Instructor:	H.E. Bible				
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Office Hours: Posted on the course website

# Textbook/Graphing Calculator

- APPLIED CALCULUS (Fourth Edition) by Hughes-Hallett, et al. (new edition as of Fall 2011)
- A scientific or graphing calculator is required for this course (see Calculator section below).

# **Class Format**

# 1. Lectures: Mondays and Wednesdays 1:30 - 2:20 ES 317

- Lectures cover 1 to 2 sections from the textbook (see attached schedule). There will be very little, if any, time for questions.
- Lecture notes are available on the course website. You should print these notes and bring them to class to take notes.
- You are responsible for all the textbook material, even if it is not discussed in the lecture.
- Attendance is very important and will be recorded each day.
- Hour exams will be given at the normal lecture time in the lecture classroom (see attached schedule).

#### 2. Quiz Sessions: Thursdays 75 minutes (start time / classroom depends on your section)

- You must attend the quiz section in which you are enrolled.
- Attendance is very important and will be recorded each day.
- You can ask questions about the lecture material and/or homework problems.
- Quiz Session TAs will return and discuss graded homework, quizzes and exams.
- You will turn in homework assignments and any take-home guizzes at the beginning of class.
- During most sessions, you will take a 20-point guiz during the last 15-20 minutes of the class.
- To turn in homework and take the quiz, you must arrive on time and be present for the entire class period.

# Attendance

Educational studies show that the single most important factor contributing to high grades in a course is regular class attendance. Because of the importance of our class sessions as active learning opportunities, you are expected to attend and participate fully in all scheduled class meetings. Your attendance will be recorded by having you sign an attendance sheet distributed during each class period. Do not sign the attendance sheet for another student or ask another student to sign for you. This is a serious offense of academic misconduct and will be treated as such.

Proper attendance means arriving on time and remaining until the class is dismissed. It is your responsibility to be punctual. If you are late for whatever reason, please respect your classmates and do not enter and interrupt the class session already in progress.

Good attendance demonstrates your desire to learn and your dedication as a student. Missing more than 5 classes in a semester should be considered excessive absenteeism. Exceptionally good attendance might be rewarded at the end of the semester with a bonus of replacing a low exam score. See **Low Exam Replacement Policy** below.

# **Student Class Number**

After the drop and add period ends and the roll is official, you will be given a **Student Class Number**. This number will consist of your section number followed by a dash, followed by a sequential number indicating your alphabetical order in your section. For example, if you are in quiz section 9 and you are the 23<sup>rd</sup> name alphabetically on the roll, your Student Class Number would be **9-23**. The Student Class Number is very important and helpful to your instructors in sorting and organizing the papers and recording grades. You should remember this Student Class Number and put it on all homework, quiz and exam papers. If you fail to put your correct Student Class Number on a homework, quiz or exam paper, you will earn a grade of zero on the paper. Numbers will be assigned in Lecture on **Wednesday, August 29**. Your **Student Class Number** will appear on the attendance signup sheet to the left of your name.

# **Examinations**

There will be three (3) fifty-minute 100-point examinations and a 110-minute 200-point comprehensive final examination. All these exams will be given in the lecture classroom. You will need your calculator on the exams. The exams will be closed-book, but you will be allowed to use a 3" by 5" note card. All cell phones , ipods, ipads, PDAs and other electronic devices (other than a calculator) should be put away during the exams and quizzes. Bring your OSU Student ID to all examinations for identification. Baseball caps or hats with wide brims are not allowed during any exam or quiz. A schedule of the exams dates is given in the attached Class Schedule. Review these exam dates now and plan your semester schedule accordingly.

# Low Exam Replacement Policy

If you have five (5) or fewer total absences for the semester, you qualify for the Low Exam Replacement. This means that your lowest hour exam score may be replaced by a higher percentage score on the final exam if it improves your grade. Only one exam score is eligible for this substitution. Generally, all absences count toward the limit of five absences. However, under rare circumstances some absences might be excused using the same conditions described in the Makeup Policy below.

# **Quizzes**

In most Thursday Quiz Sessions, you will be given a 20-point quiz during the last 15-20 minutes of class. A total of twelve (12) quizzes will be given. Only your scores on the best ten (10) of these will be counted. Your quiz score has a maximum value of 200 points – the equivalent of two fifty-minute 100-point exams.

You will be able to use your calculator, but the quizzes will be closed-book with no notes or note cards allowed. You must be present for the entire session to take the quiz. The quiz questions will involve topics covered on homework problems and lectures. Your success or failure on these quizzes will be a direct reflection of how much time and effort you are spending working and understanding the homework problems, studying the textbook and studying the lecture notes. In general, the material tested on each quiz will be the material covered since the last quiz. However, since much of mathematics is cumulative, there is always the possibility that some questions will rely on earlier concepts. Quiz and exam questions will not just be restated homework problems. Generally, they will be new problems constructed to test whether you have mastered the concepts of the course.

Some of these quizzes may be given in two parts. Half of the quiz (10 points) might be given in lecture as an unannounced, pop quiz. By the nature of a pop quiz, if you are not present in the lecture for whatever reason, you would not qualify for the pop quiz points. We will discuss the guidelines for these quizzes if and when they are given.

# **Homework**

Homework assignments will be given for each section we cover. These assignments will be posted on the website. You should print these papers and work the problems on the printed paper. The assignments are due at the **beginning** of your quiz session. Due dates for the homework sets are noted on the course outline. Each homework set will consist of 1 to 3 lecture sections and will be graded for 10 points. A total of twelve (12) homework sets will be collected. Only your scores on the best ten (10) of these will be counted for a total of 100 points possible.

Only selected problems on the homework sets will be graded. Since you will not know what problems will be graded, you should always work all the problems on every set and always turn in all the pages to insure that you get the maximum points possible. <u>Remember,</u> the main reason for working the homework is for practice and to help you learn the course material. Any grade that you may receive is only a secondary reward.

These guidelines apply to homework papers:

- Homework papers will be turned in at the **beginning** of the Quiz Session. If you are late to class, you cannot submit the paper.
- You must attend the entire session and turn the paper in yourself it cannot be turned in early and it cannot be turned in by a classmate. Homework and quiz scores come in pairs. If you miss a quiz session, you miss the both the homework grade and the quiz grade. No homework score is recorded without an accompanying quiz score.
- No early or late homework will be accepted.
- The papers should be submitted properly to be graded. The pages should be in order, stapled in the upper left corner, with your name and Student Class Number on all pages. Submit the printed copy from the website, not a handwritten copy.
- It is your responsibility to know what sets are due each week and to turn in the proper papers (see Class Schedule).
- The homework you submit should be your own work. You can work with others or get help from tutors, but ultimately you should be able to work the problems yourself. Copying someone else's work is not allowed; but, more importantly, you don't learn anything from copying.

#### Course Grading

1. 2.	Homework Quizzes	100 points 200 points	best 10 homework scores out of 12 best 10 quiz scores out of 12
3. 4. 5.	Exam 1 Exam 2 Exam 3	100 points 100 points 100 points	low score may be replaced with Final Exam percentify if you qualify for the Low Exam Replacement Policy
6.	Comprehensive Final	200 points	
	Total	800 points	

Semester grades are not negotiable. They will be firmly and equitably assigned with no curving based solely on total points as follows: 800-720 A, 719-640 B, 639-560 C, 559-480 D, 479 and below F.

# Calculator

A calculator is required for this course. A graphing calculator like a TI83 Plus (or higher) is recommended. At a minimum, you should have a calculator that will perform exponentiation and calculate logarithms. You may be able to check out a graphing calculator from the math department to use for free during the semester. Details are posted on the website.

Cell phones and other electronic devices with calculator apps are NOT considered calculators in this course and are illegal. Using these illegal devices on exams or quizzes is considered cheating. You can only use dedicated calculators.

Calculators are allowed for all homework, quizzes and exams. However, it is your responsibility to learn how to operate the calculator properly. Dead batteries, calculator failure or user errors are your responsibility. We will not answer any questions about calculator operation during exams or quizzes. If you forget your calculator or it malfunctions, you CANNOT borrow one from a classmate or share one during an exam or quiz.

# Some calculators have calculus evaluation features. In this course you are not allowed to use these features. You should learn to work the problems in this course using the manual calculus techniques covered in the textbook and/or lecture.

#### Who Should You Talk To

- All questions or issues concerning your grades or progress in the course, class policies, grading of an exam or quiz, attendance, etc. should be directed to me in my office - not by e-mail, not to your Quiz Session TA, not before/after class.
- Your quiz section TA are not authorized to accept late papers, give makeups, change homework/quiz scores, answer questions about grades, answer questions about class policies. All these issues should be directed to me.
- Questions about homework or course material see your Quiz Session TA, attend the special tutoring sessions, or see me.

#### Office Hours

My office hours are posted on the course website. Your Quiz Session TA will give you their office hours during the first Quiz Session meeting. You are strongly encouraged to take advantage of these hours for help with the course material. Feel free to drop by anytime we're in. However, since we have a lot of students, this time will be on a first-come, first-served basis. If your class schedule conflicts with these times, we can arrange an appointment at a mutually acceptable time.

#### E-mail Guidelines

My e-mail address is listed on Page 1 (notice it is @<u>math</u>.okstate.edu, not @okstate.edu). Please use the following guidelines when you send me an e-mail:

- Use your OSU e-mail account (...@okstate.edu).
- Course business will not be discussed via e-mail. Any questions or issues involving class policies or grades must be taken care of in person in my office.
- The e-mail must have a Subject Line or it automatically gets put in my SPAM folder and I'll never see it.
- The e-mail must include your Student Class Number.
- Any e-mails written using "textese", "cyber slang", or other text message jargon will be DANR (Deleted And Not Read).

#### Grade Corrections

If you believe a homework, quiz or exam was incorrectly graded, you should bring it by my office as soon as possible for re-grading. However, be aware of a couple of things. 1) The entire paper will be re-graded, so there is always the possibility that you might lose points on other problems instead of gaining points on the problem in question. 2) If you are comparing your paper to that of a classmate, you should also bring in their paper. Their paper will be subject to the same re-grading. They could also lose points on the problem in question or on other problems. Although grade corrections should be addressed as soon as they are discovered, <u>all grade</u> <u>corrections should be made within two (2) weeks of the papers being returned to the class.</u>

#### Unclaimed Papers

It is very important that you get your graded homework, quizzes, and exams back quickly in order to monitor your progress in the class, to identify and correct mistakes, and to use in preparing for future work. You do not officially "earn" the points on the paper until the graded paper is in your possession. If your instructors take the time and effort to grade these papers, you should take responsibility to make sure that you get these papers back in a timely manner. Generally, papers will be returned to the class within one week of being given. Any graded homework, quiz or exam that is not personally picked up by you within three (3) weeks of being returned to the class will earn a grade of zero (0).

# Statute of Limitations on Grade Corrections and Unclaimed Papers – Noon, Friday, November 30, 2012

All homework, quiz and hour exam grades become official on this date. Any grading errors discovered after this date will stand and will not be corrected. If they haven't already, any unclaimed graded papers will earn a grade of zero (0) after this date.

#### Course Website

We will use the OSU Online Classroom system - Desire2Learn (D2L) at <u>https://oc.okstate.edu</u> for our course website. When you access your courses in D2L, there may be two entries for Math 2103. Always pick the one that is the combination of sections. Grades will NOT be posted on the website. However, the course website will have valuable information pertaining to this course including homework papers, lecture notes and quiz/exam solution keys. Most of these postings are PDF documents so you will need to have Acrobat Reader installed on your computer.

Probably the most important postings will be the daily lecture notes. Before coming to lecture, you should print off the notes for that day and bring them with you to help with taking notes and following along with the lecture. These lecture notes are full-page documents, with large print – exactly like those displayed in lecture. To save paper, you may want to use certain print options to print more than one page per sheet of paper. Refer to Acrobat Help to see how this printing might be done.

The website is a required feature of the course. However, technical problems with the site or your inability to access it should not be used as an excuse for not fulfilling the course requirements. If you do have problems accessing the website, contact the IT Helpdesk. Furthermore, reviewing the lecture notes online is not a sufficient substitute for actually attending the lecture.

A document entitled **FAQ – Frequently Asked Questions** is posted in the Miscellaneous section of the website. This document addresses some issues and answers some questions that students often ask about the course. You should read this document.

#### Makeup Policy

It is the policy of the Mathematics Department to offer each student reasonable accommodations in the event that the student misses a major assessment activity for a valid and documented reason. Because of the importance placed on our class sessions as active learning opportunities, you are expected to attend all class sessions. It is also expected that you assume responsibility for taking all exams and quizzes and turning in all homework assignments on the dates scheduled.

If you miss an exam, quiz or homework assignment, allowances are included in the grading system for missed work, i.e., 2 dropped quizzes, 2 dropped homework and the Low Exam Replacement policy. Because of these built-in accommodations, there should be no need for a makeup. However, under <u>rare</u> circumstances, with the proper documentation for an approved reason, you <u>might</u> be allowed to make up missed work.

To be considered for a makeup assignment, you will need to complete a <u>**Request for Makeup Form**</u> (available on the course website) and submit it to your instructor in a timely manner with <u>official documentation</u>. This documentation should be written specifically for you. Generic or form letters are not acceptable. The documentation should include the name and phone number of a responsible person that can be contacted by your instructor for verification.

a. If you are <u>required</u> to participate in a University sponsored activity or military exercise, you will know in advance that you will miss the work. You should submit the <u>Request for Makeup Form</u> at least 7 days before the missed class. To be considered, it must be true that the activity was not optional and could not be rescheduled to another day or time to avoid the conflict with this class.

b. Illnesses or accidents require official documentation from your doctor, typed on official stationery certifying that:

- 1) you were unable to attend class on the day in question due to illness or accident and
- 2) you are currently well enough to return to class.

You should submit this documentation attached to the completed Request for Makeup Form immediately after returning to class.

- c. Other situations may qualify for makeups at the instruction's discretion. However, in all cases, official documentation is required with the **Request for Makeup Form** and your instructor will need to approve the request and your documentation.
- d. Some obvious situations which would seem to not qualify are:
  - medical conditions <u>not</u> requiring a doctor's visit
  - conflicts with other class or work schedules
  - travel plans for holidays or semester breaks
  - alarm clock failure, oversleeping
  - misreading the schedule, forgetfulness

- car trouble, no parking space, OSU bus problems
- social or fraternity/sorority obligations
- boyfriend / girlfriend issues
- incarceration or court for alcohol or illegal drug activities
- job interviews, job or career fairs

To be considered for a makeup, all paperwork should be completed and an in-office discussion held with your instructor as soon as possible after the occurrence. Failure to comply with these conditions will void your qualification for a makeup and result in a 0 grade on the assignment, exam or quiz.

# **Special Tutoring**

Free tutoring is offered for this course. Usually these sessions are held every Monday, Tuesday and Wednesday late afternoons and evenings. A schedule of times and more details will be announced in class and posted on the course website.

The special tutoring sessions are not intended to be a "study hall." You are expected to show up with specific questions about problems you have already tried to work. If you come to the sessions with no evidence of prior work or effort, the tutors have been instructed to ask you to leave.

# Partial Credit / Showing Work - Final Answer vs Total Solution

Regardless of what you may be used to in previous math courses, in this course only minimal partial credit will be given. Homework will be graded more strictly than quizzes and exams. Homework, unlike proctored exams and quizzes, has no time limit. You have access to the textbook, notes, and tutors. With all these resources, you should be able to carefully work the problems correctly and double check the solutions before you submit the papers. Therefore, very little, if any, partial credit will be given on homework.

Many of the problems you will be asked to work in this course require several calculation steps to arrive at the "answer." Just supplying that answer is usually not sufficient. We are interested in measuring whether you have mastered the techniques required for a complete solution. You will demonstrate this by showing all your steps at arriving at the final answer. Therefore, you must show all your work clearly and in detail. You will be graded on your <u>total solution</u>, not just the final answer. Answers alone with little or no work steps shown will result in no points. <u>Also, when an answer has units (\$, feet, \$/item, etc.) you must include the units for full credit.</u>

#### University Policies / Academic Integrity

All university policies will be followed in this course. It is your responsibility to know and comply with all university policies and deadlines. The university has prepared a syllabus attachment document which contains important information. A link to this document can be found on the course website.

OSU is committed to the maintenance of the highest standards of integrity and ethical conduct. This level of ethical behavior and integrity will be maintained in this course. A document outlining academic integrity issues specific for this class can be found in the Miscellaneous section of the course website. A link to OSU's academic integrity policies can be found on the course website.

#### Classroom Decorum

Because of the size of this class, any activity that is noisy or disruptive affects a large number of students. You are expected to act in an attentive, respectful, non-disruptive manner in the classroom. Cell phones, pagers, iPods, laptops and other electronic devices are to be turned off and put out of sight before the beginning of class. Activities during the lecture such as visiting with other students, talking on the phone, texting, reading the newspaper, working on material for another class, sleeping, playing video games, etc. show contempt for the learning process. You will be asked to leave the classroom if your actions involve the activities above and/or your actions are distracting or inattentive. Your behavior in the classroom reflects your dedication as a student.

You should always come to lecture with a copy of the printed lecture notes. Viewing the lecture notes using a laptop during the lecture is NOT permitted. See the FAQ on the website for reasons why this is not permitted.

During the semester if another student is creating a disturbing or distracting environment for you, please let me know and I will correct the situation quickly.

# Special Accommodations for Students

If you have a need for special accommodations, I will work with you and the Office of Student Disability Services to provide reasonable accommodations to ensure that you have a fair opportunity to perform in the class. Please advise me of such disability and the desired accommodations as soon as possible during the first week of class. If Student Disability Services has determined that you require extending testing time, you should meet with me as soon as possible to discuss several very specific requirements to qualify for this extended testing time. Failure to meet these requirements will void your opportunity for extra time.

#### **Final Comments**

Your instructors want you to succeed in this class! We enjoy mathematics and we want to share our appreciation of the subject with you. We are committed to helping you achieve your goals, but ultimately your success lies in your hands. You are going to have to work, study and learn something. Some of you will need to work more than others. If you spend an appropriate amount of time studying the material, hopefully you will learn some calculus. If you successfully demonstrate your knowledge on the quizzes and exams, you will earn a course grade that rewards your efforts. Trying to find the easy way out, not attending class, making excuses for not doing the work, asking for exceptions to class policies, blaming your failure on others are all counter-productive. This approach has not worked for students in the past and it will not work for you this semester. Try to have a positive attitude about the course, make a commitment to work hard and learn the material. Hopefully, this hard work will earn you a good grade and it might even be fun!

#### Any changes in this syllabus or class schedule will be communicated to you in class and posted on the website.

# **Elementary Calculus**

Wk	Lec	Date	Section/Topic	Wk	Lec	Date	Section/Topic
1	1	Aug 20 Mon	Course Overview 1.1 What is a Function?		20	Oct 29 Mon	<ul><li>4.1 Local Max/Min (cont)</li><li>4.2 Inflection Points</li></ul>
	2	Aug 22 Wed	1.2 Linear Functions		21	Oct 31 Wed	<ul><li>4.2 Inflection Points (cont)</li><li>4.3 Global Max/Min</li></ul>
		Aug 23 Thu	Quiz Session - Your attendance at this first session is very important			Nov 01 Thu	Quiz Session <u>Q10</u> 4.1,4.2
							<u>HW10</u> 4.1, 4.2
2	3	Aug 27 Mon	1.3 Rates of Change	12	22	Nov 05 Mon	4.4 Profit, Cost and Revenue
	4	Aug 29 Wed	1.4 App of Functions to Economics		23	Nov 07 Wed	<ul><li>4.5 Average Cost</li><li>4.6 Elasticity of Demand</li></ul>
		Aug 30 Thu	Quiz Session <u>Q1</u> 1.1, 1.2			Nov 08 Thu	Quiz Session <u>Q11</u> 4.3, 4.4
			<u>HW1</u> 1.1, 1.2		(3)		<u>HW11</u> 4.3, 4.4
3		Sep 03 Mon	University Holiday	13	24	Nov 12 Mon	4.6 Elasticity of Demand (cont)
	5	Sep 05 Wed	<ul><li>1.5 Exponential Functions</li><li>1.6 The Natural Logarithm</li></ul>		25	Nov 14 Wed	Exam 3 – 3.4, 4.1- 4.6
		Sep 06 Thu	Quiz Session <u>Q2</u> 1.3, 1.4			Nov 15 Thu	Quiz Session <u>Q12</u> 4.5, 4.6
			<u>HW2</u> 1.3, 1.4				<u>HW12</u> 4.5, 4.6
4	6	Sep 10 Mon	1.7 Exponential Growth & Decay	14	26	Nov 19 Mon	7.1 Antiderivatives, Integrals
	7	Sep 12 Wed	<ul><li>2.1 Instantaneous Rate of Change</li><li>2.2 The Derivative Function</li></ul>			Nov 21 Wed	University Holiday
		Sep 13 Thu	Quiz Session <b><u>Q3</u></b> 1.5, 1.6, 1.7			Nov 22 Thu	University Holiday
			<u>HW3</u> 1.5, 1.6, 1.7				
5	8	Sep 17 Mon	2.2 The Derivative Function (cont)	15	27	Nov 26 Mon	<ul><li>7.1 Antiderivatives, Integrals (cont)</li><li>5.2 - 5.5 Selected topics</li></ul>
	9	Sep 19 Wed	Exam 1 – 1.1-1.7, 2.1,2.2		28	Nov 28 Wed	5.2 – 5.5 Selected topics (cont)
		Sep 20 Thu	Quiz Session <u>Q4</u> 2.1, 2.2			Nov 29 Thu	Quiz Session
			<u>HW4</u> 2.1, 2.2		(4)		
6	10	Sep 24 Mon	2.3 Interpretations of the Derivative	16	29	Dec 03 Mon	6.1 Average Value
	11	Sep 26 Wed	2.4 The Second Derivative		30	Dec 05 Wed	6.1 Average Value (cont) Review for Final
		Sep 27 Thu	Quiz Session <u>Q5</u> 2.3			Dec 06 Thu	Quiz Session - Review for Final
			<u>HW5</u> 2.3				
7	12	Oct 01 Mon	2.5 Marginal Cost and Revenue	17		Dec 14 Fri	Final Exam Comprehensive 200 pts
	13	Oct 03 Wed	3.1 Deriv. of Powers & Polynomials				2:00 - 3:50 pm
		Oct 04 Thu	Quiz Session <u>Q6</u> 2.4, 2.5				The date and time of the Final Exam
	(1)		<u>HW6</u> 2.4, 2.5				is set by the University.
8	14	Oct 08 Mon	3.2 Exponential and Log Functions				It cannot and will not be changed.
_	15	Oct 10 Wed	3.3 The Chain Rule			Special Dates	
		Oct 11 Thu	Quiz Session <u>Q7</u> 3.1, 3.2				
			<u><b>HW7</b></u> 3.1, 3.2		(1)	Oct 05, Fri	Fall Break
9	16	Oct 15 Mon	3.3 The Chain Rule (cont)				
	17	Oct 17 Wed	Exam 2 – 2.1-2.5, 3.1-3.3		(2)	Oct 20, Sat	Homecoming (Iowa State)
		Oct 18 Thu	Quiz Session <u>Q8</u> 3.3				
	(2)		<u>HW8</u> 3.3		(3)	Nov 09, Fri	Last Day to Drop a Course
10	18	Oct 22 Mon	3.4 The Product & Quotient Rule				-
	19	Oct 24 Wed	3.4 The Product & Quotient Rule (cont) 4.1 Local Max/Min		(4)	Nov 30, Fri	Statute of Limitations on Grade Corrections & Unclaimed Papers
		Oct 25 Thu	Quiz Session <u>Q9</u> 3.4				
			<u>HW9</u> 3.4				