TEXT: *Calculus*, 6th edition by Ellis & Gulick (Cengage). Any 6th edition, 2003 or later, hardcover or softcover, is fine. A paper copy of the text is available from the reserve desk in McKeldin Library. An electronic copy of the text (labelled 7th edition) is available within WebAssign, if you choose the Cengage Unlimited option.

INSTRUCTOR: Tim Pilachowski   TJP@math.umd.edu **BE SURE TO INCLUDE "Math 140" IN THE SUBJECT LINE.**

COURSE INFO & SCHEDULE: follow links from http://www2.math.umd.edu/~tjp

OFFICE: Math building room 3316, 301-405-5150          OFFICE HOURS: see http://www2.math.umd.edu/~tjp

TUTORING ROOM Math Building room 0203 see http://www2.math.umd.edu/~tjp

**Be sure to take advantage of FREE available tutoring in the Math building (room 0203) and in the Math Success program (Sun. thru Thurs., 6 to 9 pm). For schedules, click on the links at http://www-math.umd.edu/undergraduate/resources.html. Old tests are also available through this link.**

Calculus is a central pillar of scientific education, and is a principal language and problem-solving tool for science, engineering, and mathematics. At UMD, Math 140-141 is the first-year sequence of calculus courses primarily for physical science, engineering and mathematics students. The primary goal of this course is to help you develop confident understanding of the concepts and techniques comprising elementary calculus and the uses of those ideas and skills in quantitative problem solving. A schedule of topics is provided via a link on the Math 140 web page (link from http://www2.math.umd.edu/~tjp). Lecture outlines can be downloaded via a link from the Math 140 web page (link from http://www2.math.umd.edu/~tjp). Students should be aware that credit cannot be earned for both Math 140 and 120, though it may be appropriate for some students to take these combinations of courses. Some homework may require the use of a graphing calculator. Graphing calculators will *NOT* be allowed for use on tests and quizzes.

Math 140 meets 5 times a week: MWF in large lecture, and TTh in 25-student sections for 75 minutes. You should plan to attend each day of both Lecture and discussion. Normally the first 10-15-minute portion of each TTh session is for questions about homework problems; the remainder of the session is devoted to a worksheet prepared especially for that session. You will work in a group of about 4-5 students; the group's task is not only to produce solutions to the worksheet problems but also to make certain that each group member participates and also understands how to solve the problems. Don't be discouraged when you find problems whose solutions do not pop out instantly. Remember that learning takes effort; Calculus cannot effectively be learned by osmosis or just by listening to others.

There will be a diagnostic precalculus test and four 50-minute exams (see dates on the course schedule page). **Old exams are available on the web: click on the links at http://www-math.umd.edu/undergraduate/resources.html.**

CALCULATORS: Graphing calculators are an integral part of the course. The preferred types are Texas Instruments (especially the TI-83 plus or the TI-84). We will furnish information about the use of these calculators. For instructions for Riemann Sum and Newton-Raphson programs to be entered onto a TI graphing calculator, click on the "Resources" tab in WebAssign. IMPORTANT NOTE: Neither calculators nor computers or other devices or notes are allowed during tests.

Expect to spend on an average at least 2 hours on homework per hour of class time (this includes reviewing, doing problems, checking and correcting them and reading the new material for the next class). The practice problems listed on the course schedule page represent the type of question you should be able to answer for each topic. Graded homework assignments will be done and submitted via the WebAssign on-line homework system with deadlines (usually) at 7:30am Tuesdays and Thursdays. Instructions can be found by following links from http://www2.math.umd.edu/~tjp. You'll need to purchase an access code which will be valid for one semester. *Do the practice problems from the textbook first, to get a feel for the material, before working on the WebAssign questions.*

A group worksheet will be given during each discussion and usually will be based on the material of the sections covered in Lecture since the previous discussion.

**When classes are on-campus,** quizzes may be given during the Lecture class, using PointSolutions software. Specific instructions are provided on ELMS and via a link on the Math 140 web page (link from  http://www2.math.umd.edu/~tjp).

Four 50-minute exams will be given (see dates on the course schedule page). **Exams from previous semesters are available on the web: click on the testbank link at http://www-math.umd.edu/undergraduate/resources.html.**

The University has a nationally recognized Honor Code, administered by the Student Honor Council. The pledge, approved by the University Senate, reads: "I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination." The Pledge should be handwritten and signed on all tests in this course. In conjunction with the University's Code of Academic Integrity, allegations of academic dishonesty will be reported to the Honor Council.

For University course-related policies see http://www.umd.edu/catalog/index.cfm/show/content.section/c/27/ss/1584/s/1540. "Excused absences do not alter the academic requirements for the course. Students are responsible for information and material missed on the day of absence." In lieu of make-ups for lecture quizzes, discussion worksheets and WebAssign, lowest scores will be dropped at the end of the semester. For medical absences when exams are scheduled "students must provide documentation from a physician or the University Health Center". Any unexcused Exams will be counted as a "0", including the final exam. **Any student with a valid reason to be excused from any Exam must contact the instructor by the day after the test, and present documentation at the time of the make-up**. The preferred method of contact is email (TJP@math.umd.edu).

To ensure success in this course students are expected to attend both Lecture and discussion regularly, do homework as assigned, and seek help when necessary. Many resources are available: textbook, instructor, discussion TAs, friends, tutors, old tests available on the web, Teaching and Learning Transformation Center in the Edward St John Building, etc. Be thorough and complete when doing homework (checking, correcting, and making note of questions to ask).

The student's grade will be determined as follows:  The grading scale is:

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|---|---|---|
| Precalculus Diagnostic Test | 2.8% | A: 90 - 100% |
| Discussion worksheets & Lecture quizzes (when given-see above) | 10.0% | B: 80 - 89% |
| WebAssign Homework | 8.6% | C: 70 - 79% |
| Top three 50-Minute test scores | 42.9% | D: 60 - 69% |
| Lowest 50-Minute test score | 7.1% | |
| Final Exam | 28.6% | |
| Total | 100% | |

For dates of Exams, follow the "Course Schedule" link on the Math 140 web page (link from http://www2.math.umd.edu/~tjp).