

# Calculus II

## MATH 2153

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**Time and Place:**

Section 003: MWF 9:30-10:20am in LSE 215

Section 007: MWF 10:30-11:20am in HSCI 236

Section 009: MWF 11:30am-12:20pm in CLB 202

**Professor:** Igor E. Pritsker

**Office:** MSCS 519C

**Office Hours:** MWF 1:30-2:30pm

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**E-mail:** [igor@math.okstate.edu](mailto:igor@math.okstate.edu)

**Web:** [http://www.math.okstate.edu/~igor/math2153/math2153\\_fall2012.html](http://www.math.okstate.edu/~igor/math2153/math2153_fall2012.html)

**Textbook:** Calculus (Early Transcendentals) by J. Stewart, 6th ed. (customized for OSU)

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**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

A	90-100
B	80-89
C	70-79
D	60-69
F	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. You must complete each homework assignment and submit it before the due date. Please enroll into your WebAssign section using the following Class Keys.

**Section 003 key: okstate 3228 5806**

**Section 007 key: okstate 6810 1060**

**Section 009 key: okstate 5479 8460**

**WebAssign page**

**WebAssign guides and tutorials**

**MLSC** stands for the Mathematics Learning Success Center located on the 4th floor of classroom building, and on the first floor of the library. You can receive invaluable tutoring help at MLSC.

**Recommended Learning Method:**

- Before we begin 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 MLSC and/or come to my office hours if needed.

**Missed work policy:** A student shall be offered reasonable accommodation in the event that he or she misses a major assessment activity for a valid and documented reason. Examples of such reasons for making up exams are serious illness, family death, etc. Contact me immediately if you need to arrange for a make-up, and provide appropriate documentation.

**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.

**University Syllabus Attachment:** Contains drop deadlines and procedures, as well as many other important dates and university policies.

## Tentative Schedule

Week	Date	Sec	Page	Topic
1	M, Aug 20	7.1	453	Integration by Parts
	W, Aug 22	7.1-2	453, 460	Integration by Parts and Trigonometric Integrals
	F, Aug 24	7.2	460	Trigonometric Integrals
2	M, Aug 27	7.3	467	Trigonometric Substitution
	W, Aug 29	7.3	467	Trigonometric Substitution
	F, Aug 31	7.4	473	Integration of Rational Functions by Partial Fractions
3	M, Sep 3	Labor Day		
	W, Sep 5	7.4	473	Integration of Rational Functions by Partial Fractions
	F, Sep 7	7.5	483	Strategy for Integration
4	M, Sep 10	7.8	508	Improper Integrals
	W, Sep 12	7.8	508	Improper Integrals
	F, Sep 14	8.1	525	Arc Length
5	M, Sep 17	8.2	532	Area of a Surface of Revolution
	W, Sep 19	8.3	539	Applications to Physics and Engineering
	F, Sep 21	Review		
6	M, Sep 24	Test 1 (7.1-7.5, 7.8, 8.1-8.3)		
	W, Sep 26	11.1	675	Sequences
	F, Sep 28	11.1-2	675, 687	Sequences and Series
7	M, Oct 1	11.2	687	Series
	W, Oct 3	11.3	697	The Integral Test and Estimates of Sums
	F, Oct 5	Fall Break		

8	M, Oct 8	11.3	697	The Integral Test and Estimates of Sums
	W, Oct 10	11.4	705	The Comparison Tests
	F, Oct 12	11.4-5	705, 710	The Comparison Tests and Alternating Series
9	M, Oct 15	11.5	710	Alternating Series
	W, Oct 17	11.6	714	Absolute Convergence and the Ratio and Root Tests
	F, Oct 19	11.6	714	Absolute Convergence and the Ratio and Root Tests
10	M, Oct 22	11.7	721	Strategy for Testing Series
	W, Oct 24	<u>Review</u>		
	F, Oct 26	<b>Test 2 (11.1-11.7)</b>		
11	M, Oct 29	11.8	723	Power Series
	W, Oct 31	11.8	723	Power Series
	F, Nov 2	11.9	728	Representation of Functions as Power Series
12	M, Nov 5	11.10	734	Taylor and Maclaurin Series
	W, Nov 7	11.10	734	Taylor and Maclaurin Series
	F, Nov 9	10.1	621	Curves Defined by Parametric Equations
13	M, Nov 12	10.2	630	Calculus with Parametric Curves
	W, Nov 14	10.2	630	Calculus with Parametric Curves
	F, Nov 16	10.3	639	Polar Coordinates
14	M, Nov 19	10.3	639	Polar Coordinates
	W, Nov 21	Thanksgiving Holidays		
	F, Nov 23	Thanksgiving Holidays		
15	M, Nov 26	<u>Review</u>		
	W, Nov 28	<b>Test 3 (11.8-11.10, 10.1-10.3)</b>		
	F, Nov 30	10.4	650	Areas and Lengths in Polar Coordinates
16	M, Dec 3	10.4	650	Areas and Lengths in Polar Coordinates
	W, Dec 5	<u>Final Review</u>		
	F, Dec 7	<u>Final Review</u>		
17	<b>Final Exams</b>			
	Section 003: Dec 12, 8-10am, in LSE 215			
	Section 007: Dec 14, 10am-12pm, in HSCI 236			
	Section 009: Dec 10, 10am-12pm, in CLB 202			