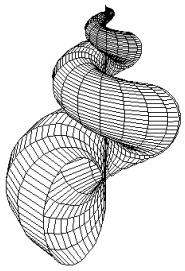
UNC CHARLOTTE

Introduction to Symbolic Computation

MATH 3050–001

Fall Semester 2001



Classroom: Denny 217
Time: MW 2:00–3:20 PM

Professor: Dr. David Royster
Office: Colvard 5023
Office Hours: MW 1–2, W 3:30 – 5, or by appt
Office Phone: 704–687–4543
email: droyster@email.uncc.edu
URL: http://www.math.uncc.edu/~droyster

Class Homepage: This class will have a WebCT page.

Text: ***Introduction to Maple,*** Second Edition by André Heck and class web pages.

Number of Class Meetings in the Semester: 29 classes

Prerequisites: You need to have taken calculus (MATH 1241, 1242, 2141), differential equations (MATH 2171), and linear algebra (MATH 2164). It would be preferable if you have taken or are taking Modern Algebra (MATH 3163). You will need to be able to use the computer. If you do not feel comfortable with email, web-browsing, and using basic computer applications then this is not the place for you.

Objective: I intend for you to learn how to take advantage of the capabilities of a state-of-the-art computer algebra system (CAS) for learning and doing mathematics at an advanced level. We will learn how to use *Maple* and learn some of the mathematics behind a CAS.

Tests: We will have a midterm and a final. The Midterm exam will be Wednesday, October 24. Our class tends to fall in the cracks for a time for the Final Exam. The schedule indicates that it is Wednesday, December 12 from 3:30 – 6:30 PM.

Grades: Your course grade will be determined by the two tests and homework.

As part of your homework, you will complete a number of the exercises from the text.

I will try to adhere to the following distribution in determining your final grade. The percentages may change over the course of the semester depending upon the difficulty and the frequency of the homework assignments and the projects.

Homework	35%
Midterm	30%
Final	35%

Purpose: The purpose of this course is twofold. First, this is a Mathematics course. You are expected to learn some new mathematics. Secondly, it is a course about computer algebra systems. We cannot learn about them if we do not learn how to use one of them quite well. We will be spending a bit of time learning how to use *Maple*. We will also discusss some of the other CAS program available, but we will not spend a lot of time doing relative comparisons by capability. By now, most of the time when one program is able to compute something correctly, the others are as well.

Class Policies: There are several policies to which you must pay heed.

i) Attendance is extremely important in a class of this level. If you feel that you do not need to attend this class, you are in the wrong classroom—go find a course in which you will be challenged and in which you will learn something new.
ii) You are allowed one unexcused absence and 2 excused absences in this course. Any absences beyond this will have an impact on your grade for the course.
iii) You have been given a day-by-day course syllabus. You NOW KNOW when we have class and when we do not have class. I expect you to be here on all days that we have class.
iv) I will not accept late homework. If for some reason you miss a class and it is excusable, see me as soon as possible to discuss the situation.
v) Academic dishonesty will be punished severely. Be cognizant of the *Code of Student Academic Integrity*.
vi) Be on time to class and remain until dismissed. Do not leave in the middle of class.
vii) Contrary to rumor and to popular belief, class **does** meet and proceed on the next class day following an exam. It is **NOT** an unwritten law that students and faculty have a vacation following each exam. In addition this policy applies to the days before and after *Fall Break* and *Thanksgiving Break*.