MA1024 PLC Syllabus

Instructor: William J. Martin
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Text: “Calculus” (8th ed.) by Varberg, Purcell, Rigdon

Office hours: 2-3 MW
or by appointment
...or, just drop in

Meetings: 1-2pm and 3-5pm MW, 3-4pm F, 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 trek:

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