

**MTH 241H DEPARTMENT OF MATHEMATICS**  
**UNIVERSITY OF MARYLAND, COLLEGE PARK**  
**General Information for Tim Pilachowski's sections**

TEXT: *Calculus*, by R. Ellis and D. Gulick (Cengage Learning, ISBN: 9781133436751) [New Custom Edition as of Fall 2011 but you can still use the 6th Edition (Thomson Publishing. ISBN: 9780759313798) for Math 241/241H]  
*Calculus Student Solutions Manual*, by R. Ellis and D. Gulick (Cengage Learning. ISBN: 9780759331778 (OPTIONAL)  
*A Guide to MATLAB: For Beginners and Experienced Users* (New 2nd Edition) by B. Hunt, R. Lipsman, and J. Rosenberg (Cambridge Univ. Press. ISBN: 0521615658) [You may find this and the next one useful.]  
*A MATLAB Companion for Multivariable Calculus*, by Jeffery Cooper (Harcourt/Academic Press. ISBN: 012187625X)  
INSTRUCTOR: Tim Pilachowski [TJP@math.umd.edu](mailto:TJP@math.umd.edu) **BE SURE TO INCLUDE "Math 241" 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/>

Math 241 is an introduction to multivariable calculus, including vectors and vector-valued functions, partial derivatives and applications of partial derivatives (such as tangent planes and Lagrange multipliers), multiple integrals, volume, surface area, and the classical theorems of Green, Stokes and Gauss. All sections of the course will use the software package MATLAB. Credit will be granted for only one of the following: MATH 241 or MATH 340. The course will cover chapters 11 through 15 of the text. A detailed schedule of topics is provided on the [Course Schedule](http://www2.math.umd.edu/~tjp/) page. Lecture outlines can be downloaded through links from <http://www2.math.umd.edu/~tjp/>. The class moves fairly quickly through chapters 11 and 12 because we need to make sure that we have enough time to do chapter 15 thoroughly with two days of review.

Expect to spend an average of 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. There will be a quiz at least once per week in discussion. Quiz question will often (but not always) come directly and verbatim from the suggested homework listed on the [Course Schedule](http://www2.math.umd.edu/~tjp/) page. There will be four short MATLAB projects which should be manageable even if you don't (yet) know MATLAB. In general, deadlines for MATLAB projects will not be extended, and make-up quizzes will not be given.

Four 50-minute exams will be given (see dates on the course schedule page). Old examss can be downloaded through links from <http://www2.math.umd.edu/~tjp/>.

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." Unless specifically advised to the contrary, 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.

Excused absences will be given only with documentation and only for valid medical reasons, university business, or appearances in court. Absence for medical reasons on days when exams are scheduled requires documentation of the illness, signed by a health care professional. In general, make-up MATLAB projects and quizzes will not be given. Any unexcused projects, quizzes or tests will be counted as a "0", including the final exam. **Any student with a valid reason to be excused from any test must contact the instructor prior to the test and present documentation in the next class session attended.** Messages may be left via email, or by calling my office phone @ 301-405-5150.

To ensure success in this course, attend lecture (and discussion, if applicable) regularly, do homework as assigned, and seek help when necessary. Many resources are available: textbook, instructor, tutors, old tests, Learning Assistance Services in the Shoemaker 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:

Quizzes	100 points
MATLAB projects	100 points
50-Minute Tests	400 points
<u>Comprehensive Final Exam</u>	<u>200 points</u>
Total	800 points

The grading scale is:

A: 90 - 100%
B: 80 - 89%
C: 70 - 79%
D: 60 - 69%

For dates of Exams, link to [Course schedule](http://www2.math.umd.edu/~tjp/).