

MATH 111-04 Calculus I, Fall 2017
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General Info: I am **not using Blackboard** for the course. The course homepage is:
<http://www.math.wm.edu/~vinroot/111F17.html>

Text(s): 1) *Single Variable Essential Calculus, Early Transcendentals* by James Stewart (8th Ed.). The W&M Bookstore sells this in loose leaf form which includes the e-Book and a WebAssign access code. WebAssign will not be required for this class, but will be set up with practice problems for those who want to use it. The course will cover Sections 2.1 – 5.4 (omit 3.11, 4.6, 4.8) of the textbook.
2) Online Labs, which will be available at:
<http://www.wm.edu/as/mathematics/undergrad/wheretostart/math111/index.php>

Calculators: Calculators will not be allowed on Quizzes, Tests, or the Final Exam. A calculator could be useful for some Lab or HW problems. You can get away without having a calculator and just use online tools, so a calculator is not required.

Tests and Quizzes: There will be three mid-semester tests: the tentative dates are October 3rd, October 31st, and November 28th. Make-up tests are only given in extreme circumstances such as documented serious illness or personal circumstance. I must review such cases **prior** to the start of the test. During weeks when there is not a test there will be a quiz, given during lab time. These are based on homework problems. There are no make-up quizzes. Your lowest quiz score will be dropped at the end of the semester.

Final Exam: The final exam is a “block” exam taken by all sections of Math 111 from 9 am-12 noon on Tuesday, December 19th. Your final exam score will replace your lowest attempted test score if it is higher.

Homework: There is a list of recommended HW problems from every section that we will cover. Many of these problems will also be on WebAssign. The only graded HW problems will be the Lab problems, but you should work on all of the HW problems to succeed in this course.

Labs: The 4th hour of this course is a lab, and takes place in Morton 342. You are required to be present at the meeting of your lab section. Each lab assignment should be completed in its entirety by the next lab session (unless otherwise specified on the syllabus). At that time, it is collected and graded by the TA. The lab scores count toward your overall grade for the course. Quizzes are also given during Lab time, on each week when there is not a Test.

Attendance: Regular attendance is critical for your success in this course. If you must miss class, you are expected to get notes and missed material from a fellow student.

Grading: Your final grade is calculated as follows:

Mid-semester Tests	15% each
Quizzes	15%
Labs	15%
Final Exam:	25%

The letter grade is assigned using the scale: A 93-100, A- 90-92, B+ 87-89, B 83-86, B- 80-82, C+ 77-79, C 73-76, C- 70-72, D+ 67-69, D 63-66, D- 60-62, F < 60

Honor Code: Students will uphold William and Mary’s stated honor code as it is written, any infractions will be referred to the Honor Council.

Tentative Syllabus for Math 111, Section 4, Fall 2017:

Week	Class	Section covered	Tuesday Labs
1	W Aug 30	Intro, 2.1 Tangent & Velocity	No lab, do Precal review & online prep test
	F Sept 1	2.2 Limit of a function	
2	M Sept 4	2.3 Limit Laws	Start Lab 1, Quiz 0 (Practice only)
	W Sept 6	2.4 Precise Definition of Limit	
3	F Sept 8	2.4 Precise Defn (cont'd)	Turn in Lab 1, Start Lab 2, Quiz 1
	M Sept 11	2.5 Continuity	
	W Sept 13	2.6 Limits involving infinity	
4	F Sept 15	2.7 Intro to Derivatives	Turn in Lab 2, Start Lab 3, Quiz 2
	M Sept 18	2.8 Derivative as a function	
	W Sept 20	3.1 Derivatives of Polys/Exp	
5	F Sept 22	3.2 Product and Quotient Rules	Turn in Lab 3, Start Lab 4, Quiz 3
	M Sept 25	3.3 Derivatives of Trig funcs.	
	W Sept 27	3.4 Chain Rule	
6	F Sept 29	3.4 Chain Rule (cont'd)	Tues, Oct 3, 8 AM, Test 1 (2.1-3.4)
	M Oct 2	Review (Lab 4 not due)	
	W Oct 4	3.5 Implicit Differentiation	
7	F Oct 6	3.6 Derivatives of Logs	Turn in Lab 4, Start Lab 5, Quiz 4
	M Oct 9	3.7 Natural & Social Sci. Apps	
	W Oct 11	3.8 Exponential Growth/Decay	
8	F Oct 13	3.9 Related Rates	No lab (Fall Break)
	M Oct 16	Fall Break	
	W Oct 18	3.10 Linear Approximation	
9	F Oct 20	4.1 Max/Min Values (bring Lab 7)	Turn in Lab 5, Start Lab 6, Quiz 5
	M Oct 23	4.1 Max/Min Values (cont'd)	
	W Oct 25	4.2 Mean-Value Theorem	
10	F Oct 27	4.3 Derivatives and Graphing	Tues, Oct 31, 8 AM, Test 2 (3.5-4.3)
	M Oct 30	Review (Turn in Lab 6)	
	W Nov 1	4.4 Indet. Forms/L'Hospital's Rule	
11	F Nov 3	4.4 Indet. Forms (cont'd)	Start Lab 9, Quiz 6
	M Nov 6	4.5 Summary of Curve Sketching	
	W Nov 8	4.7 Optimization	
12	F Nov 10	4.7 Optimization (cont'd)	Turn in Lab 9, Start Lab 10, Quiz 7
	M Nov 13	4.9 Antiderivatives	
	W Nov 15	5.1 Areas and Distances	
13	F Nov 17	5.2 The Definite Integral	Practice Quiz
	M Nov 20	5.2 The Definite Integral (cont'd)	
	W Nov 22	Thanksgiving Break	
14	F Nov 24	Thanksgiving Break	Tues, Nov 28, 8 AM Test 3 (4.4-5.2)
	M Nov 27	Review (Lab 10 due)	
	W Nov 29	5.3 Fund Thm of Calculus	
15	F Dec 1	5.3 Fund Thm (cont'd)	Start Lab 11, Turn in History Lab
	M Dec 4	5.4 Indefinite Integrals	
	W Dec 6	5.4 Net Change Theorem	
EXAM	F Dec 8	Review	Cumulative, block final (Location TBA)
	T Dec 19	Final Exam 9:00 AM-12 noon	