MATH 2103 ELEMENTARY CALCULUS Fall 2010 Page 1 of 6

Instructor: Ken Gann Office: MS 444

Office Hours: M, W 12:30 – 1:20 pm or by appointment

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Class Website https://oc.okstate.edu/

E-mail

Feel free to e-mail me at anytime to set up an office appointment. Please note that when you send me an e-mail, it must have a <u>Subject LINE and you must state your section number</u> Also I will not conduct any course business via e-mail. Any questions or issues involving class policies or grades in the course must be done in person in my office.

The class website will have valuable information pertaining to this course including **lecture notes** and **quiz/exam solution keys**. Most of these are Microsoft Word documents. I would suggest that before coming to class, you print off the lecture notes and bring them with you to help with taking notes and following along with the lecture.

OSU Official Syllabus Attachment: The OSU Syllabus Attachment for 2010 Fall Semester is available at http://osu.okstate.edu/acadaffr/aa/syllabusattachment-Fall.htm Please read this online.

Textbook/Graphics Calculator

- APPLIED CALCULUS, by Hughes-Hallett, etal;
- A graphics calculator is required for this course. Your instructor will be using a TI-83 Plus.

MLRC: Mathematics Learning Resource Center.

Location: Classroom Building 4-th floor

Learning aids/Services: Tutoring, videotaped lectures and micro computers with mathematics software.

<u>ATTENDANCE:</u> Your attendance will be recorded by having you sign an attendance sheet which will be distributed during the class period. Do not sign the attendance sheet for another student or ask another student to sign for you. This is a serious offense. Any student misrepresenting his or her attendance or that of another student on the signup sheet is committing academic fraud. You will receive an F in the course and will be reported to the University Misconduct Office.

If your objective for attending a class is to simply sign the attendance sheet and leave early, then you are abusing the system. If you are identified, your attendance credit will be voided for the semester.

Student Class ID

After the drop and add period ends and the roll is official, you will be given a **Student Number for the class**. This number will consist of your section number followed by a dash, followed by a sequential number indicating your alphabetical order in your section. You must remember this **Student Number** and put it on all quiz and exam papers. If you fail to put your Student Number on a paper, you will lose 5 points on the paper.

Examinations. There will be three (3) fifty-minute examinations with a maximum possible score of 100 points each and a 200 point comprehensive final examination. Make-up examinations will be given only for very serious and unavoidable conflicts and *only if* your <u>request</u> to present a make-up examination <u>is approved</u> by your instructor **in advance**. Documentation may be required. If this condition is not satisfied, it is understood that the opportunity to present a make-up examination is voided. **Bring your student ID to each examination, papers will not be graded without an official OSU ID.**

<u>Lecture Attendance / Low Exam Replacement Policy</u> If you make a low score on one of your hour exams but make a higher percentage score on the final exam, it may be possible to replace that low exam score with your final exam percentage. This right or privilege is only applicable if you have four (4) or fewer Lecture absences. Only one hourly exam score is eligible for this substitution and a missed exam can not be replaced. A student with more than 8 absences will receive an automatic grade of "F".

All of 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. Baseball caps or hats with wide brims are not allowed during any exam or quiz. Bring your OSU Student ID card to all examinations for identification.

No Excused Absences / No Makeups for homework, quizzes or exams. A student may be allowed to accomplish the work prior to the due date if the instructor is notified prior to the exercise and approves the request.

In this course there are no excused absences and no makeup exams, homework or quizzes. This policy will be firmly applied with no exceptions. Sickness, emergencies, personal/family issues, vacation plans, military obligations, and even University sponsored / approved absences are all not accepted. Consequently, there is no point in discussing the reason for your absence or the reason for the missed exam or quiz with your instructor – it will not be excused. Athletes must have a letter from the Athletic Department and must talk to the instructor one week prior to travel before any scheduled absence. All Work will be accomplished before the absence date.

<u>Homework</u> – A set of homework problems, reflecting principles from that week's lectures, will be posted on the class website to be turned in for grading each discussion session. It is the student's responsibility to complete and understand the posted homework assignments prior to Thursday's session. <u>Students must be present in the discussion sessions to turn in homework at the beginning of class and late homework will not be accepted.</u>
We will grade 12 of the 15 assignments, choosing random questions, and drop the two lowest scores for a total of 100 points possible. Ten points possible on each.

<u>Quizzes</u> - You will be given 12 quizzes, each worth 20 points, in the discussion classes on Thursdays.. The two lowest scores will be dropped leaving a total possible of 200 points.. You may use your calculator, but the quizzes will be closed-book with no notes or note cards allowed. <u>Absolutely no makeup quizzes will be given</u>. A schedule of quiz dates is given in the attached Class Schedule.

Most of the quiz questions will be very similar to homework problems you have been assigned. In general, the material tested on each quiz will be the material covered since the last quiz.

Course Grading

1.	12 Quizzes	200 points	lowest two will be dropped
2.	12 Homework assignments	100 points	lowest two will be dropped
3.	Exam 1	100 points	low hourly exam score may be replaced by the
4.	Exam 2	100 points	average on the final with 4 or less absences.
5.	Exam 3	100 points	
6.	Comprehensive Final	200 points	
	Total	800 points	

Semester grades will be assigned based solely on total points earned in the course subject to the Lecture Attendance Policy.

The course grades will be firmly, fairly and equitable assigned with no curving using the table below:

Α	720	-	800	points	90%
В	640	-	719	points	80%
С	560	-	639	points	70%
D	480	-	559	points	60%
F	0	-	479	points	Below 60%

The instructor will not send or discuss grades via e-mail . The student must come to my office or the TA's office for progress reports.

Who Should You Talk To

- Questions about homework or course material see your Quiz Session Instructor or the instructor.
- 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 before/after class).

Office Hours

My office hours are listed on page 1. Your Quiz Session Instructors will give you their office hours during the first Quiz Session meeting. I encourage you 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 schedule conflicts with these times, e-mail us and we can arrange an appointment at a mutually acceptable time.

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 a respectful, non-disruptive manner in the classroom. Cell phones, pagers 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 other students, reading the newspaper, and working on material for another class, sleeping or eating show contempt for the learning process. 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.

The discussion classes are designed to answer questions on homework and class material. The students should try all the homework problems and be prepared to ask questions before they go to these sessions.

Class Format

- 1. Lectures: Mondays and Wednesdays 11:30-12:20 pm NRC 106
 - Each Lecture will cover 1 or occasionally 2 sections from the textbook (see attached schedule)
 - You are responsible for all the textbook material, even if it is not discussed in the Lecture
 - There will be very little, if any, time for questions on homework.
 - Attendance is very important and will be recorded each day.
 - Hourly exams will be given during Lecture times in the Lecture classroom (see attached schedule)
- 2. Discussion Sessions: Thursdays 75 minutes (start time/classroom depends on your section)
 - Homework will be turned in at the beginning of class
 - · You may ask questions about the Lecture material and/or homework problems
 - Quiz Session Instructors may present additional material to expand or enhance the Lecture material
 - Quiz Session Instructors will return and discuss any graded guizzes/homework and exams
 - · Quizzes will be administered as scheduled

Four Step Learning:

- 1. Read the material and write down the important points
- 2. Ask questions on the reading material and the TA do an example
- 3. Seek help if you do not know how to solve a problem.
- 4. Complete the assigned homework problems.

Working with another person or in study groups can be helpful in learning the material.

One of the non-content goals of this course is to improve your mathematical communication skills. You are getting practice at reading mathematics in step 1: listening to mathematics in step 2 and step three: speaking about mathematics and writing mathematics in step three; and completing assignments in step four. The four step learning method not only increases your retention of concepts but also gives you practice with several communication skills.

A major cause of failure in Math 2103 is attitude. If you expect to fail, you will fail. If you plan to do as little work as possible with no plan to learn anything from the course, you will fail. If you plan to memorize a few facts in cram sessions, you will probably fail. What is important is to learn the concepts involved, finding rates of change and applying these mathematics to solve real problems. It is also important to learn to communicate these concepts to others including the instructor.

Drop and Withdrawal Policy (General University Policy 2-0206). "Dropping" means withdrawing from a specific course with "withdrawal" means withdrawing from all courses and leaving the University for the balance of the term. The drop and withdrawal dates are noted on the attached calendar. IT IS YOUR RESPONSIBILITY TO KNOW AND COMPLY WITH ALL DEADLINES. Reasons similar to those listed below will not result in approval for dropping a course after the deadline (from OSU Policy 4.03):

- a. Student's lack of knowledge or misunderstanding of the deadline.
- b. Student waited to get the results of an exam or other assignment.
- c. Student's grades have declined since the deadline.
- d. Student doesn't need the course for graduation.
- e. Different deadlines existed at a previous school.

Academic Dishonesty/Misconduct. The university has explicit rules governing academic dishonesty and academic misconduct. The policies are detailed in the document "Student Rights and Responsibilities Governing Student Behavior." It is available from the Deans' Offices, the Provost's Office and various other places around campus. The university policies will be followed in this class. The minimum penalty for an act of academic dishonesty will be the assignment of a grade of 0 on the examination or homework assignment.

Special Accommodations for Students. "If any member of this class feels that he/she has a disability and needs special accommodations of any nature whatsoever, the instructor will work with you and the Office of Disabled Student Services, 326 Student Union, to provide reasonable accommodations to ensure that you have a fair opportunity to perform in the class. Please advise the instructor of such disability and the desired accommodations at some point before, during, or immediately after the first scheduled class period." (from M. S. Keener, August 3, 1998).

Final Note. The instructor will communicate any changes in this syllabus to you in class.

CLASS SCHEDULE

Week	D <u>ate</u>	Topic <u>Textbook Section and Quizzes</u>
1	August 23 August 25 August 26	#1.1 What is a Function? #1.2 Linear Functions Discussion Sections Hw #1: 1.1
2	August 30 September 01 September 02	#1.3 Rates of Change #1.4 Applications to Economics Discussion Sections Hw#2: 1.2, 1.3 Quiz #1
3	September 06 September 08 September 09	University Holiday #1.5/1.6 Exponential fns/Natural Logs Discussion Sections Hw#3 : 1.4, Quiz #2
4.	September 13 September 15 September 16	# 1.7 Exponential Growth/Decay #1.8 New Functions From Old Discussion Sections Hw#4: 1.5,1.6, 1.7 Quiz #3
5	September 20 September 22 September 23	#1.9 Power functions/Polynomials Exam 1 Sections 1.1 – 1.9 Discussion Sections Hw#5: 1.8, 1.9 Quiz #4
6	September 27 September 29 September 30	#2.1 Instantaneous Rate of Change #2.2 Derivative Function Discussion Sections Hw#6: 2.1 Quiz #5
7	October 04 October 06 October 07	#2.3 Interpretations of the Derivative , #2.4 The Second Derivative Discussion Sections Hw#7: 2.2 – 2.3 Quiz #6
8	October 11 October 13 October 14	#2.5 Marginal Cost and Revenue #3.1 Derivatives of Powers and Polynomials Discussion Sections Hw#8: 2.4 – 2.5 Quiz #7
9	October 18 October 20 October 21	#3.2 Exponential / Logarithmic Fns. #3.3 The Chain Rule Discussion Sections Hw#9: 3.1 – 3.2 Quiz #8
10	October 25 October 27 October 28	#3.4 Product and Quotient Rule Exam 2 Chapters 2 and 3 through #3.3 Discussion Sections Hw#10: 3.3-3.4 Quiz #9

11	November 01 November 03 November 04	#3.4 Product and Quotient Rule (cont), #4.1 Local Max/Min, #4.1 Local Max/Min (cont), #4.2, Inflection Pts Discussion Sections Hw#11: 3.4, 4.1 Quiz #10
Week	D <u>ate</u>	Topic
12	November 08 November 10 November 11	#4.2, Inflection Pts(cont), #4.3 Global Max/Min #4.4 Profit, Cost and Revenue Discussion Sections Hw#12: 4.2, 4.3 <i>Quiz #11</i>
13	November 15 November 17 November 18	#4.5 Average Cost #4.6 Elasticity of Demand Discussion Sections Hw#13: 4.4, 4.5 Quiz 12
14	November 22 November 24 November 25	Exam 3 Chapter 3 #3.4 and Chapter 4, 4.1-4.6 University Holiday University Holiday
15	November 29 December 01 December 02	#9.1 Functions of Two Variables #9.3 Partial Derivatives Discussion Sections Hw#14: 4.6, 9.1
16	December 06 December 08 December 09	#9.4 Computing Partial Derivatives Algebraically #9.5 Critical Points/Optimization Discussion Sections Hw#15: 9.3, 9.4, 9.5

Final Exam Comprehensive – Wednesday December 15, 10:00 – 11:50 a.m. NRC Room

Dates to Remember
Last day to add a course(nonrestrictive)
Last day to drop or withdraw with 50% fees (W)
Last day to drop a course(Automatic Grade of W)

Monday August 30 Friday , September 03 Friday , November 12

Lecture Attendance Policy 4 / 8 Rule

How well a student performs in a course is usually highly correlated with his/her attendance. Because of the importance I place on our class sessions as active learning opportunities, attendance is a required element of this course. There are 26 lecture sessions this semester. In order to pass this class, you must be physically present for at least 70% of these sessions (18 lectures). That is, if you miss more than eight (8) lecture sessions, you will automatically receive an F in the course.

The 4/8 Absence Rule will be strictly enforced. More than four (4) lecture absences make you ineligible for the Low Exam Replacement Policy. More than eight (8) lecture absences earn an automatic F in the course.

In this course, there is no such thing as an excused absence. If you were not physically present for a class, then you were absent . no exceptions, no excuses. Absences due to University-sponsored activities and military training are also not excused. The attendance policy is liberal enough to accommodate an occasional absence without serious penalty.

Attendance will be recorded by having you sign an attendance sheet which will be distributed during the lecture period. It is your responsibility to make sure that you sign the attendance sheet during each lecture. Do not sign the attendance sheet for another student or ask another student to sign for you. This is a serious offense of academic fraud and will be treated as such. You will be reported to the University Academic Integrity office with a recommendation of an F! in the course.

Proper attendance also means arriving on time and remaining until the class is dismissed.

It is your responsibility to arrive in lecture no later than 11:30. You are not allowed to enter the lecture classroom after the lecture has begun. If you are late for whatever reason, please respect your classmates and do not interrupt the class session already in progress. Students entering the classroom late will be asked to leave.

If your objective for attending a class is to simply sign the attendance sheet and leave early, then you are abusing the system. You will be counted as absent if you are late or leave early.

Students who continue to attempt to enter late or leave early after being counseled will be reported to the Academic Integrity office and appropriate University policies will be applied.

Excerpt from the OFFICIAL OSU SYLLABUS

Class attendance is a critical component of learning; therefore, you are expected to attend and participate fully in all scheduled class meetings. Many instructors consider attendance so essential that your grade may be affected by your absence. SOME DEPARTMENTS AND PROFESSORS HAVE MANDATORY ATTENDANCE POLICIES. If no written attendance policy is provided before the last day to add a class without instructor permission, no penalty may be assessed for class absences although you may not be permitted to make up certain in-class activities. If you are required to participate in official university-sponsored activities or military training you should receive an excused absence unless the written course attendance policy indicates otherwise. If you will be absent from class for sponsored activities, you must provide prior notification of the planned absence to the instructor. You may be required to submit assignments or take examinations before the planned absence. If you must be absent from classes due to illness or other extenuating circumstances, it is your responsibility to notify instructors at the earliest possible time and determine if missed assignments can be submitted.