## Course Syllabus

Instructor: Alan Sola

Email: asola@math.okstate.edu

Phone: 744-5787

Webpage: www.math.okstate.edu/~asola

Office Hours: Mondays 4-6 p.m. & Wednesdays 9-11 a.m.

Meeting day and time: Mondays, Wednesdays & Fridays 2:30-3:20 p.m.

Location: Engineering South 302

Required text: Calculus (Early Transcendentals) by James Stewart, 6th edition (customized for OSU).

### OSU Catalog Description

(A) Calculus II. Prerequisites: 2144. A continuation of 2144, including series and their applications, elementary geometry of three dimensions and introductory calculus of vector functions.

#### Examinations

I will give three one hour examinations, so-called Midterms, with a maximum possible score of 100 points each, and a 200 point comprehensive Final Examination, which will be recorded twice, during Finals Week. Please see the course schedule for exact dates.

I will give make-up examinations only in the case of **very serious and unavoidable conflicts**, and **only** if a request for a make-up examination is approved in advance. You must also present proof of the reasons for your absence. If these conditions are not satisfied, a make-up examination will not be given.

#### Homework

Homework will be posted online via the WebAssign system. Please enroll into our section using the class key okstate 2199 4398.

You need to complete and submit each homework before the due date. I will try to remind you periodically about approaching deadlines, but it is ultimately your own responsibility to hand in homework on time. Late work will not be accepted.

### Attendance and participation

Class attendance, and more importantly active participation, is an essential element in learning calculus. I strongly encourage you to participate in each class session.

Do not hesitate to ask questions if something is unclear, if you cannot follow an argument, or if you feel that you have spotted a mistake on the blackboard. This will usually be highly appreciated by your instructor, as well as your classmates. I advise you not to wait too long to resolve any difficulties you may have with the material; mathematics is a cumulative subjects, where a concept often builds on earlier ideas.

Also, I will communicate any changes to this syllabus to you in class.

#### Calculators

A calculator is not required for the course, but you may of course use one if you like. TI-83 and TI-83 plus model calculators can be checked out from the Department of Mathematics front office (MSCS 401) free of charge.

No calculators are allowed on the examinations.

### Grading

I will base your final grade for the course on the following scheme.

		Grade	i ercemage reeded
Homework	100 points	A	90-100%
Midterm 1	100 points	В	80-89%
Midterm 2	100 points	C	70-79%
Midterm 3	100 points	D	60-69%
Final	200 points	F	59% and lower

Final grades will not be curved. I reserve the right to use some discretion in borderline cases, based on my subjective judgment of your effort and performance.

### Help

I really encourage you to see me during my office hours; further consultations will be possible by appointment.

It is often helpful to discuss the course material with other students, and to try to explain difficult concepts to each other. Note, however, that any work you submit must be your own, as per OSU Academic Integrity policy. Further help is available from through the Mathematics Learning Resource Center (MLRC), see <a href="http://www.math.okstate.edu/mlrc/">http://www.math.okstate.edu/mlrc/</a>. The Center is an invaluable resource to support your mathematical learning and I encourage you to go there regularly. Please visit the MLRC webpage for up-to-date information on tutoring hours for Spring 2011.

The MLRC is located on the fourth floor of the Classroom building; please check in for tutoring in 420 CLB.

#### Feedback

I would greatly appreciate your feedback, whether communicated in class, during office hours, or via email.

## University-wide Policy

The policies stated herein are specific to this class. For the full OSU guidelines on matters such as withdrawal from courses, academic integrity and student disabilities, please refer to the University Syllabus Attachment, to be found at <a href="http://osu.okstate.edu/acadaffr/aa/syllabusattachment-Spr.htm">http://osu.okstate.edu/acadaffr/aa/syllabusattachment-Spr.htm</a>.

Please review the Syllabus Attachment carefully.

# Course Schedule

Monday 1/10	Preliminaries.		
	7.1 Integration by parts.		
Wednesday 1/12	7.1 Integration by parts.		
- ,	7.2 Trigonometric integrals.		
Friday 1/14	7.2 Trigonometric integrals.		
Wednesday 1/19	7.3 Trigonometric substitutions.	Monday 3/21	11.8 Power series.
Friday 1/21	7.3 Trigonometric substitutions.	Wednesday 3/23	11.8 Power series.
Monday 1/24	7.4 Integration of rational fcns.	Friday $3/25$	11.9 Representation of fcns.
Wednesday 1/26	7.4 Integration of rational fcns.	Monday $3/28$	11.10 Taylor and Maclaurin series.
Friday 1/28	7.5 Strategies.	Wednesday 3/30	11.10 Taylor and Maclaurin series.
Monday 1/31	7.8 Improper integrals.	Friday $4/1$	Review of Chapter 11.
Wednesday 2/2	7.8 Improper integrals.	Monday $4/4$	10.1 Curves and parametric eqns.
Friday $2/4$	Midterm review.	Wednesday 4/6	10.2 Parametric curves.
0 1		Friday 4/8	10.2 Parametric curves.
Monday $2/7$	Midterm 1.	:	10.3 Polar coordinates.
		Monday $4/11$	10.3 Polar coordinates.
Wednesday 2/9	8.1 Arc length.	Wednesday $4/13$	Midterm review.
Friday 2/11	8.2 Surfaces of revolution.		
Monday 2/14	8.3 Applications.	Friday $4/15$	Midterm 3.
Wednesday 2/16	Review of chapter 8.		
Friday 2/18	11.1 Sequences.	Monday $4/18$	10.4 Area and length.
Monday 2/21	11.1 Sequences.	Wednesday $4/20$	10.5 Conic sections.
<i>V</i> /	11.2 Series.	Friday $4/22$	10.5 Conic sections.
Wednesday 2/23	11.2 Series.	Monday $4/25$	Review of Chapter 10.
Friday 2/25	11.3 The integral test.	Wednesday $4/27$	Final review.
Monday 2/28	11.4 The comparison test.	Friday $4/29$	Final review.
Wednesday 3/2	11.5 Alternating series.		
Friday 3/4	11.6 Absolute convergence,	5/6	Final exam.
· ,	ratio and root tests.		
Monday 3/7	11.7 Strategies.		
Wednesday 3/9	Midterm review.		
<u> </u>			
Friday $3/11$	Midterm 2.		

This is a preliminary schedule that may be adjusted as the term progresses. I will let you know about any substantial changes in class.