

# MA1022 Syllabus

**Instructor:** William J. Martin  
**Office:** SH 302A  
**Phone:** 831-6764  
**e-mail:** martin@wpi.edu  
**Office hours:** 11-12, 3-4 MTRF  
or by appointment  
... or, just drop in

MA 1022 – D01-D02, D Term 2001  
Calculus II  
**Text:** “Calculus” (8th ed.)  
by Varberg, Purcell, Rigdon  
**Meetings:** 2-2:50 MTRF, AK233  
**TA:** Amy Lachapelle, SH204  
**e-mail:** amy1@wpi.edu

The course content is prescribed by the Department of Mathematical Sciences. Please see the website <http://www.math.wpi.edu/>

## TERM SCHEDULE

Here is a rough outline of what we will cover in the 28 lecture periods:

Mar. 13 to Mar. 23	<i>Definite Integral</i>	Chapter 5
	5.4, 5.3, 5.5, 5.6, 5.7, 5.1, 5.8, 5.2	
Monday Mar. 26	TEST 1	(Chap. 5 + background)
Mar. 27 to Apr. 6	<i>Applications of Integration</i>	Chapter 6 (except 6.3)
Monday Apr. 9	TEST 2	(Chap. 6)
Apr. 10 to Apr. 20	<i>Logarithmic &amp; Exponential Functions</i>	Chapter 7 (except 7.8)
Apr. 23 to Apr. 30	<i>Integration Techniques</i>	Chapter 8, Secs. 1,3,4
Monday April 30	FINAL EXAMINATION	7-9 p.m. in AK233

## GRADES

**A:** 100 % – 88 %;      **B:** 87.99 % – 74 %;      **C:** 73.99 % – 60 %

## GRADING SCHEME

Homework (best 5 assignments):	25 %
MAPLE Laboratories (4):	20 %
Tests (two):	30 %
Final Exam:	25 %

If a student happens to miss a test for valid reasons (e.g., as evidenced by a doctor's note specifically stating that the student was too ill to participate), then the weight of the final exam will be increased to compensate for the missing mark. No late assignments or labs will be accepted for credit.

## EXERCISES

In order to encourage students to keep up with the course and to prepare for the tests, a large number of problems from the text will be recommended each week. A small number of these will be collected and graded for credit.

These six homework assignments will be due on the following dates: **Thur. Mar. 22; Thur. Mar. 29; Thur. Apr. 5; Thur. Apr. 12; Fri. Apr. 20; Thur. Apr. 26.** The best five of these scores will be used in the calculation of your grade.

## CONFERENCE MEETINGS

The graduate TA, Amy Lachapelle, will hold weekly conference sessions as follows:

<b>Section</b>	<b>Date and Time</b>	<b>Location</b>
D01	Mondays, 8:00	SH304
D02	Mondays, 3:00	SH309

## MAPLE LABS

Computer algebra systems have, in recent years, had tremendous impact on the teaching of calculus and on its use in industry. While a computer cannot construct a mathematical model of a real-world situation, cannot interpret numerical results, and does not always give correct answers to our questions, it can save us a great deal of time by quickly and accurately performing the more routine tasks involved in doing calculus. Therefore it is crucial that we learn about the capabilities and limitations of computers at the same time that we learn calculus. The department has excellent lab facilities and talented Instructor's Associates ("IA's") to guide each student through the MAPLE computer algebra system and its application to problems from integral calculus. Throughout your time at WPI, other faculty will expect you to be comfortable with MAPLE and it is often a valuable tool to project teams in many disciplines.

### **Instructors' Associates:**

*Jane Bouchard*    bouchard@wpi.edu    Office: SH 205    Ph: 831-5730

*Dina Solitro*    dsolitro@wpi.edu

For its lab sessions, our class will meet in Stratton Hall Room 306 (directly across from my office). We have already designed lab worksheets for these five sessions. In four of the sessions, students will be required to submit their completed labs for credit. Here are the meeting times for MAPLE labs:

<b>Section</b>	<b>Date and Time</b>	<b>Location</b>
D01	Tuesdays, 8:00	SH306
D02	Tuesdays, 3:00	SH306

The **first lab** will be held **Tuesday, March 20.**

## FINAL EXAMINATION

The course will culminate in a two-hour comprehensive test to be administered in room 233 of Atwater-Kent from 7:00 to 9:00 p.m. on Monday, April 30. All students are expected to take this test. If, for any valid reason, you will not be able to attend this meeting on April 30, you must notify me (WJM) by Friday, March 23 in order to make alternative arrangements.