizzes and exams. The Mathematics Department has graphing calculators available for check out to students who are enrolled in mathematics courses. You will not be permitted to use any device that can establish a connection to a cellular or wireless network during quizzes and exams. This means, for example, that you cannot use a cellphone calculator app or a tablet computer at these times.

What I'm Looking for When I Read Your Work

Part of my job in this class is to give you feedback to assist you in making progress. Another part is to assess your knowledge and skills so that I can eventually assign you a grade. I'm not interested in the final answers to the problems; I can already solve them for myself. What I'm interested in is how you arrived at your answer and whether that process demonstrates a sound grasp of the skills that you are supposed to have and an accurate understanding of the underlying concepts. If these things are taken care of then the final answer will be correct as a matter of course. Consequently, always show your work in sufficient detail that I can find what I'm looking for, and don't try asking for more credit because "the answer is right!" Think about what you're writing and make sure that you really mean it. Don't, for example, use the symbol "=" to mean "and the next step is." That symbol means several things – "is equal to," "should be equal to," "is defined as" – and you should only use it when you mean one of those things. To express things that don't fit easily into formulas, consider using words, sentences even, as well as pictures, tables, and whatever else seems likely to be effective.

Missed Work

The Mathematics Department suggests a policy on missed work, which I shall be following in this class. Here it is in full:

- (A) Every student shall be offered reasonable accommodation in the event that he or she misses a major assessment activity for a valid and documented reason.
- (B) Appropriate documentation shall be provided by the student in a timely fashion to support his or her request for accommodation.
- (C) Major assessment activities are those such that a zero on that activity could reasonably be foreseen to impact the student's grade substantially; this category

includes, but is not limited to, exams.

(D) Valid reasons include official University activities, activities associated with military service, illness, family emergencies, mandatory court appearances, and any other events of comparable gravity.

(E) Reasonable accommodation means that the student will be given the opportunity to earn a grade on the assessment activity that is based on criteria as similar as possible to those used to grade his or her classmates. This opportunity should normally be made available in a timely fashion.

What all this means is that if you have to miss a quiz or exam for a *serious* reason, *and you are able to provide acceptable documentation verifying that reason*, then you will be allowed to make up the missed work. If you have a scheduled University activity then it is normally best to do this beforehand. I try to be flexible and fair, so if you encounter an unusual circumstance then it is worth at least asking about make-up work, although I might say no.

D2L and Email

I use OSU's online classroom (D2L) to post important information about the class. I suggest that you add a little basic information to your D2L profile, particularly if you are interested in studying with other students in the class. I use email to contact individual students and the class as a whole. This means that you must check your OSU email regularly. If you prefer to use another email address then you should arrange to have your OSU email forwarded to that address.

Miscellaneous Information

You should read the syllabus attachment for Spring 2016, which I shall post on D2L. This is a document that outlines some of the general academic policies of the University, as well as listing important dates. You are subject to the University's policy on academic integrity. Information about this policy may be reached from the Division of Academic Affairs web page at <http://academicaffairs.okstate.edu>.