NORTHEASTERN ILLINOIS UNIVERSITY

MATH 167 ONLINE
BUSINESS CALCULUS (4 CREDIT HOURS)

Instructor's Information:

Name: Anna Kupiec

Office Hours: by appointment only

E-mail: a-kupiec@neiu.edu (the best way to communicate with me)

Please be advised that I check my e-mail several times a day, Monday through Friday. I try to stay away from the computer on Sundays. **Please be sure to include your full name and course number when e-mailing me to ensure a prompt response.**

Course Dates:
October 15 – December 11

Important Dates:
November 15 (7:00 p.m.-8:30 p.m.) – Midterm Exam

December 10 (7:00 p.m.-8:30 p.m.) – Final Exam

These are mandatory proctored exams – photo ID required.
If you have a conflict, let me know as soon as possible.

Course Description:
This course is a study of elements of analytic geometry, differential and integral calculus with application to business, economics and finance.

Prerequisite: **Math 163**

Required Material:

- MyMathLab Access code (which includes the eBook)
- Text(not required, but highly suggested): *Finite Mathematics and Calculus with Applications* by Lial, Greenwell, and Ritchey, 9th Edition, Pearson Addision-Wesley (2012) *OR* *Calculus with Applications*, 9t edition, Lial/Greenwell/Ritchey (Custom Edition for NEIU, 2012) **with MyMathLab**
- Graphing calculator (TI-83 Plus) may be used to check your work. Exams will require you to show how you arrived at your solution.
- A separate notebook where you write all your work for the course.

Course Goals and Objectives

At the end of this course students are expected to:

1. Be able to obtain the limits of functions using graph and functional form.
2. Be able to find derivatives using the definition and to find derivatives of functions (including polynomial, exponential, and logarithmic functions) using product rule, quotient rule, and chain rule.
3. Be able to obtain and interpret marginal cost, marginal profit, and marginal

revenue.
4. Apply the method of implicit differentiation.
5. Understand how to find higher order derivatives and determine the intervals where functions are increasing, decreasing, constant, concave upward, and concave downward.
6. Be able to find the relative and absolute extrema.
7. Apply the derivatives to sketch the graph of a function.
8. Be able to find indefinite and definite integrals.
9. Understand how to find the area between two curves.
10. Use derivatives and integrals in order to solve various application problems.

Tentative list of topics and sections to be covered:

Chapter 11 *The Derivative*	**Sections** 11.1, 11.2, 11.3, 11.4
Chapter 12 *Calculating the Derivative*	**Sections** 12.1, 12.2, 12.3, 12.4, 12.5
Chapter 13 *Graphs and the Derivative*	**Sections** 13.1, 13.2, 13.3, 13.4
Chapter 14 *Applications of the Derivative*	**Sections** 14.1, 14.2, 14.4
Chapter 15 *Integration*	**Sections** 15.1, 15.2, 15.3, 15.4, 15.5

Methods of Evaluation:

Listed below are required assignments for this course:

- Homework assignments (23 in total) and five quizzes in MyMathLab. Homework and all quizzes will be posted at the beginning of each Module. **Homework and quizzes will not be accessible after the Module is finished.** Each Module requires you to take a quiz found under the "Tests and Quizzes" folder. Keep in mind that you can attempt each quiz only once and there are no makeup quizzes.
- Four Discussions in MyMathLab Discussion Board for each Module (find it in the Communication folder).
- Midterm Review and Final Review Assignment in MyMathLab.
- Midterm and Final Exam. **You will need to show up on campus in order to take the Exams**. Both the Midterm and Final Exams will be proctored. You MUST come to the campus on the dates specified in the schedule. Also, you MUST bring a photo ID. The midterm and the final exam will be cumulative and on paper. You will need to show all your work in order to receive full credit. **To get a grade of C or above you need to earn at least 60% on each exam and earn at least 770 points in total.**

- Notebook. You need a separate notebook where you write all your work for the course. You should include the date, the section you are working on and the problem number. You have to bring this notebook to the final exam. No grade will be given in the course without the submission of this notebook.

Extra Credit:
Please do not ask for extra-credit work as a mean to enhance your grade standing. Extra credit work will not compensate for the amount of material you will need to learn during the course of the semester.

Grading Scale:

A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F = < 60%

Formula for Success:

Please remember that this is an eight week, 4 credit hour course. For successful completion of this course, students should spend about 15-20 hours per week completing coursework.

WEEK & DATES	ASSIGNMENTS:	DUE DATES	POINTS:
Orientation	Get the access code and log into the class	10/15	N/A
	Introduce yourself to your classmates using MyMathLab Discussion Board	10/16	10
	Submit review homework Hw0	10/18	10
Module 1 (Oct 19- Oct 25)	Submit homework for Section 11.1	10/19	10
	Submit homework for Section 11.2	10/20	10
	Submit homework for Section 11.3	10/22	10
	Submit homework for Section 11.4	10/24	10
	Complete Quiz 1	10/25	40
Module 2 (Oct 26 - Nov 4)	Submit homework for Section 12.1	10/26	10
	Submit homework for Section 12.2	10/28	10
	Submit homework for Section 12.3	10/30	10
	Submit homework for Section 12.4	11/01	10
	Submit homework for Section 12.5	11/03	10
	Complete Quiz 2	11/04	40
	Discussion2	11/04	10
Module 3 (Nov 7 - Nov 15)	Submit homework for Section 13.1	11/05	10
	Submit homework for Section 13.2	11/07	10
	Submit homework for Section 13.3	11/09	10
	Submit homework for Section 13.4	11/11	10
	Complete Quiz 3	11/12	40
	Discussion3	11/12	10
	Review for Midterm Exam	11/14	40
	MIDTERM EXAM	11/15	200
Module 4 (Nov 17- Nov 24)	Submit homework for Section 14.1	11/16	10
	Submit homework for Section 14.2	11/18	10
	Submit homework for Section 14.4	11/20	10
	Complete Quiz 4	11/25	40
Module 5 (Nov 25- Dec 10)	Submit homework for Section 15.1	11/26	10

	Submit homework for Section 15.2	11/28	10
	Submit homework for Section 15.3	11/30	10
	Submit homework for Section 15.4	12/02	10
	Submit homework for Section 15.5	12/04	10
	Submit homework for Section 15.6	12/06	10
	Complete Quiz 5	12/07	40
	Discussion5	12/07	10
	Submit review for the Final	12/09	40
	FINAL EXAM	12/10	350
	TOTAL POINTS		**1100**

Getting Started:

MyMathLab is an interactive website where you can:

- Self-test to improve your Math skills.
- Study more efficiently. Create personalized study plans with exercises that match your book.
- Get help when you need it. Includes multimedia learning aids like videos and animations.
- Talk to a live tutor via a toll free number.

In order to register for your online course you will need the following:

☐ You MUST have a **student access code** from the book publisher. There are a few ways that you can obtain this code:

- You can purchase a new textbook, which has the MyMathLab student kit bundled with it, **OR**
- You can purchase the MyMathLab student access kit by itself. (This is an option for those students who want to buy a used book), **OR**
- You can go online and purchase an access code with a credit card at: http://www.coursecompass.com/ccindex.html.

☐ You MUST have a **valid e-mail address**. If you do not have one, you can get a free e-mail account from Northeastern by contacting student services.

☐ The course ID for this class is **kupiec55547**and the school zip code is **60625**.

Student Registration:

- Go to http://www.coursecompass.com and click on the **Register** button for students.
- Review the **Before You Start** information. If you have everything you need to register, scroll down and click **Next**. (If you need to buy access online, click that option and follow those prompts to register).
- Read the Privacy Policy and License Agreement and click **"I Accept."**
- If you have previously taken a course using MyMathLab or Course Compass, click **Yes, Look Me Up** and enter your user name and password. Otherwise, select **No, I am a New User**.
- Enter your **Access Code** in the fields provided (type one "word" per box).
- Enter your **School Zip Code**, select your country, and click **Next**.
- Enter your **Course ID** and click **Next**.
- Enter your **Name** and **E-mail** and select **Your School**.
- Create your **Login Name** and **Password**, answer the **Security Question**, and click **Next**.
- If successful, you should see a **Confirmation & Summary** screen; write down your confirmed login/ password in case you forget it! A confirmation e-mail will also be sent to you. (If you use a Spam e-mail blocker, be sure to allow e-mails from Pearsoned.com.

Logging In:

- Go to http://www.coursecompass.com and click the **Log In** button for students.
- Enter the **login name** and **password** you just created and click **Log In**.
- You will see the name of your course listed on the left; click that link to access your course and Announcements.
- The first time you enter the site from your computer and anytime you use a new computer, click on the software **Installation Wizard** on the Announcements page. This wizard will walk you through installing the software you will need to use the MyMathLab resources. Note: Software may already be installed on the school's lab computers (check with your lab administrator).

MyMathLab Help:

MyMathLab includes access to the AW Tutor Center:

- Visit www.aw-bc.com/tutorcenter for available tutoring services, **OR**
- Use Students toll-free phone: 1.800.877.3016 **OR** Email Questions: tutor@pearson.com

Tutoring:

Free tutoring is available in the Math Lab (4th Floor, Library) **OR** in the Math Department (Math Tutors are available in SCI 214 A Mondays through Fridays. Schedule posted on BBH 247.)

Safety Procedurs

It is recognized that a safe university environment is a shared responsibility of faculty, staff, and students, all of whom are expected to familiarize themselves with and cooperate with emergency procedures. Web links to Campus Safety: Emergency Procedures and Safety Information can be found on NEIUport on the MyNEIU tab or as follows:
http://www.neiu.edu/~neiutemp/Emergency_Procedures/MainCampus/

STATEMENT OF ACADEMIC INTEGRITY

The very nature of higher education requires that students adhere to accepted standards of academic integrity. Northeastern Illinois University has adopted University Student Conduct Code, which can be found in the Student Survival Kit.

Academic misconduct is an offense against the University. Acts of academic misconduct include but are not limited to:

1. **Cheating**. Use or attempted use of any unauthorized assistance in taking an exam, test, quiz, or other assignment. (Please note, cheating on exams includes all required University, state, and/or national assessment exams.)

2. **Encouraging Academic Dishonesty**. Intentionally or knowingly helping or attempting to persuade and/or influence another to violate University's rules, policies, and regulations governing academic integrity.

3. **Fabrication**. Deliberate falsification or design of any material or an excerpt in an academic assignment or exercise.

4. **Plagiarism**. Appropriation or imitation of the language, ideas, and thoughts of another author and representation of them as one's original work. This includes (1) paraphrasing another's ideas or conclusions without acknowledgement; (2) lifting of entire paragraphs, chapters, etc. from another's work; and (3) submission as one's own work, any work prepared by another person or agency.

If the student's observed conduct or apparent behavior is such as to lead to suspicion of academic misconduct, the faculty member in whose course the alleged infraction occurred may adjust the grade downward (including F – failure) for the test, paper, or course, or other course related activity in question. In such instances the faculty member shall notify the student, the Department/Unit Head, and the Office of the Dean of Students of the reason for such action in writing. The student has the right to appeal the grade (see Grade Appeal Policy).

If the faculty member in whose course the alleged infraction occurred perceives the alleged act of academic misconduct as warranting additional or other action (beyond adjusting the grade downward for the test, paper, or course, or other course related activity in question), she/he shall file a complaint with the University Examiner to initiate the Student Conduct Code procedure. **NOTE:** Should this procedure be used, and should there be a formal hearing, the Judicial Hearing Officer, Office of the Dean of Students, shall notify in writing the appropriate Chair and Dean of the outcome.