MATH 181-3003
Calculus I
SYLLABUS and COURSE EXPECTATIONS

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- Office: H-101, office G (Charleston campus)
- Phone: 651-7579
- Office Hours: See my schedule at http://sites.csn.edu/jmartin/f2015sched.pdf
- Class Meeting info: Mon/Wed 2:00-3:50 pm in I-312, Charleston campus

COURSE DESCRIPTION: A first semester, single variable calculus course. Topics include limits, differentiation, and integration of algebraic and transcendental functions with applications.
PREREQUISITE: C or better in Math 127 or Math 128; satisfactory placement score

REQUIRED TEXT: MyOpenMath Access (free)

Note 1: MyOpenMath (www.myopenmath.com) is an open source website (like Wikipedia) created by math instructors to give students free access to math books, homework problems, and videos.

Note 2: The book for this course is called Contemporary Calculus by Dale Hoffman and is available in an electronic version in MyOpenMath. It is also available here. A print version is available through amazon, here.

Note 3: To find our course in MyOpenMath you will need the following information:
Course ID: 7483
Enrollment Key: csnmath181

CALCULATORS: Calculators will NOT be allowed on any in-class exams.

In general, the use of technology to learn math is very much encouraged. Sites like https://www.desmos.com/calculator and http://www.wolframalpha.com are very helpful learning tools and can be used when completing HW. Just keep in mind that on in-class exams, calculators are NOT allowed. Prepare yourself accordingly!

OUTLINE: These are the sections from the book we will cover (to some extent) in class. (The order may vary.)

Ch 1: sections 1.0 – 1.3 & 3.6 (Limits, continuity, and asymptotes)
Ch 2: sections 2.0 – 2.6 & 2.9 (Definition of derivative, differentiation rules, implicit differentiation)
Ch 3: sections 3.1 – 3.5 & 3.7 (Extreme values, mean value theorem, graphing, optimization, l’Hospital’s rule)
Ch 4: sections 4.0 – 4.6 (Riemann sums, definite integral, indefinite integral, fundamental theorem, substitution)
Ch 7: sections 7.3 (Calculus of inverse trig functions)

Note: A tentative schedule outlining which sections will be covered each day in class can be accessed through my website. http://sites.csn.edu/jmartin/181-3003-fall2015-lectureschedule.pdf
GRADING BREAK DOWN:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW (skills practice 10%, notebook 5%)</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>15%</td>
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<tr>
<td>Exam 4</td>
<td>15%</td>
</tr>
<tr>
<td>Tech Assignments</td>
<td>5%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

GRADING SCALE:

A: 92-100%,
A−: 90-91.9%,
B: 82-89.9%,
B−: 80-81.9%,
C: 72-79.9%,
C−: 70-71.9%,
D: 62-69.9%,
D−: 60-61.9%,
F: 0-59.9%.

Notes on class grades:

1. When calculating the final class grade, the lowest score from the following list will be dropped: HW average, Exam 1, Exam 2, Exam 3, and Exam 4.

2. A college policy dictates that the instructor CANNOT give a grade of “W.” If a student wishes to withdraw from a class, he or she must do so on their own through MyCSN or the registrar by Friday, October 30th.

3. Each student’s class grade will be determined by the breakdown above, period. So, please don’t ask for a grade you did not earn through satisfactorily completing the above assignments.

LECTURE STYLE: The class-time will be divided into three parts.

During the first part of the class (aprx. 20 min), I will give students 1 review question to work and discuss with me and with other students. This question will be the type of problem I might put on a test. Coming to class and understanding how to work these questions WILL benefit you!

During the second part of the class (aprx 30 min), I will answer questions from students, to the best of my ability. These questions might relate to the homework, or maybe to the previous lecture. Any questions at all are fine. If I do not feel a question will benefit the entire class, or if I do not feel we have time to explore a particular question, then I may postpone answering that question until after class, or during my office hours.

During the third part of class (aprx. 60 min), I will lecture on the upcoming material. I will do my best to present the basic concepts needed to begin the understanding process. After the lecture, you will hopefully understand some of the vocabulary and basic principles from a section. From there, you go home and work your butt off to gain the deeper understanding required to succeed on tests!

EXTRA RESOURCES: Below is a list of resources that I believe may help a motivated student study calculus. This is not a comprehensive list, but it is a start. I thoroughly encourage you to mindfully take advantage of all of these resources.

- Josh’s Calculus Website: http://sites.csn.edu/jmartin/math181videos.html
- Professor Eric Hutchinson’s Calculus Videos: http://sites.csn.edu/ehutchinson/MATH181NOTES.html
- Textbook Resources: http://scidiv.bellevuecollege.edu/dh/Calculus_all/Calculus_all.html
- Paul’s Online Calculus Notes: http://tutorial.math.lamar.edu
- Khan Academy: https://www.khanacademy.org/math/calculus
- University of Houston Videos: http://www.online.math.uh.edu/HoustonACT/videocalculus

HOMEWORK: Homework has 2 components: skills practice and thinking notebook.

Skills Practice: These are homework assignments of about 5 to 15 questions each that focuses on skill building. Skills Practice assignments contain questions that can be attempted an unlimited number of times and are administered through MyOpenMath. All Skills Practice assignments are due on the final day of class, 12/9.
To access the skills practice, as well as other online components of this class, follow these three steps:

1. Register with the site (www.myopenmath.com) by clicking the button that says register as a new student.
2. Enter the requested information, as well as the **Course ID: 7483** and the **Enrollment Key: csnmath181**.
3. Click “sign up.”

**Note:** *When filling out the registration information, please use the name you see when you log in to MyCSN*

After you are registered and enrolled in our course shell, you can access the online materials by going to www.myopenmath.com and logging in with your new user name and password. Inside the course shell, you will find many tabs, usually corresponding to chapters. By expanding these tabs you gain access to videos, an online text-book, Skills Practice, and textbook problems. Open up the top tab to get started.

**Thinking Notebook:** This is a notebook that you will create consisting of answers to book problems. In MyOpenMath, next to the Skills Practice assignments, are regular book homework assignments. These assignments are to be completed in a single (or multiple) notebook(s) and turned in at the end of the semester (12/2) to be graded for completeness.

If you are having trouble with a specific homework problem (either on the skills practice or the thinking notebook) email me about it, ask me during class, see a tutor, or come to my office for help. If you are having trouble with several (or all) homework problems, exploit the resources listed above. If you are still having trouble, make time to visit me in my office during my office hours as often as possible and seek immediate help from the tutoring services offered by CSN (see below).

**TECHNOLOGY ASSIGNMENTS:** These are out of class assignments that require the use of a computer program to complete. They will be posted at least two weeks before they are due. The due dates can be found in the lecture schedule: http://sites.csn.edu/jmartin/181-3003-fall2015-lectureschedule.pdf.

**EXAMS:** There will be four in-class exams AND a comprehensive in-class final exam. The exams will be designed to test your understanding of the critical principles covered in the class. **Questions on exams may ask students to apply previously studied concepts in new settings. This is how I believe understanding is tested.** Each exam will consist of 8 to 10 problems and you will be given a 1-hour time limit.

**Note:** No practice problems will be given before the exam.

**EXAM DATES:** Here are the dates for each exam. These dates will not change.

| EXAM 1 is on **WEDNESDAY, SEPTEMBER 23rd** | EXAM 2 is on **WEDNESDAY, OCTOBER 14th** |
| EXAM 3 is on **WEDNESDAY, NOVEMBER 4th** | EXAM 4 is on **WEDNESDAY, DECEMBER 2nd** |
| The **FINAL EXAM** is on **WEDNESDAY, DECEMBER 9th** |

**PARTIAL CREDIT ON EXAMS:** Credit on exams will only be awarded if logical work is shown. If no work is shown, or insufficient work is shown, the student will be given zero points for that problem.

MOST questions on exams will be graded out of 3 points. The following partial credit scale will usually be used:

<table>
<thead>
<tr>
<th>3-point solutions</th>
<th>These are solutions that are almost mathematically perfect, with sufficient work shown, and contain only very (very!) minor arithmetic or transcriptional errors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-point solutions</td>
<td>These are solutions that are logical and display a concrete understanding of the pertinent principles in the problem; however 2-point solutions contain at least one critical error.</td>
</tr>
<tr>
<td>1-point solutions</td>
<td>These are solutions that show some understanding of the underlying principles in the problem but contain two or more critical errors.</td>
</tr>
<tr>
<td>0-point solutions</td>
<td>These are solutions that show no understanding of the underlying principles in the problem, or solutions that have insufficient work shown.</td>
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</tbody>
</table>
**ATTENDANCE:** Attendance is strongly encouraged but not required, unless there is an exam that day. It is the student’s responsibility to understand all material covered in class, whether or not he or she attends class. Sometimes important information is discussed during class, so be sure to contact the instructor, or a classmate, to get any information given in class in the case of an absence.

**MAKE-UP POLICY:** Absolutely no late exams will be given. Please make every effort to attend class on exam days. In the case of a prearranged absence, **exams may be taken a day or two early, but special arrangements with the instructor must be made in advance.**

**DISRUPTIVE STUDENT POLICY:** It is expected that students will refrain from activities that disrupt the learning of other students. Do not partake in inconsiderate activities during class. It is distracting and will not be tolerated. Examples of inconsiderate activities include (but are not limited to): listening to music, texting or talking on the phone, talking out of turn, frequently leaving the classroom, making disrespectful comments, etc. Continually disruptive students will be asked to leave the classroom. (The Student Code of Conduct can be found in the 2013-2014 general catalog on page 469.)

**ACADEMIC DISHONESTY:** Exams are to be completed independently with no aid from other persons or forbidden items as specified by the instructor (such as books, calculators, cell phones, tablets, etc). Dishonest work on an exam or quiz will be punished by a zero on that assignment. No exceptions. (Students’ rights and responsibilities regarding academic dishonesty are outlined in the CSN academic integrity policy, which can be found at [http://www.csn.edu/pages/3342.asp](http://www.csn.edu/pages/3342.asp).)

**AMERICANS WITH DISABILITIES ACT STATEMENT:** Students with medical, psychological, learning or other disabilities desiring academic adjustments, accommodations or auxiliary aids will need to contact a campus Disability Resource Center. Only the Disability Resource Center determines eligibility for and authorizes the provision of services. (Information regarding the DRC can be found at [http://www.csn.edu/pages/544.asp](http://www.csn.edu/pages/544.asp), and information about the ADA can be found at [http://www.csn.edu/pages/2566.asp](http://www.csn.edu/pages/2566.asp).)

**OUTSIDE RESOURCES:** If you find yourself falling behind or becoming even the slightest bit confused, seek help immediately! CSN provides free tutoring for all enrolled math students. There is a free walk-in tutorial lab on all three CSN campuses that is staffed with tutors and math instructors ([http://sites.csn.edu/math/mrc.htm](http://sites.csn.edu/math/mrc.htm)). In addition, a student can sign up for one-on-one tutoring sessions by visiting [http://www.csn.edu/pages/1903.asp](http://www.csn.edu/pages/1903.asp).

**DISCLAIMER:** Information contained in this syllabus, other than the grading, late assignments, make-up work, and attendance policies, may be subject to change with advance notice, as deemed appropriate by the instructor.