## **Calculus II**

# MATH 2153-003

Time and Place: MWF 9:30-10:20 a.m. in PS 355 Professor: Igor E. Pritsker Office: MSCS 524 Office Hours: MWF 10:30-11:30 Office Phone: 744-8220 E-mail: igor@math.okstate.edu Web: http://www.math.okstate.edu/~igor/math2153/math2153\_spring2011.html Textbook: Calculus (Early Transcendentals) by J. Stewart, 6th ed. (customized for OSU)

Grading: We have three semester tests and the Final Exam. The break up of your course grade is as follows:

Tests 1-3	60% (20% each)					
Homework	15%					
Final Exam	25%					
Your grade will be determined according to the scale						
А	90-100					
В	80-89					
С	70-79					
D	60-69					
F	59 and lower					
D F	60-69 59 and lower					

Note that the above numbers are percentages of the highest possible score in the course.

Attendance is mandatory in this class.

**Homework** will be given online via WebAssign system. Please enroll into our WebAssign section using the Class Key **okstate 3208 1000**. You must complete each homework assignment and submit it before the due date. **Late work will not be accepted.** 

### <u>WebAssign page</u> <u>WebAssign guides and tutorials</u>

<u>MLRC</u> stands for the Mathematics Learning Resource Center located on the 4th floor of classroom building. You can receive invaluable tutoring help at MLRC.

#### **Recommended Learning Method:**

- Before we start any section, read it in the textbook. Keep a list of questions you encounter while studying.
- When we cover this material in class, ask me any prepared or unprepared question and resolve any difficulty you might have had.
- Start working on the assigned homework immediately after we covered the necessary topics. It is

helpful to read the text again before doing your homework, and in case you have difficulties with a problem.

• Write down a detailed solution of every problem. Use tutorial assistance at MLRC and/or come to my office hours if needed.

**Make-up Exams** are given only in cases of serious illness or extreme emergency that prevents you from taking a test at the specified time. You have to contact me before the test and communicate all circumstances. Furthermore, you must appear in person, with supporting documents, to discuss the situation as soon as possible.

**Calculator:** A graphing calculator is not required, but may be used at your preference. You can check out TI-83 or TI-83 Plus from the Department of Mathematics (MSCS 401) free of charge. However, no calculator is allowed on examinations.

<u>University Syllabus Attachment:</u> Contains drop deadlines and procedures, as well as many other important dates and university policies.

		Schedule				
Week	Date	Sec	Page	Торіс		
1	M, Jan 10	7.1	453	Integration by Parts		
	W, Jan 12	7.1-2	453, 460	Integration by Parts and Trigonometric Integrals		
	F, Jan 14	7.2	460	Trigonometric Integrals		
2	M, Jan 17	Martin Luther King Jr. Day				
	W, Jan 19	7.3	467	Trigonometric Substitution		
	F, Jan 21	7.3	467	Trigonometric Substitution		
3	M, Jan 24	7.4	473	Integration of Rational Functions by Partial Fractions		
	W, Jan 26	7.4	473	Integration of Rational Functions by Partial Fractions		
	F, Jan 28	7.5	483	Strategy for Integration		
4	M, Jan 31	7.8	508	Improper Integrals		
	W, Feb 2	7.8	508	Improper Integrals		
	F, Feb 4	8.1	525	Arc Length		
	M, Feb 7	8.2	532	Area of a Surface of Revolution		
5	W, Feb 9	8.3	539	Applications to Physics and Engineering		
	F, Feb 11	Review				
	M, Feb 14	<b>Test 1</b> (7.1-7.5, 7.8, 8.1-8.3)				
6	W, Feb 16	11.1	675	Sequences		
	F, Feb 18	11.1-2	675, 687	Sequences and Series		
7	M, Feb 21	11.2	687	Series		
	W, Feb 23	11.3	697	The Integral Test and Estimates of Sums		
	F, Feb 25	11.3	697	The Integral Test and Estimates of Sums		
	M, Feb 28	11.4	705	The Comparison Tests		
8	W, Mar 2	11.4-5	705, 710	The Comparison Tests and Alternating Series		
	F, Mar 4	11.5	710	Alternating Series		
	M, Mar 7	11.6	714	Absolute Convergence and the Ratio and Root Tests		
9	W, Mar 9	11.6	714	Absolute Convergence and the Ratio and Root Tests		
	F, Mar 11	11.7	721 Strategy for Testing Series			
10	Mar 12-20	Spring Break				
11	M, Mar 21	Review				
	W, Mar 23		<b>Test 2</b> (11.1-11.7)			
	F, Mar 25	11.8	723	Power Series		
	M, Mar 28	11.8	723	Power Series		
12	W, Mar 30	11.9	728	Representation of Functions as Power Series		
	F, Apr 1	11.10	734	Taylor and Maclaurin Series		
13	M, Apr 4	11.10	734	Taylor and Maclaurin Series		
	W, Apr 6	10.1	621	Curves Defined by Parametric Equations		
	F, Apr 8	10.2	630	Calculus with Parametric Curves		
14	M, Apr 11	10.2	630	Calculus with Parametric Curves		

### Schedule

	W, Apr 13	10.3	639	Polar Coordinates		
	F, Apr 15	10.3	639	Polar Coordinates		
15	M, Apr 18	10.4	650	Areas and Lengths in Polar Coordinates		
	W, Apr 20	Review				
	F, Apr 22	<b>Test 3</b> (11.8-11.10, 10.1-10.4)				
16	M, Apr 25	10.5	654	Conic Sections		
	W, Apr 27	10.5	654	Conic Sections		
	F, Apr 29	Final Review				
17	M, May 2	Final Exam (PS 355, 8-9:50 a.m.)				