

MA1024 PLC Syllabus

Instructor: William J. Martin	MA 1024 – B09A, B Term 2004
Office: SH 109B	Calculus IV
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or by appointment	PLA: Joe Chapman
... or, just drop in	e-mail: jchapman@wpi.edu

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

TERM SCHEDULE

Here is a very rough outline of what we will cover in our 7-week trek:

Oct. 26 to Oct. 29	<i>Curvilinear Motion</i>	Sec. 13.4, 13.5
Nov. 1 to Nov. 5	<i>3-Space</i>	Sec. 14.1 thru 14.4
Nov. 8 to Nov. 12	<i>Curves, Surfaces in 3-Space</i>	Sec. 14.5 thru 14.7
Nov. 15 to Nov. 19	<i>Derivatives in n-Space</i>	Sec. 15.1 thru 15.4
Nov. 22 to Nov. 23	<i>Directional Derivatives, Chain Rule</i>	Sec. 15.5, 15.6
Nov. 29 to Dec. 3	<i>Tangent Planes, Optimization</i>	Sec. 15.7 thru 15.9
Dec. 6 to Dec. 10	<i>Double Integrals</i>	Sec. 16.1 thru 16.4
Dec. 13 to Dec. 17	<i>Surface Area, Triple Integrals</i>	Sec. 16.5 thru 16.8 (as time permits)

GRADING SCHEME

Homework (best 5 assignments):	25 %
MAPLE Laboratories (3):	15 %
Quizzes (6):	30 %
Final Exam:	30 %

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 roughly one per week as detailed in class. The best five of these scores will be used in the calculation of your grade.

CONFERENCE MEETINGS

The PLA, Joe Chapman, will hold weekly conference sessions in the PLC classroom each Thursday 4-5pm. This is an opportunity to see another perspective on the material and to go over the solutions to the practice problems. Attendance is mandatory.

MAPLE LABS

Each student will have a WPI laptop. The computer algebra system MAPLE has been installed on each of these. On Friday's 3-4pm, we will have a one-hour lab meeting in which

we will use MAPLE to solve problems related to our current studies. These sessions are mandatory for all PLC-2 students.

QUIZZES, NOT CHALLENGES

On certain Mondays and Wednesdays at 1:15pm, I will administer quizzes, roughly once per week. Students will be expected to correct their own errors on these quizzes for additional credit.

FINAL EXAM

On Thursday, December 16, from 2pm to 5pm, we will have a comprehensive 3-hour exam which tests a student's knowledge and synthesis of all the material covered in the course.

SPECIAL ARRANGEMENTS

If you need course adaptations or accommodations because of a disability, or if you have medical information to share with me, please make an appointment with me as soon as possible. My office location and hours are listed at the top of this syllabus. If you have not already done so, students with disabilities, who believe that they may need accommodations in this class, are encouraged to contact the Disability Services Office (DSO), as soon as possible to ensure that such accommodations are implemented in a timely fashion. The DSO is located in Daniels Hall, (508) 831-5235.

ACADEMIC DISHONESTY

There is no place for cheating in a university. As future leaders of our society, WPI students will be held to the highest ethical standards. Hard-working honest students can be assured that I will do my best to preserve the integrity of their good work by being vigilant and promptly and forcefully prosecuting cases of academic dishonesty. Each student should be familiar with the university's Academic Honesty Policy, to be found at

<http://www.wpi.edu/Pubs/Policies/Honesty/policy.html>