MATH 152
Spring 2016 Syllabus

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Goals: This course is about understanding and doing integral calculus. We also have some more specific goals:

1. Justify and explain steps in solving math problems. [Instruments: lectures, exams]
2. Describe and understand the different ways to conceptualize an integral (e.g. as a function, as a limit, as an area). [Instruments: lectures, WeBWorK, exams]
3. Recognize and implement appropriate integration techniques. [Instruments: lectures, WeBWorK, exams]
4. Apply the principles and techniques of integral calculus to calculating areas and volumes and solving physical applications. [Instruments: lectures, WeBWorK, exams]
5. Understand and use parametric equations and polar coordinate systems for differential and integral calculus. [Instruments: lectures, WeBWorK, exams]
6. General Education objective from CLA Catalog: Students will demonstrate the ability to make judgments and draw appropriate conclusions based on quantitative information. [Instruments: lectures, WeBWorK, exams]

Assessment: Your grade will be computed as follows:

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>WebWork</td>
<td>30%</td>
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<tr>
<td>Quizzes</td>
<td>20%</td>
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<tr>
<td>Midterm Exam</td>
<td>20%</td>
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<td>Final Exam</td>
<td>30%</td>
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<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Letter grades are assigned on the usual 90-80-70-60 scale. Plus and minus grades are at my discretion but generally correspond to trends in your performance for borderline cases.

As a general rule, you should not expect any “curving.” The grades correspond to a level of achievement, not a ranking in the class. However, if you focus on learning what we study, the grades will take care of themselves. They should be among the least of your worries.

I will not take attendance for a grade, but I will expect you to be here every day. If you must miss, you should let me know in advance.

WeBWorK: This is an on-line homework system. The problems will be very much like those in the text, so the text problems can give you additional practice. Note that WeBWorK is worth 30% of your grade. That means that you are unlikely to pass without doing it! In WeBWorK, you may keep trying problems you miss until you get them right. This means that everyone should get 100% on homework, so take advantage of the system by not giving up. At the same time, you should not just guess at answers until one works; this is
a counterproductive waste of time. If you are struggling, **come see me!** The address for our WeBWorK site is https://secure.willamette.edu/webwork2/Math152-Starr/ and there is a link on our course homepage. Please be sure to do more than just the WeBWorK. WeBWorK is the graded portion, but it is not sufficient by itself. WeBWorK assignments will become available at class time on the day they are assigned. They are due at 11:50 PM on the due date, and answers will then be available.

**Please note:** Our class time is very limited; we are only together for three hours each week. That means that you **must** read the text before class; I will assume that you have done so and present my lectures accordingly. If you have not, you will be left in the dust. **You should expect to spend at least three hours outside of class for every hour we have in class.**

**Quizzes:** We will have brief quizzes periodically over the WeBWorK that was due the previous class period. These will have only one or two problems and last about five minutes. If you have understood the WeBWorK, you should have no trouble finishing in time. Quizzes will be the first five minutes of class, so you will need to be on time. Quizzes cannot be made up, but I will drop your two lowest quiz scores. I intend the quizzes to be somewhat diagnostic: they will tell you and me what you need to work on. With that in mind, I don’t want you to stress out over them; I want them instead to be a tool to help you succeed. Accordingly, at the end of the term I may [no guarantee!] place more weight on the final exam if that works in your favor.

**Exams:** There is one midterm exam. It is scheduled for Monday, February 8. The final exam is Monday, March 7 in class*. You may not make up any missed exam. If an emergency arises, **contact me prior to the exam.**

**Please note:** Written responses to all questions must be in complete sentences. I expect correct usage of grammar, spelling, and punctuation at all times; your grade will reflect this! I also expect your work to be neatly written.

**Calculators:** There are no required calculators for this course. There is a link on our course webpage to a powerful online calculator that you may use for your homework. You may bring a non-graphing scientific calculator to the exams. No graphing calculators will be allowed on the exam.

**Special Needs:** If you have special needs (e.g., for a documented disability), it is your responsibility to approach me at least a day in advance of the need for accommodation. To receive accommodation, you must be registered with Disability Services; this office is located in Bishop Health Center in Baxter Hall. (Phone: (503) 370-6471.)

**Cheating:** Cheating will not be tolerated. The minimum penalty for cheating is a 0 on the assignment and a formal notification to the dean. I encourage you to work together on your homework, but your final write-up **must** be your own. **NOTE:** It is your responsibility to avoid even the appearance of cheating.

**Classroom Comportment:** We will all make mistakes, and these are an essential part of learning. The classroom environment must be tolerant and welcoming so that everyone feels free to contribute without fear of ridicule or harassment. Treat everyone with respect, and we can all learn from each other.

**You are WELCOME!** My door is usually open. The office hours above are the times I will definitely be in my office (or nearby), but you are welcome to come by at other times as well. Make sure you come see me whenever you have a question. Plus, that’s where I keep the Red Vines.