Instructor: Ken Gann 01/09/12
Office: MS 444
Office Hours: M, W 12:00 –1:00 pm or by appointment
Telephone: Instructor's Office 744-5701, MSCS 444, Math Office MSCS 401 Secretary 744-5688
E-mail kengann@math.okstate.edu
Class Website **https://oc.okstate.edu/**

Feel free to e-mail me at any time to set up an office appointment. Please note that when you send me an e-mail, it must have a Subject LINE and you *must state your section number* Also I will not conduct any confidential 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 homework assignments. Most of these are Microsoft Word documents. Before coming to class, you should print off the lecture notes and bring them with you to help with taking notes and following along with the lecture. Homework for each lecture should be completed for submission and discussion in the quiz sessions.

OSU Official Syllabus Attachment: The OSU Syllabus Attachment for 2012 Spring Semester is available at
. http://academicaffairs.okstate.edu/faculty-a-staff/48-syllabus-spring Please read this online.

Textbook/Graphics Calculator

- **APPLIED CALCULUS, by Hughes-Hallett, etal; 4th Edition**
- **A graphics calculator is required for this course. Your instructor will be using a TI-83 Plus. Students may borrow one free for the semester from the Math Department MSCS 401 as supplies last**

Free Special Tutoring by the TAs – 5:00 – 8:00pm , location to be announced.

The following policies for the class are designed to ensure that all students are treated fairly and consistently and to allow the instructor and TAs to most efficiently run the class.

ATTENDANCE:

- **Your attendance will be recorded by having you sign an attendance sheet distributed during the class period. Signatures should be legible.**
- **Student participation and attendance is very important in learning the material and preparing for exams, quizzes and homework. It demonstrates a desire to learn and dedication to performance.**
- **Traditionally, it results in higher grades.**
- **I consider more than 4 absences excessive.**
- **Good attendance may be considered when calculating semester grades.**

Student Attendance Number – Required for all homework, quiz and exam papers – 5 pt penalty

After the drop and add period ends and the roll is official, you will be given a Student Attendance 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 should remember this Student Number and put it on all homework, quiz and exam papers. This requirement is to help us sort papers by sections.

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 request to present a make-up examination is approved by your instructor . See the policy on page 3.**
- **Documentation will be required If this condition is not satisfied, it is understood that the opportunity to present a make-up examination is voided.**
- **Please bring your student ID to each examination, papers will not be graded without an official OSU ID.**

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. With the exception of multiple choice questions, all work leading to a solution must be shown.

Homework – With the exception of multiple choice questions, all work leading to a solution must be shown.

- **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 all problems and understand the posted homework assignments prior to Thursday's session.**
- **Students must be present in the discussion sessions to turn in homework at the beginning of class.**
- **We will grade the assignments, choosing two – three random questions, and drop the two lowest scores for a total of 100 points possible. Ten points possible on each. Homework is the equivalent of an hourly exam.**
- **Students should attempt every problem to obtain the highest possible score.**

Quizzes – With the exception of multiple choice questions, all work leading to a solution must be shown.

- **You will be given 13 quizzes, each worth 20 points, in the discussion classes on Thursdays..**
- **The three 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.**
- **A schedule of quiz dates is given in the attached Class Schedule. Students must attend the full discussion period to take a quiz, and coming to class late will void the opportunity to take a quiz.**
- **Most of the quiz questions will be very similar to lecture and homework problems you have been assigned. In general, the material tested on each quiz will be the material covered since the last quiz, usually Wednesday and the following Monday material.**
- **Quizzes are the equivalent of 2 hourly exams.**

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, 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 total solution, not just the final answer. Answers alone with little or no work steps shown will result in no points. Also, when an answer has units ($, feet, $/item, etc.) you must include the units for full credit.

Questions on Grading

When homework/quizzes are returned in the discussion sessions, it is the student's responsibility to evaluate mistakes and learn how to prevent those errors on future assignments. If you do not agree with the grading algorithm, papers must be brought to my office for re-grading the entire paper. Handing a paper to me in lecture is not acceptable; and the deadline for this procedure is two weeks after the papers are returned to you. The instructor will not consider any corrections after that time. TAs cannot change grades.

Attendance / Low Exam Replacement Policy 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. Only one hourly exam score is eligible for this substitution (a missed exam can be replaced)

MATHEMATICS DEPARTMENtal POLICY ON MISSED WORK

(A) A student shall be offered reasonable accommodation in the event that he or she misses a major assessment activity for a valid and documented reason.

(B) Appropriate documentation shall be provided by the student in a timely fashion to support his or her request for accommodation.

(C) Major assessment activities are those such that a zero on that activity could reasonably be foreseen to impact the student's grade substantially; this category includes, but is not limited to, exams.

(D) Valid reasons include official University activities, activities associated with military service, illness, family emergencies, mandatory court appearances, and any other events of comparable gravity.

(E) Reasonable accommodation means that the student will be given the opportunity to earn a grade on the assessment activity that is based on criteria as similar as possible to those used to grade his or her classmates. This opportunity should normally be made available in a timely fashion.

(F) The instructor will provide a form for students to request making up missed work. The form must be completely filled out and documentation attached to allow the instructor to approve or disapprove the request

Course Grading

12 Homework 100 points
13 Quizzes 200 points lowest two HW/ lowest 3 Quizzes will be dropped

1. **Exam 1 100 points low hourly exam score may be replaced by the**
2. **Exam 2 100 points individual's average on the final exam.**
3. **Exam 3 100 points**
4. **Comprehensive Final 200 points**

Total 800 points

Semester grades will be assigned based solely on total points earned in the course .

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

A	**720**	**-**	**800**	**points**	**90%**
B	**640**	**-**	**719**	**points**	**80%**
C	**560**	**-**	**639**	**points**	**70%**
D	**480**	**-**	**559**	**points**	**60%**
F	**0**	**-**	**479**	**points**	**<60%**

Who Should You Talk To

- **Questions about homework or course material - see your Quiz Session Instructor or the instructor or attend the special tutoring.**

- **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 tentative 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 convenient 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 and answer questions before they go to these sessions.

Class Format

1. **Lectures: Mondays and Wednesdays 1:30 - 2:20 pm ANSI 123**
   - **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 to get the most benefit from lectures 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)

- **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 quizzes and exams**
- **<u>Attendance is very important and will be recorded each day.</u>**
- **Quizzes will be administered as scheduled**

This class may be unlike others that students have taken. Each lecture is designed to prepare students for future material which will use principles from previous lectures. Students may want to think of lectures as building blocks. Succeeding depends on a firm foundation.

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

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.**

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).

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.

<u>Final Note. The instructor will communicate any changes in this syllabus to you in class.</u>

Schedule

Wk	Lec	Date	Section/Topic	Wk	Lec	Date	Section/Topic
1	1	Jan 09 Mon	Course Overview 1.1 What is a Function?	10	18	Mar 12 Mon	3.4 The Product & Quotient Rule
	2	Jan 11 Wed	1.2 Linear Functions		19	Mar 14 Wed	3.4 The Product & Quotient Rule (cont) 4.1 Local Max/Min
		Jan 12 Thu	Quiz Session - Your attendance at this first session is very important			Mar 15 Thu	Quiz Session **Q9** 3.4
							HW9 3.4
2		Jan 16 Mon	**University Holiday**	11		Mar 19 Mon	**No class – Spring Break**
	3	Jan 18 Wed	1.3 Rates of Change			Mar 21 Wed	**No class – Spring Break**
		Jan 19 Thu	Quiz Session **Q1** 1.1, 1.2			Mar 22 Thu	**No class – Spring Break**
			HW1 1.1, 1.2				
3	4	Jan 23 Mon	1.4 App of Functions to Economics	12	20	Mar 26 Mon	4.1 Local Max/Min (cont) 4.2 Inflection Points
	5	Jan 25 Wed	1.5 Exponential Functions 1.6 The Natural Logarithm		21	Mar 28 Wed	4.2 Inflection Points (cont) 4.3 Global Max/Min
		Jan 26 Thu	Quiz Session **Q2** 1.3, 1.4			Mar 29 Thu	Quiz Session **Q10** 4.1,4.2
			HW2 1.3, 1.4				**HW10** 4.1, 4.2
4	6	Jan 30 Mon	1.7 Exponential Growth & Decay	13	22	Apr 02 Mon	4.4 Profit, Cost and Revenue
	7	Feb 01 Wed	2.1 Instantaneous Rate of Change 2.2 The Derivative Function		23	Apr 04 Wed	4.5 Average Cost 4.6 Elasticity of Demand
		Feb 02 Thu	Quiz Session **Q3** 1.5, 1.6, 1.7			Apr 05 Thu	Quiz Session **Q11** 4.3, 4.4
			HW3 1.5, 1.6, 1.7				**HW11** 4.3, 4.4
5	8	Feb 06 Mon	2.2 The Derivative Function (cont)	14	24	Apr 09 Mon	4.6 Elasticity of Demand (cont)
	9	Feb 08 Wed	**Exam 1 – 1.1-1.7**		25	Apr 11 Wed	**Exam 3 – 3.4, 4.1- 4.6**
		Feb 09 Thu	Quiz Session **Q4** 2.1, 2.2			Apr 12 Thu	Quiz Session **Q12** 4.5, 4.6
			HW4 2.1, 2.2				**HW12** 4.5, 4.6
6	10	Feb 13 Mon	2.3 Interpretations of the Derivative	15	26	Apr 16 Mon	7.1 Antiderivatives, Integrals
	11	Feb 15 Wed	2.4 The Second Derivative		27	Apr 18 Wed	5.2 – 5.5 Selected topics
		Feb 16 Thu	Quiz Session **Q5** 2.3			Apr 19 Thu	Quiz Session Q13 - 7.1, 5.2-5.5
			HW5 2.3				HW13 - 7.1, 5.2-5.5
7	12	Feb 20 Mon	2.5 Marginal Cost and Revenue	16	28	Apr 23 Mon	6.1 Average Value
	13	Feb 22 Wed	3.1 Deriv. of Powers & Polynomials		29	Apr 25 Wed	6.1 Average Value (cont) Review for Final
		Feb 23 Thu	Quiz Session **Q6** 2.4, 2.5			Apr 26 Thu	Quiz Session - Review for Final
			HW6 2.4, 2.5				
8	14	Feb 27 Mon	3.2 Exponential and Log Functions	17		**Apr 30 Mon**	**Final Exam Comprehensive**
	15	Feb 29 Wed	3.3 The Chain Rule				**2:00 - 3:50 pm**
		Mar 01 Thu	Quiz Session **Q7** 3.1, 3.2				The date/time of the Final
			HW7 3.1, 3.2				is set by the University.
9	16	Mar 05 Mon	3.3 The Chain Rule (cont)				It cannot and will not be changed.
	17	Mar 07 Wed	**Exam 2 – 2.1-2.5, 3.1-3.3**				
		Mar 08 Thu	Quiz Session **Q8** 3.3		(4)	May 04 Fri	Last Day to Drop a Course with a W
			HW8 3.3				