

Math 251-H1 (Honors Section) Information Sheet

Lecturer: Professor Roe Goodman

Office and telephone number: Hill 428, 445-3071

Office Hours: Monday 1:30-2:30, Wednesday 1:30-2:30, and by appointment.

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General Description

The honors section of Math 251 has the same syllabus and has exams at the same level of difficulty as the regular (large-lecture) sections of Math 251 (this is the same policy that applies to the honors sections of Math 151 and Math 152). Here are the differences:

- 1) The class is small (maximum of 25 students) and selective (every student had a grade of B or better in math 152 or equivalent calculus advanced placement score).
- 2) The Monday and Wednesday class meetings are in 'small class lecture style' (mathematical topics presented by the lecturer with class participation).
- 3) The Thursday class meeting is a 'workshop' (see description below) conducted by the lecturer and a peer mentor.
- 4) The Tuesday evening 7* period (55 minutes) is devoted to homework problems and a brief quiz, and taught by a graduate teaching assistant. This period requires a special registration:

01:640:491-H1 Math Seminar (Index number 31889)

Important: This is a required component of honors math 251. If you cannot arrange your class schedule to include this period, then you must transfer to one of the large-lecture sections of math 251.

Workshops

Participation in the Thursday workshops will be a component of the workshop grade. Most of your workshop time will be spent in small-group work on a page of three or four problems that is handed out at the beginning of the workshop session. The emphasis will be on problem-solving strategies and multi-step problems. At the end of the workshop session, one problem will be designated to be written up and handed at the beginning of the next week's workshop. The writeups of workshop problems must give complete details and contain a statement of the problem and verbal descriptions of the steps in the solution, as well as equations (just as in the workshop writeups for math 151-152).

LATE WRITEUPS OF WORKSHOP PROBLEMS ARE NOT ACCEPTED.

Maple

You will learn how to use the computer program MAPLE in this course in the way that most computer languages are learned: by carrying out assignments that require the use of MAPLE. The MAPLE program is much more powerful and versatile than your graphing calculator, and it can be a valuable tool in your other mathematics, engineering and science classes. Preparing the MAPLE assignments can be very time-consuming, however, so you should budget your time and not wait until the last minute to do them.

Grades

There will be weekly written assignments of workshop problems. There will also be assignments using the symbolic math program MAPLE that you will do outside of class time. The grading scale will be based on the performance of an 'average' math 251 class, which will mean that most students in this class will get grades of B or above. The term grade will be based on the following items:

2 in-class exams @ 100 points each	=	200 points
Final exam	=	200 points
Workshop participation and write-ups	=	100 points
Maple assignments	=	50 points
Quizzes (Practicum)	=	50 points
Total	=	600 points

(Over)

Fall, 1999

Exam rules

You may use your graphing calculator (TI-82 or equivalent) during the 80 minute in-class exams and the three hour final exam; you may also bring to these exams *one* sheet (8.5×11 inches or smaller) of prepared formulas, inspirational materials, etc. of your choosing. No books or additional notes will be allowed. Calculators that do symbolic math (such as the TI-92) are not be allowed on exams. Calculators and notes will not be allowed on the weekly quizzes in the practicum.

Web page

All course materials (syllabus, workshop assignments, Maple assignments, exam review questions, etc.) will be posted on the lecturer's home page (see the address above).

Comparison to math 291

The honors section of math 251 is quite different from math 291 (honors calculus III), which is only open to entering first-year students who had a grade of 5 (top) on the B/C advanced placement calculus exam. Math 291 is conducted at a more advanced level than the standard 251 or honors math 251 course.