Math 161-04: Calculus I  
Fall semester 2006

Professor       Dave Richeson  
Class location  Tome 122  
Class time      Tues., Fri. 1:30-2:45  
Lab             Thurs. 1:30-3:30  
Office          Tome 242  
Phone           245-1744  
Office Hours    Tues. 3:00-4:00  
                  Wed. 2:45-3:45  
                  Fri. 9:00-10:00  
Email           richesod@dickinson.edu  
Class web page  http://www.dickinson.edu/~richesod/math161-04.html  
Text            Calculus (5th edition), by James Stewart

Course description: In this course we begin our study of calculus. Our first goal is to understand rates of change and the tangent problem. In doing so we must investigate limits and derivatives. Once we have a good understanding of the derivative we will learn to apply this tool to a variety of problems. Next, we investigate the area problem and see how integration helps solve this problem. We conclude the course with the Fundamental Theorem of Calculus, the beautiful theorem that exhibits the relationship between differentiation and integration. We will cover some or all of chapters 1, 2, 3, 4, and 5.

Grading: Your grade will be computed based on 600 possible points. The points are distributed as follows.

- 3 exams (100 pts. each)  
- Weekly homework (40 pts. total)  
- Weekly labs (15 pts. total)  
- Research project (40 pts.)  
- Math chat (5 pts.)  
- Final exam (200 pts.)

Exams: There will be three midterm exams. Attendance on exam days is mandatory; if there is an unavoidable conflict please contact me well in advance so that alternate plans can be made. Except in exceptional circumstances, an unexcused, missed exam will count as a 0 in the grade book. The exams will be held during the lab period. You can
use the entire class period to finish your exam. Be sure to schedule your holiday travel plans so that you can attend the scheduled final exam.

**Homework:** Homework will be assigned daily and collected every Friday. The questions will be posted on the class web page the day of the class. I will post a variety of problems on the web page. I expect you to do all of the problems, but you need only turn in the boldface problems.

Homework will be due at the end of the class on Friday. My late homework policy is as follows: if you get the homework to me before I have given assignments to the grader then I will accept it, otherwise it is late and you earn a 0. You are free to (and encouraged to) work together on the homework but you must turn in your own work, and it should be written in your own words. Copying the work of a classmate is unacceptable, the mildest penalty for such plagiarism being a zero on the problem. Please refer to the college’s *Code of Conduct* for more information on plagiarism.

I will reserve the first few minutes of each class to answering questions about the uncollected problems from the previous day’s homework assignment.

Each homework assignment will be graded based on a 30 point scale. Typically, but not always, this breaks down to six problems graded out of 5 points. Note that I will only grade a selection of problems, not all the problems that you turn in. Solutions to all homework problems will appear on the class website. I will drop your lowest homework grade of the semester.

**Labs:** The weekly lab sessions are intended to develop your critical thinking skills. In addition, the problems given during the labs should be fun and interesting with less emphasis on the drill problems found in the textbook. There will be no homework from the lab sessions; all projects will be started and completed during the lab session. The material found in the labs will not be on the exams.

**Research project:** In the second half of the semester you and two partners will complete a research project. The project will consist of researching an application of calculus or a historical topic in calculus, writing a short paper, and giving a 10-minute presentation to the class. The presentations will take place during the last lab period of the semester.

**Math chats:** You are required to attend at least one “Mathematics and Computer Science Chat.” These are typically held on Tuesdays at 12:00, and occur approximately once every two weeks. Lunch (usually pizza) will be served. They will be announced in class.

**Attendance and tardiness:** Attendance is mandatory. It is difficult to learn from the text. Much of the lecture will be spent elaborating on the material presented in the text, presenting examples not found in the text and explaining concepts in a different way. On a more practical level, if you attend class you will see what topics are emphasized, thus you will have a better idea of what will appear on the exams. It is important that you
arrive to class on time. Entering late shows disrespect and is distracting to the class and the professor. Repeated absences and tardies will affect your grade.

**Calculators:** You may use calculators on your homework and during labs, but they will not be allowed (or needed) during exams.

**Extra help:** My office hours are given above; feel free to drop in as often as you’d like. These are the hours that I will definitely be in my office. During these times discussing mathematics with you will be my priority. Do not come to my office hours with expectations of me doing your homework for you. I will give you hints, point you in the right direction, work through problems with you, etc. But, I won’t simply show you the solution. You will get the most out of my office hours if you have tried the homework in advance. Also, if you miss class due to an unexcused absence, do not come to office hours and ask me to teach you what you missed; you will have to get that information from one of your classmates.

I will be in my office at other times too. Feel free to drop by any time. I may be too busy to get into a long discussion, but I will surely try to help you. If you want to come by at a time other than my office hours you may want to call or email me to be sure I’m available.

**Email policy:** Email is a convenient way to contact me. However, I may not check my email in the evenings or over the weekend. Do not expect prompt replies to email sent after 5:00 weekdays or on the weekend. I will read and reply to the email during the next school day.
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<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Friday, Sept. 1</td>
<td>Last day to add/drop or pass/fail</td>
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<tr>
<td>Thursday, Sept. 28</td>
<td>Exam #1</td>
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<td>Tuesday, Oct. 17</td>
<td>No Class, Fall pause</td>
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<td>Thursday, Oct. 26</td>
<td>Exam #2</td>
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<td>Wednesday, Nov. 1</td>
<td>Last day to withdraw with a W</td>
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<td>Thursday, Nov. 23</td>
<td>No Class, Thanksgiving break</td>
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<td>Friday, Nov. 24</td>
<td>No Class, Thanksgiving break</td>
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<td>Thursday, Nov. 30</td>
<td>Exam #3</td>
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<td>Thursday, Dec. 7</td>
<td>Presentations/papers due</td>
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<td>Saturday, Dec. 16, 2:00-5:00</td>
<td>Final exam</td>
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**Disclaimer:** I reserve the right to change the syllabus during the semester.
Everyone has his or her pet peeves—you know, those things that really get under your skin (drivers in the passing lane who go 10 mph under the speed limit, the bad grammar in the ‘ten items or less’ sign at the grocery store, drivers who cut diagonally across the parking lot, people who assume everyone uses Windows PCs, etc.). You may not know it, but professors have pet peeves too. Here, in no particular order, is a list of ten things that get under my skin.

Professor Richeson’s Top Ten Pet Peeves

1. **no capital letters in an email.** FYI, IMO it is inappropriate for U 2 email YR professor using AIM shorthand. BTW….it would B GR8 if U used punctuation 2….K? THX! :-(

2. **Ringing cell phones.** There are tines when you need a cell phone in class. A student of mine took a phone call during an exam. It was her mother calling to tell her that her ailing grandmother had just passed away. A colleague at another institution had a student who needed his phone on because he was waiting to hear from his parole officer! If you are expecting an important call and need to leave your phone on, that is fine, just let me know in advance. Otherwise, turn your phone off, or leave it at home!

3. **Assignments torn from a spiral-bound notebook.** As an undergraduate, I went through a “green” phase during which I turned in all of my assignments on the back side of paper from a recycling bin. That probably annoyed my professors. That wouldn’t bother me now, but ragged edges do.

4. **Late arrivals.** In Tome the classroom doors are located in the front of the room, so it is impossible to “sneak in” to class unnoticed. This is a small campus; you can get to class on time.

5. **“Is this going to be on the exam?” or the related “do we have to know this?”** Don’t ask it. Everything is fair game. Besides, we’re all here for the joy of learning, right?

6. **Typing during class.** Like fingernails on a chalkboard to me! C’mon, you can wait one hour to check your email.

7. **Whispered conversations.** If it is about math, that’s fine. Otherwise, wait until after class.

8. **Lame excuses.** If you didn’t do your homework, don’t tell me about how your friend’s dog ate it after your roommate turned off your alarm because your coach told you couldn’t miss practice because there was a death in the family. Just say that you didn’t get your homework done.

9. **“Can I do some extra credit?”** Devote the time you would have spent on extra credit to trying to master the course material. It will be worth more than the extra credit, trust me. Besides, extra credit is like a regressive tax---the rich get richer. Typically strong students do the extra credit, struggling students do not. It exaggerates the grade gap.

10. **Eating potato chips while talking to me on the phone.** OK, this probably won’t come up, but it really gets on my nerves!