Course: MTH 252: Calculus II (5 credits)
Term and Section Number: 201601 – 12645
Meeting Times: TuTh: 6:00 PM – 8:20 PM
Meeting Location: Sylvania Campus – ST 209
                   12000 SW 49th Ave.
                   Portland, OR 97219
Instructor: Steve Simonds
Website: spot.pcc.edu/~ssimonds
Office Location: SY ST 203
Phone Number: 971-722-4784
FAX Number: 971-722-8259
PCC email address: ssimonds@pcc.edu
Mailing Address: Portland Community College
                 PO Box 19000
                 Portland, OR 97280

Office Hours
MTWR: 4:00-5:30 PM
Other times available by appointment

Course Description
Includes antiderivatives, the definite integral, topics of integration, improper integrals, and applications of integration. Graphing calculator required. TI-89 Titanium or Casio Classpad recommended. Prerequisites: MTH 251 and its prerequisite requirements. Audit available.

Course Outcomes
Upon successful completion students should be able to:

• Analyze real world scenarios to recognize when derivatives or integrals are appropriate, formulate problems about the scenarios, creatively model these scenarios (using technology, if appropriate) in order to solve the problems using multiple approaches, judge if the results are reasonable, and then interpret and clearly communicate the results.

• Appreciate derivative and integral concepts that are encountered in the real world, understand and be able to communicate the underlying mathematics involved to help another person gain insight into the situation.

• Work with derivatives and integrals in various situations and use correct mathematical terminology, notation, and symbolic processes in order to engage in work, study, and conversation on topics involving derivatives and integrals with colleagues in the field of mathematics, science or engineering.

• Enjoy a life enriched by exposure to Calculus.

View the Course Content and Outcome Guide at:
http://www.pcc.edu/ccog/default.cfm?fa=ccog&subject=MTH&course=252

Required Materials
Textbook: Calculus Volume 1 - PCC custom edition for MTH 251 and 252 by James Stewart
Calculator: Graphing calculator with CAS required. TI-89 Titanium or Casio Classpad recommended.
Other: A ruler and at least three colors with which to write (regular pencil counts as one)
Testing Policy
No make-up tests will be given without arrangements made prior to the scheduled test time. All make-up testing will take place in the Sylvania testing center (CC 212) and can be taken by appointment only (971-722-4131).

Graded Homework Policy
Graded Homework is due at 6:00 pm, on the date indicated on the assignment. Assignments that are not in by the time I start lecture will receive an automatic 20% point deduction. Assignments will not be accepted after 6:30 pm on the date they are due. Neither of these late policies is negotiable. Graded Homework assignments are distributed periodically - i.e. they are not the practice problems listed on the course schedule. Assignments may be FAXED or sent as an email attachment. The primary purpose of graded homework is for you to get feedback before taking a test. If you just copy someone else's homework or if you ask a tutor to work the problems for you the assignments lose all of their intrinsic value and you will probably pay a price when you take your test.

More Information on your grade in the course
All work in this class is evaluated for presentation, process, and mathematical correctness. Examples in class always follow formats that will earn you full credit provided that your mathematics is totally correct. Solutions shown on keys always follow formats that will earn you full credit provided that your mathematics is totally correct (unless otherwise noted on the key). If you take complete and accurate notes then your notes serve as a guidebook for how your work should be presented and for what amount of work you are expected to show.

I know that each and every student in my classes is capable of presenting work in a manner appropriate to a 200 level mathematics course - that is why I hold students accountable for this.

Remember - it doesn’t take 100% to earn an A.

More Information on testing in this class
I do not collect your practice homework. However, when writing your tests I will assume that you have successfully completed all of the practice problems that were assigned.

Important Dates
Your tests are scheduled for February 2, February 25, and March 10 (take-home test due date). Your final exam will be given on March 15.
A complete course schedule (Table 3) appears on page 7.

Important dates for all of you PCC courses (including information about changing your grading options) can be found at: http://www.pcc.edu/registration/academic-calendar.html
**Flexibility Statement**
The instructor reserves the right to modify course content and/or substitute assignments and learning activities in response to institutional, weather or class situations.

**School Closures**
In the unlikely event the college is closed on the day of an exam or graded homework due date, the exam/homework due date will be the following class period unless you are otherwise informed by me via MyPCC email and my MTH 261 website.

**Attendance Policy**
While attendance is not required (except on test days 😜 ) , attendance is required if you want to know what goes on during any given day - i.e. Mr. Simonds will not provide personal lectures nor will he serve as a personal messaging service for students who miss a class.

**Link to Portland Community College’s Grading Guidelines**
http://www.pcc.edu/resources/student-records/grading/

**Information about auditing, dropping, or withdrawing from the course**
The college has very tight deadlines for auditing, dropping, or withdrawing from a course. For example, during most terms the paperwork to audit a course must be signed and submitted by the end of the first week of the term. Similarly, to receive a refund for a class a drop must be completed the first week of the term. These time frames are even shorter for some summer term courses. In all cases, it is 100% the student’s responsibility to process the change in registration status by the due date and time. Term specific information for these deadlines is available at:  http://www.pcc.edu/registration/dropping.html

**Academic Integrity Statement**
Dishonest activities such as cheating on exams and submitting or copying work done by others will result in disciplinary actions including but not limited to receiving a failing grade. See the academic integrity policy in the Students Rights and Responsibilities Handbook for further details.

**Link to Portland Community College’s Student Rights and Responsibilities Handbook**

**Email communications**
Because of federal privacy laws, all email communications related to this class need to be sent from and to your PCC email address. You may access your PCC email via MyPCC. Please visit me during my office hours if you are unfamiliar with MyPCC.

**Course Evaluations**
Near the end of the term, students are encouraged to complete course evaluations by answering on-line questions about the class and the instructor. You will receive a PCC email notification when the evaluations become available. You are strongly encouraged to complete the evaluations to provide me feedback on the course and my teaching.
There are several things I will do to help you achieve success in class.

- I will show several examples for each topic covered in the class. I will consistently illustrate the proper way to write the mathematics and consistently illustrate proper organizational strategies so that you have a clear guide for how to write and organize your work.

- I will, to the best of my ability, answer all of your course related questions and do so in a friendly and open manner. This includes questions asked during class, during office hours, over the phone, or via email.

- I will frequently have you work in pairs and/or small groups so that you have the opportunity to practice the skills and ask pointed questions before you leave the classroom.

- I will be as explicit as possible in my feedback when grading your papers. I want you have the best chance of fully understanding your error and/or fully understanding how you need to write things differently to earn full credit on your next assignment.

- I will post all materials distributed in class on my web-site. This includes the lecture notes given in class.

### ADA Statement
PCC is committed to supporting all students. If you plan to use academic accommodations for this course, please contact your instructor as soon as possible to discuss your needs. Accommodations are not retroactive; they begin when the instructor receives the “Approved Academic Accommodations” form from you (submitted via email). To request academic accommodations for a disability, please contact a disability services counselor on any PCC campus. Office locations, phone numbers, and additional information may be found at [http://www.pcc.edu/disability](http://www.pcc.edu/disability).

### PCC’s policies on discrimination and harassment
Portland Community College does not tolerate unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, marital status, height/weight ratio, disability, veteran status, age, or sexual orientation in any area, activity or operation of the District. In addition, the college complies with the Civil Rights Act of 1964 (as amended), related Executive Orders 11246 and 11375, Title IX of the Education Amendments Act of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act of 1990 (as amended), USERRA – Uniformed Services Employment and Reemployment Rights Act, and all county, state and federal civil rights laws. Accordingly, equal opportunity for employment, admission, and participation in the college’s benefit and services shall be extended to all persons, and the college shall promote equal opportunity and treatment through a positive and continuing affirmative action plan. Additional information may be found at [http://www.pcc.edu/about/affirmative-action/nonharassment.html](http://www.pcc.edu/about/affirmative-action/nonharassment.html).

### Regarding Cell Phone Usage …
Your cell phone must be in some sort of “silent mode” while you are in the classroom.

You may not read or send text messages while class is in session. If there is an unusual situation where you simply must be able to read and/or send a message without delay, have your phone in vibrate mode and leave the room before reading and/or responding to the message.
• If you find yourself getting anxious about the class, I will respectfully listen to your concerns (during office hours) and do whatever I reasonably can to help mitigate your concerns.

As much as I want you to be successful in class, there are several things I can’t or won’t do.

• I can’t read your mind while I’m lecturing. If I am explaining something that you don’t understand, then you need to ask me questions. I can’t promise that you will understand everything right away, but I will try my best to explain things in different ways until you do understand whatever you ask about.

• I can’t take your notes for you. You need to follow along with me while I am lecturing and you need to write down all of the steps I show during lecture. You need to look at your notes when you first start working your homework problems and you need to find the connections between my examples and the problems in the book.

• I can’t do your homework for you. If you want to be successful in class you need to do all of your assigned homework in a complete and timely manner. I will be very specific about the work you need to show for certain types of problems. When practicing those problems you need to practice showing all of that work as well as understanding the steps.

• I can’t predict what problem set and/or concept a specific student won’t understand. If you don’t know how to successfully work some problems you need to find someone to help you with those problems. There are all sorts of people at PCC available help – this includes me, the tutors in the math center and multi-cultural center, and perhaps a fellow classmate. If you find yourself struggling with topic after topic, you might want to consider getting a private tutor.

• I can’t take your quizzes and tests for you. I will ask questions that are remarkably similar to what I illustrate in class and what is in your textbook. If you’ve done all of your homework and consistently come to class you will not find any surprises on your tests.

• I can’t be responsible when you miss a class. I know that sometimes a person has a perfectly legitimate reason for missing a class, but I can’t take that on for the more than 100 students I have this term. If you miss a class, go to my web-site and download the materials distributed the day that you missed. You’ll really want to get to know some students in the class to help you study and to pump for information should you miss class. Also, if a graded homework is either due or distributed it is 100% your responsibility to get the work in to me by time designated on the assignment if you want to receive credit for the assignment; I will not accept a late assignment under any circumstances.

• I can’t let you (or any other student) dictate how I evaluate your work. I have been teaching for over 20 years and have a set of standards that I have learned help students be successful not only in my class but also in subsequent math classes. If you get frustrated with how I’ve graded something, try to keep in mind that I’m truly trying to help you be the best math student you can be. Feel free to stop by my office to have a friendly chat about how I’ve graded your work. If I write something on your paper that offends you (or say something in class that offends you) please let me know so that I can apologize and try to not do it again.

• I cannot allow you to use cell phones or other electronic communication devices while class is in session; those devices are distractions for you, the other students, and me. If you cannot exist with those type devices shut off, at the very least put the devices in vibrate mode and leave the classroom if an emergency requires you look at a message or take a call.
<table>
<thead>
<tr>
<th>STUDENT RESOURCES</th>
</tr>
</thead>
</table>
| **Calculator Handbooks**  
Revised handbooks for TI-89, TI-Voyage 200, and the Casio ClassPad 330 are available on the PCC Math Department page under “Course Downloads” at: [http://spot.pcc.edu/math/download.htm](http://spot.pcc.edu/math/download.htm)  
| **College Success Courses**  
There are several one credit courses available to help you maximize your success in the college experience. These include courses specifically geared to study skills. The following site offers information on these courses as well as tips for success: [http://www.pcc.edu/resources/panther-tracks/college-success/study-skills.html](http://www.pcc.edu/resources/panther-tracks/college-success/study-skills.html)  
| **Counseling Services** (SY CC 210, 971–722–8153)  
Get help dealing with personal or career concerns that may be impacting your academic success. Trained professional counselors can also assist you with decision-making, goal-setting, and personal development. [http://www.pcc.edu/resources](http://www.pcc.edu/resources)  
| **Multicultural Center** (SY CC 267, 971–722–4112)  
A welcoming and inclusive space for diverse students. One of the many services is one-on-one help for math courses, drop-in or by appointment: [http://www.pcc.edu/resources/culture/](http://www.pcc.edu/resources/culture/)  
| **Student Computing Center** (SY Library, 971–722–4325)  
- internet access, mathematics computer programs, and more (orientation required)  
  [http://www.pcc.edu/resources/computer-labs/](http://www.pcc.edu/resources/computer-labs/)  
- allocation of 100 double-sided pages of free printing per term  
  (does not roll over to next term)  
  [http://www.pcc.edu/resources/printing/](http://www.pcc.edu/resources/printing/)  
| **Student Learning Center** (SY Library, 971–722–4540)  
An informal, open study area, with the added benefit of free tutoring assistance. The Math Center resides here. For more information: [http://www.pcc.edu/resources/tutoring/sylvania/student-success/math-center](http://www.pcc.edu/resources/tutoring/sylvania/student-success/math-center)  
| **Veteran’s Resource Center** (SY CC 246, 971–722–8793)  
Relax, connect, computer workstations, work study and volunteer opportunities, and more. For additional information: [http://www.pcc.edu/resources/veterans/sylvania](http://www.pcc.edu/resources/veterans/sylvania)  
| **Women’s Resource Center** (SY CC 268, 971–722–8101)  
A wide variety of services that support the academic achievement of women: [http://www.pcc.edu/resources/women/sylvania](http://www.pcc.edu/resources/women/sylvania) |
Table 3: Tentative Schedule for Section 12645

<table>
<thead>
<tr>
<th>Week</th>
<th>Classroom Activities</th>
<th>Practice Homework (not turned in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 5/7</td>
<td>Cover Section 4.8, 5.5</td>
<td>4.8: 1-53 odd</td>
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<tr>
<td></td>
<td></td>
<td>5.5: 1-35 odd</td>
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<tr>
<td></td>
<td></td>
<td>Handout Problems</td>
</tr>
<tr>
<td>Jan 12/14</td>
<td>Cover Sections 5.1 and 5.2</td>
<td>5.1: 1-15 odd</td>
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<tr>
<td></td>
<td>Learn about Calculator</td>
<td>5.2: 1-5 odd, 9-25 odd, 31-43 odd, 47, 49</td>
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<tr>
<td></td>
<td></td>
<td>Handout Problems</td>
</tr>
<tr>
<td>Jan 19/21</td>
<td>Cover Sections 5.3 and 5.4</td>
<td>5.3: 1-29 odd, 43-47 odd, 51-63 odd</td>
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<td></td>
<td></td>
<td>5.4: 3-21 odd</td>
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<tr>
<td>Jan 26/28</td>
<td>Cover Sections 5.5 and 5.6</td>
<td>5.5: 1-61 odd</td>
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<td></td>
<td></td>
<td>5.6: 1-29 odd</td>
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<tr>
<td></td>
<td></td>
<td>Handout Problems</td>
</tr>
<tr>
<td>Feb 2/4</td>
<td><strong>Test 1 on Tuesday</strong></td>
<td>4.5: 1-45 odd</td>
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<tr>
<td></td>
<td><strong>Cover Section 4.5</strong></td>
<td>Handout Problems</td>
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<tr>
<td>Feb 9/11</td>
<td>Cover Sections 5.10</td>
<td>5.10: 1-39 odd</td>
</tr>
<tr>
<td>Feb 16/18</td>
<td>Cover Sections 4.2, 4.3, and 4.6</td>
<td>4.2: 41-53 odd</td>
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<tr>
<td></td>
<td>Learn about Calculator</td>
<td>59</td>
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<td></td>
<td>4.3: 21-31 odd</td>
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<tr>
<td></td>
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<td>4.6: 5-11 odd</td>
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<td>31</td>
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<td></td>
<td></td>
<td>Handout Problems</td>
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<tr>
<td>Feb 23/25</td>
<td><strong>Test 2 on Thursday</strong></td>
<td>5.9: 1-15 odd</td>
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<td></td>
<td><strong>Covers section 4.2, 4.3, 4.5, 5.10</strong></td>
<td>27-31 odd</td>
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<tr>
<td></td>
<td><strong>Cover Sections 5.9 and 6.1</strong></td>
<td>6.1: 1-21 odd</td>
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<tr>
<td></td>
<td>Learn about Calculator</td>
<td>25, 27</td>
</tr>
<tr>
<td>Mar 1/3</td>
<td>Cover Sections 6.2 and 6.3</td>
<td>6.2: 1-17 odd</td>
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<tr>
<td></td>
<td></td>
<td>6.3: 1-17 odd</td>
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<td>21-33 odd</td>
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<td></td>
<td>Handout Problems</td>
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<tr>
<td>Mar 8/10</td>
<td>Cover Sections 6.4-6.6</td>
<td>6.4: 3-19 odd</td>
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<td><strong>Test 3 Take Home due on Thursday</strong></td>
<td>23, 25</td>
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<td>6.5: 1-15 odd</td>
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<td></td>
<td></td>
<td>6.6: 1-9 odd</td>
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<tr>
<td>Mar 15</td>
<td><strong>Final Exam on Tuesday</strong></td>
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FoxTrot by Bill Amend