Math 142 - Calculus II - Spring 2016

Instructor:	Dr. Heather Finotti
Office:	233 Ayres Hall
Phone:	974-4320 (I cannot receive messages left here, though)
e-mail:	heather@math.utk.edu (this is my preferred means of communication)
Office Hours:	Posted at http://www.math.utk.edu/~heather/teaching.html
Course Web Page:	http://www.math.utk.edu/~heather/142Math.html
Course Text:	"Calculus", Third Edition with "Early Transcendentals" by Jon Rogawski & Colin Adams

Class Meeting Times :

Section 1: MWF 9:05-9:55, Estabrook 201
     R 8:10-9:25, Burchfiel Geography Building 101
Section 2: MWF 10:10-11:00 , Estabrook 201
     R 9:40-10:55 Ayres 124
Section 3: MWF 11:15-12:05, Ayres 110
     R 11:10-12:25, Ayres 110

Midterms:	There will be three midterms See class calendar for dates.
Final:	Each section has a different final exam time. See class calendar for dates and times.
Grade:	20% for homework, 20% for each midterm 20% for the final exam.
Grading Scheme:	90-100 A, 87-89 A-, 84-86 B+, 80-83 B, 77-79 B-, etc.

Course Information

The main purpose of this course is to master the basics of integral Calculus, Sequences, and Series.

Please let me know if you feel that you may not have an adequate background for success in this course, or if you have not met the course prerequisites with at least a 'C' grade. Even if you have met the prerequisite, if you have not taken Calculus I for some time, or do not feel your algebra skills are solid, please come and talk with me.

I look forward to working with you this semester! Calculus II can be challenging, but what worthwile endeavor isn't? Together with sincere effort and ample devoted time, I look forward to watching you master the ideas in this subject and revel with me in it's beauty and applicability.

Expectations Summary

1. Read sections we will be covering **before** coming to class, review any indicated prerequisite materal, and complete the prep quiz for that day. The lowest four of these will be dropped to allow for occasional emergenices/sicknesses. We will rest **heavily** on prerequisite material (Calc I, algebra, trig), and I will not be reteaching it, so make sure you allow yourself time for any necessary reviewing that needs to be done so that you can succeed in our course.

2. Active engagement during class - I **expect** you to ask questions during class, and that you are actively thinking about what is being presented. So, please, do not hesitate to ask questions during class.

3. Complete all assigned homework problems, and mark any you find especially challenging. Seek help for marked problems. The lowest two problem set scores will be dropped. Problem sets will be completed on WebAssign.

4. Attend and participate in "Work-It-Out" days. These days will be graded by attendance or completion of in-class work, whichever is appropriate. The lowest two of these scores will also be dropped.

5. Check your email and the website frequently (at least every other day). I will be using email to send out announcements about the course.

6. Remember, making mistakes in math course is inevitable **and essential to learning the material**. The key is to learn from them when they happen, so don't sweep them under the rug. When something goes awry, delve into it to discover what misunderstanding you hold that *led* to that mistake so that it can be recified. If you can't rectify the misunderstanding on your own (or even ferret it out) seek help! There is no special reward for doing this all on your own. The depth of learning you can obtain from being diligent in this kind of practice will astound you!

Course Structure

The tentative day-by-day course material to be covered is shown at

http://www.math.utk.edu/~heather/142Spring16Calendar.pdf.

and will be updated regularly (I will notify you of any changes via email. Because it is likely to change, I recommend checking the calendar online as a rule, rather than printing it out and using that). There you can see what sections will be covered in lecture each day, (this is also your indication as to what you should read before each class), when we'll have "Work-It-Out" days and when the exams will be held.

Homework

Doing the homework is absolutely the key to learning the material and doing well in the class. **If you do not do the homework or do not get help with the things you don't understand, do not expect to pass.** Math is not a spectator sport and is multi-layered. It takes time spent practicing and mulling over ideas to learn to any level that is useful.

Problem sets will be posted on the course homework page at

http://www.math.utk.edu/~heather/142Homework.html

and will not be announced in class. Beside each problem set you will see a date that indicates when that set is due. Problem sets will be completed on WebAssign.

Another part of the homework is doing the preparation quizzes. The point of these is to have you read and reflect on the material we will be covering in lecture *before* we cover it, and to make sure you have reviewed any necessary prerequisite material. This allows you to set up a sort of scaffold in your mind before class, that you can then begin to better fill in with details in lecture. It also reduces the amount of learning that needs to occur in lecture, allowing you to get more out of what we cover in class. AND it increases long term retention of the material. Taking this seriously can make an enormous impact on what you get out of this course.

Read your mathematics actively before coming to class, and it will greatly increase your understanding and long-term retention, setting you up for future success! These quizzes will be given through Blackboard and automatically graded by Blackboard. The lowest four will be dropped (there will be MANY) to allow for unavoidable emergenices/sickness.

The final component of your homework grade is comprised of scores accumulated from "Work-It-Out" days. On these days (which largely fall on Thursdays), we will not have lecture, but will use this time to work through problems. I plan to use part of the time to talk together about issues you are having with homework problems, and part of the time to complete some in-class work constructed to help you sort out topics that generally cause students to get tripped up.

If we have days we devote entirely to homework problems, the day will be graded on attendance. Otherwise, they will be graded on completion of the in-class work.

It is your responsibility to keep all your graded homework and midterms. It is very important to have them in case there are any problems with your grade.

Learning Outside the Classroom

I strongly encourage you to form study groups. Research shows that this can be highly beneficial to learning. However, it's important that you write up your homework problems **on your own** so that you know clearly what it is that you do and do not understand. The homework is for learning the material and part of the process of learning is seeing what it is that **you do not know**.

Absolutely **come to my office hours** if you are having difficulties with the course – this is what they are for. Please try to come during my *scheduled* office hours, if at all possible, as my time is stretched thin with so many sections/students to serve. That said, in the event that you have unavoidable conflicts with my scheduled office hours, or special needs, I can still find time to meet with students outside my regularly scheduled office hours if you make an appointment with me. Any appointments should be scheduled via email.

You are also welcome to email me with math questions. Of course, you are most likely to get a timely response if you give me time to respond (please try to avoid last minute questions). I am not available for drop-in office hours in general, as if I am in my office outside of office hours it is because I need to get other work done for the course (my time, like yours, is precious and nearly always too little).

The Math Tutorial Center is also a good resource for help with this course. You can see more information about it at

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`http://www.math.utk.edu/~mtc`.

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I highly recommend using the link they provide for the "Tutor Skills List", so that you can make sure that you go to the MTC when there is guaranteed to be someone there is qualified to help you. (Click on a specific tutor's name so that you can see what times they will be working.) As

with many things, teaching/learning is highly specific to each individual, so if you try the MTC out once and don't have a great experience, try again but with a different (qualified) tutor. There are some excellent students working in there, so I am sure eventually you will find some help that fits.

Exams

We will have three midterms and a comprehensive final exam. These exams will be made up of problems you have not seen before. I am interested in discerning whether or not you have made the material your own and are really coming to understanding it. After all, the point of taking this course is so that you can use the material you learn here after the fact – in later courses and/or in your future careers. You cannot use what you do not understand, and likely won't even recognize when you *could* use what we will learn if you don't understand it. As a result, it is important that you do your work with the intention to understand, rather than just produce correct results.

With that said, I *never* will try to trick you on an exam, or try to make an exam difficult. My intention is always to test whether or not you've learned the techniques and ideas you've been asked to learn, and whether or not you understand them. You will need to come in to an exam well prepared, and well practiced, as I do not leave much time for "mulling over". Your time to mull is before the exam, and I expect that you have learned the material to the level that it is no longer necessary for you to mull over much once the exam time has come.

It is important to note that **no calculators will be allowed during exams**. As a result, it is important that you do as much of your homework sets as possible without a calculator. If not, you risk a surprise on the exam!

Finally, I grade your exams anonymously - meaning I don't know whose work I'm grading as I grade. I do this to protect you and to protect me. In this way, you can be sure that you need not worry about anyone's perception about your abilities, or knowledge of your past performance, influencing your grade. I want to know that your grade is as accurate a reflection of your level of demonstrated knowledge on the exams as possible.

Course Grade Computation

As mentioned above, your course grade will be made up of 20% for each midterm exam, 20% for the final exam, and 20% for homework. The 20% attributed to homework is actually built up of 14% your average WebAssign problem set percentage, after dropping the lowest two, 3% your average Prep Quiz percentage, after dropping the lowest four, and 3% your average "Work-It-Out" days percentage, after dropping the lowest two.

As an example: Suppose Student Zero has the following scores over the semester

Midterm 1	85%
Midterm 2	91%
Midterm 3	77%
Final Exam	83%
WebAssign Average	90%
Prep Quiz Average	86%
Work-It-Out Average	82% .

Student Zero's course grade would then be given by

$$.2 * (85) + .2 * (91) + .2 * (77) + .2 * (83) + .14 * (90) + .3 * (86) + .3 * (82) = 84.84 \approx 85\% .$$

The course grade then would be a B+.

I generally don't have to curve, and if it is necessary, it won't happen until the class has ended (meaning I never curve individual exams, etc). I determine whether or not to curve based on the class average of the course grades (if this falls below the C range, then there is a curve, but I've actually only curved a class once in my 20 years of teaching).

E-Mails

It is best to check your e-mail at least three times a week, preferably daily. I will use e-mail (given to me by the registrar's office) to make announcements. I will assume that any message that I send via e-mail will be read within one day of it being sent, and it will be considered an *official* communication.

Due to privacy issues, I cannot send grades via e-mail, unless you sign a document saying that you are aware that e-mails are not secure and not necessarily private. (In fact, because of the open records laws in Tennessee, it really is not private.) If you want to sign such a document, please let me know. Grades for midterms will generally be posted on the course blackboard site, however.

Feedback

I have an *On-line Feedback Form* at

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`http://www.math.utk.edu/~heather/php/feedback.html`

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where you can anonymously send me your comments and feedback. I will consider your comments and try to do whatever I can to resolve possible problems before it is too late. So, please, feel free to use it whenever you have any constructive comments or suggestions. (In fact, I would greatly appreciate it.)

Legal Issues

Conduct.   All students should be familiar with and maintain their "Academic Integrity": from *Hilltopics 2007/2008* (`http://web.utk.edu/~homepage/hilltopics/HILLTOPICS2007-08.pdf`) pg. 40:

> ### Academic Integrity
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> *The responsibility for learning is an individual matter. Study, preparation and presentation should involve at all times the student's own work, unless it has been clearly specified that work is to be a team effort. Academic honesty requires that all work presented be the student's own work, not only on tests, but in themes, papers, homework, and class presentation. There is a clear distinction between learning new ideas and presenting them as facts or as answers, and presenting them as ones own ideas.*

You should also be familiar with the "Classroom Behavior Expectations" found at

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`http://www.math.utk.edu/Undergraduate/undergrad/Expectations.pdf`.

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Disabilities.   Students with disabilities that need special accommodations should contact the "Office of Disability Services" (`http://ods.utk.edu/`) and bring me the appropriate letter/forms.

Sexual Harassment and Discrimination.   For *Sexual Harassment* and *Discrimination* information, please visit the *Office of Equity and Diversity* at `http://oed.admin.utk.edu/` and check

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`http://oed.admin.utk.edu/docs/complaint_sex_harass.pdf` (Sexual Harassment)

`http://oed.admin.utk.edu/docs/DiscrimCompProc.pdf` (Discrimination)

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