## MATH 11012 INTUITIVE CALCULUS FALL 2012

INSTRUCTOR: Dr. Beth Osikiewicz

### CONTACT INFORMATION:

• Office: B-115

• Phone: (330) 308-7412

• Office hours: 10:00–10:40 AM MTWR, 1:00–1:30 PM M, 12:00–1:30 PM W, 12:00–1:00 PM TR, 3:15–4:00 PM MW, or by appointment.

• E-Mail address: bosikiew@kent.edu

• Home page: http://www.personal.kent.edu/~bosikiew/

**CLASS TIME:** 10:45 AM – 12:00 PM M W A20 Call #15402

**TEXT:** Brief Applied Calculus, by Berresford and Rocket 4th edition

**PREREQUISITES:** MATH 11010, MATH 11011, or 12001, or appropriate placement test score. You should be well versed in working with polynomial and rational expressions, roots and radicals, exponentials and logarithms, and solving equations. You should also have a working knowledge of functions, including the concepts of domain and range, and graphing techniques using transformations. Also, you should be familiar with the natural exponential and natural logarithmic functions.

**COURSE OBJECTIVES:** Development of basic differential and integral calculus skills (without trigonometric functions).

**ATTENDANCE POLICY:** Regular attendance is necessary and expected. If you must miss a class, then YOU are responsible for any material that was covered. Please make arrangements with a fellow classmate to get the notes.

**SUPPLIES:** A calculator with  $e^x$  and  $\ln x$  is required. You are NOT allowed to use an Ipod application or a cell phone as your calculator. If your calculator is able to store material, no notes, formulas, or any information can be stored in the calculator. If you violate this condition, you will receive a zero on the exam. In addition, a large number of handouts will be given in this course. A 3-ring binder is the easiest way to accommodate the handouts that will be distributed throughout the semester.

#### **GRADING:**

## GRADING SCALE

A = 900 - 1000 points B = 800 - 899 points C = 700 - 799 points D = 600 - 699 points

The final grade will be based on the following:

graded homework	(110  pts)	)
differentiation gateway exam	(120  pts)	= 1000  total points
3 in-class exams	(180  pts each)	
comprehensive final	(230  pts)	J

- DAILY HOMEWORK ASSIGNMENTS: Daily homework will be assigned from each section but will not be collected. Therefore, it is your responsibility to ensure that you are doing the homework problems correctly. Keep in mind that the answers to all of the Set A problems are found in the back of your text, and the first part of class will always be devoted to answering homework problems. I encourage you to work in groups with your fellow classmates. Lastly, note that exam problems will be similar to assigned homework problems; hence, your success in this class is proportional to the amount of homework that you complete.
- GRADED HOMEWORK ASSIGNMENTS: Several graded homework assignments will be given throughout the semester. Each graded homework will be announced in class and posted on the class webpage. Each graded homework will have a specific due date. In some cases, late homework will be accepted; however, twenty percentage points will be deducted from your score. No late homework will be accepted once the key to the homework is provided to the class. If you do not turn in a homework assignment, a zero will be recorded as your homework score. See homework guidelines.
- **EXAMS:** There will be three 75 minute exams (Exams 1, 2, 3) and one 30 minute Differentiation Gateway Exam. Partial credit is awarded at the discretion of the instructor. Please note that there will be no partial credit on the Differentiation Gateway exam.
- **FINAL EXAM:** The comprehensive final exam will be worth 220 points. The final exam is scheduled for Wednesday, December 12, 2012 from 10:00 AM-12:00 PM.
- MAKE-UP EXAMS: Make-up exams will be given only in exceptional cases and provided you have a valid excuse. (Please note that vacations and work do not qualify as a valid excuse.) If you must miss an exam, you must contact me within 24 hours of your absence and provide information on how I can contact you. If you do not contact me or do not have a valid excuse, I will have the option to deny giving you a make-up exam, and you will receive a grade of zero for the exam. Make-up exams should be completed prior to the next scheduled class meeting. If this is impossible, then a make-up exam will be given during FINALS WEEK, December 10–14, 2012. It is YOUR responsibility to schedule this make-up exam with me during the 15th week of the semester, December 3–7, 2012. If you fail to schedule this make-up exam during the 15th week, you will receive a zero for the exam. Please note that in general make-up exams are more difficult.
- **ON-LINE SUPPLEMENTS:** A webpage for this class can be found at:

http://www.personal.kent.edu/~bosikiew/Math11012/

You can also access this page through the Tuscarawas Campus home page. Also, BE SURE TO CHECK OUT

http://www.personal.kent.edu/~bosikiew/Algebra-handouts/

for some algebra supplements.

Blackboard Learn: Blackboard Learn will be used to post the scores on all graded homework assignments and exams. The Blackboard Learn page for this course can be accessed through the My Courses Tab in your Flashline account or through https://learn.kent.edu/ using your flashline id and password.

- ELECTRONIC DEVICES: It is rude and inconsiderate to use electronic devices such as Ipods, Ipads, blackberries, etc. during class. Therefore, their use during class is prohibited. Also, please turn off all cell phones and put them away upon coming into class. If I catch you texting in class, I will simply ask you to leave. Furthermore, if a cell phone is activated during an exam, the owner will have a ten percentage point penalty assessed to his/her exam score due to the disturbance caused to the other class members. (Note: this policy also applies to any other noise-making device.)
- **EMAIL CORRESPONDENCES:** Please use only your "@kent.edu email" for all correspondences. Remember to use complete sentences and identify yourself as well as the class in which you are enrolled.
- **ACADEMIC HONESTY:** All work you turn in must be your own. Cheating will not be tolerated, and those found guilty will face the highest disciplinary action.
- STUDENTS WITH DISABILITIES: University policy 3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Robert Brindley, Coordinator, Academic Services, in Room A104 or at 330-339-3391 Ext. 47433.
- **CLASS CANCELLATIONS:** In case of a class cancellation, check your "@kent.edu" email account for an email from me notifying you of any homework or exam post-ponements.

**NOTE:** This syllabus is subject to change with notification.

#### HOMEWORK GUIDELINES

- 1. Place all work in the space provided.
- 2. Be sure to show all of your work. Answers alone will **NOT** receive credit.
- 3. Be sure to circle your final answer.
- 4. If necessary, please staple your homework assignment.
- 5. Be sure your work is **neat**, **well-organized**, and **readable**. The instructor has the right to refuse any disorganized or unreadable work.
- 6. If you lose a copy of the assignment or need a "fresh" copy, you will find one on the course webpage.
- 7. If you are going to be absent from a class on which a homework assignment is due, it is your responsibility to get that assignment to me. Either submit it to me early, or have a friend give it to me.
- 8. In some cases, late homework will be accepted. Any homework turned in after the specified due date will be considered late and twenty percentage points will be deducted from your score. Please note that homework turned in on the due date but **AFTER** it has been collected in class is considered late.
- 9. No homework will be accepted once the key to the assignment is provided to the class.

# Learning Outcomes for MATH 11012

# Knowledge

The students should be able to compute the derivative and the integrals of some elementary functions.

# Comprehension

Should understand the meanings of the derivative, the indefinite and definite integrals of a function.

# Application

To find the rate of change of a function, to minimize and maximize a function, to find the area of a region bounded by certain given curves.

# Analysis

Should understand some basic proofs in the topics of derivatives and integrals.

## **Synthesis**

N/A.

## **Evaluation**

Should be able to apply the knowledge of differentiation and integration to solve some application problems.

## Class Activities

To solve problems in class.

### Out of class Activities

To do the homework.