

**Syllabus
Calculus II
Math 201 Section 591
Summer 2013**

Class Times Distance Learning Class

Classroom Virtual

Instructors Phil Chesson, Russ Frith

Class Lecture Notes: Lecture notes may be found at <http://rfrith.uaa.alaska.edu/M201/Calculus.html> . Blackboard will be used for posting grades.

Office Hours :

Russ Frith :

8:30PM, Tuesdays and Thursdays, Eagle River High School (Ask attendant); or by appointment

Email rfrith@uaa.alaska.edu

Phone Russ Frith: 223-9657

Tutors Tutoring is available in the CERC Tutoring Lab. Schedule posted in the tutoring lab.

Textbook *Calculus Early Transcendentals* 7th edition by James Stewart (required)
WebAssign-textbook online service (required)

Computational Devices

You will benefit from the use of various computational devices in and out of the classroom.

Calculators

Graphing calculators including apps on phones and laptops will be useful for exploration and checking computations.

Computer Algebra Systems

You will be required to use a computer algebra system for some assignments. The Mathematical Sciences department provides Mathematica in the Math Tutoring Lab (SSB 156). Students may use any system to which they have access though support may be limited.

Web Access

You may find it useful to have a laptop or other device in class for accessing web pages, displaying pdf files, and using Wolfram Alpha.

Prerequisites You need to be able to use algebra and trigonometric techniques easily, and you need to be able to quickly calculate derivatives and basic anti-derivatives from Calculus I.

Topics The course covers integration techniques, sequences, series, alternate representations, and some applications.

Goals By the end of the appropriate section you should

- be able to evaluate a variety of integrals using standard integration techniques,
- be able to solve applied problems using integration techniques,
- be familiar with the fundamental tests of convergence of infinite series,
- be able to manipulate infinite series and sequences, and
- be able to parameterize curves and graph well known curves using polar coordinates.

Daily Lesson

Purpose

The lesson is the source of new material. By completing the assigned problems you will learn new topics.

Assignment

Complete the assigned problems from the problem set found online on Blackboard or at <http://rfrith.uaa.alaska.edu/M201/Calculus.html>. Note you may work with other students and ask questions of the instructor when working on the lesson.

Due

Assigned problems must be completed before the class in which they are due.

Feedback

Questions on lessons will be addressed via email or conference calls, visits

Grading

See class time below

Daily Homework

Purpose

Problems from the textbook provided through Web Assign provide the opportunity to practice skills. Be aware that most text book problems emphasize mechanical skills rather than understanding. As such they are not representative of test questions.

Assignment

Complete the problems on [Web Assign](#). Questions on practice problems can be asked during office hours or by tutors.

Due

Due dates are listed in Web Assign.

Feedback

Web Assign will indicate whether your solutions are correct.

Exams

Purpose

Exams provide you with an opportunity to demonstrate your mastery of mechanical skills and your understanding of the concepts. The latter are weighted more heavily in the grading. Exams will be given on the dates specified on Blackboard or at <http://rfrith.uaa.alaska.edu/M201/Calculus.html>.

Assignment

Feedback

If incorrect, the first, major wrong step in a problem will be noted with a note about the correct step if possible. Grading symbols, explained online, will be used to identify error types. Full solutions will be provided in a posted answer key.

Grading

Your work will be graded for accuracy and presentation.

Projects

Purpose

Projects require using learned skills to solve large problems. They often require extrapolating from what you know to discover something new. This mimics actual use of mathematics in life and therefore meets the goals of the course.

Assignment

The projects can be found on Blackboard or at <http://rfrith.uaa.alaska.edu/M201/Calculus.html>.

Due

Projects will be collected initially on the dates specified online. Resubmissions of projects can be submitted with homework during any class prior to the beginning of exams.

Feedback

Incorrect problems will be explained as on homework. Essays will be returned with verbal comments on how to improve the writing and on any misconceptions.

Grading

Your work will be graded for accuracy and presentation. Writing project criteria are posted online http://rfrith.uaa.alaska.edu/M201/writing_criteria.html Projects may be resubmitted. The grade will be 100% of earned for the first submission, 90% for the second submission, and 80% for the third submission.

Grading

Your grades will reflect your ability to perform the tasks outlined in the goals and to clearly explain how you accomplished the tasks. Because understanding is more important than producing results, steps in a solution are more important than the result. Specific criteria are provided above and with individual assignments as required.

Assessments

- Lesson and Homework 10%
- Projects 10%
- Exams 10% x 6
- Final Exam 20%

The final exam will be on the last class day of the semester.

Scale

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|---|--------|
| A | 90-100 |
| B | 80-89 |
| C | 70-79 |
| D | 60-69 |
| F | 0-59 |

Grades of C or higher indicate preparedness to progress to courses for which this is a prerequisite. A grade of B or higher indicates an ability to explain procedures. A grade of A indicates the ability to extrapolate from these skills to solve related problems.

Academic Expectations

Lessons: If you do not understand any part of a lesson or an assignment, please ask for assistance before the assignment is due. You must provide a specific description of the difficulty: instructors cannot read your mind.

Instructions: If you do not understand any instruction or a question, please ask before the work is due. An assignment may be submitted only once, except for projects.

Corrections: If you discover a mistake in any graded work, please bring it to the attention of the instructor as soon as possible.

Incomplete assignments: Lessons, homework, and quizzes not turned in on time receive no credit.

DSS If you have a certified learning disability, please inform the instructor so that the university sanctioned assistance can be provided.