MA1023 PLC Syllabus

Instructor: William J. Martin
Office: SH 109B
Phone: 831-6764
e-mail: martin@wpi.edu
Office hours: 2-3 MW
  or by appointment
  . . . or, just drop in

MA 1023 – A10A, A Term 2004
Calculus III
Text: "Calculus" (8th ed.)
by Varberg, Purcell, Rigdon
Meetings: as arranged, DH131
PLA: Joe Chapman
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 adventure:

Aug. 26 to Aug. 27	*Limits, Indeterminate Forms*	Sec. 9.1, 9.2
Aug. 30 to Sep. 3	*Improper integrals, sequences*	Sec. 9.3,9.4,10.1
Sep. 7 to Sep. 10	*Series and Convergence*	Sec. 10.2 thru 10.5
Sep. 13 to Sep. 17	*Power series, Taylor series*	Sec. 10.6 thru 10.8
Sep. 20 to Sep. 24	*Numerical methods, approximation*	Sec. 11.1 thru 11.4
Sep. 27 to Oct. 1	*Polar coordinates*	Sec. 12.6,12.7,12.8
Oct. 4 to Oct. 8	*Parametric curves, vectors*	Sec. 13.1 thru 13.3 (as time permits)
Oct. 11 to Oct. 14	*all of the above!*	catch up and review

GRADING SCHEME

Homework (best 5 assignments):	25 %
MAPLE Laboratories (4):	15 %
Challenges (8):	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 powerful computer algebra system MAPLE should (!) be installed on each of these. On Friday's, 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.

CHALLENGES
On Mondays at 1pm and on Wednesdays at 4pm, students will be given the opportunity to take tests focused on one particular topic (e.g. Convergence Tests) covered in the course. Grades will be given for each of these "Challenges". The grade range will be 0–10 for the first attempt. A student unhappy with their grade may, with advanced notice, re-take this Challenge. For the first re-take, the maximum allowable score is an 8 out of 10; for the second re-take, the maximum is six. The first attempt must occur by the scheduled time for the entire class for that Challenge; no later. Typically, all students participating in such a session will be taking the same exam. Anyone planning to re-take a Challenge given earlier must notify me at least 24 hours in advance by e-mail.

FINAL EXAM
On Wednesday, October 13, from 3pm to 6pm, 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