#### Bucks County Community College Department of Mathematics, Science and Technology

Basic Course Information

Math 118 Business Calculus

Fall 2011

<i>Instructor:</i> Dr. Elaine Fitt	Email: fitte@bucks.edu
<b>Phone</b> : 215 968 8260	<i>Office</i> : F123 Office Hours: MWF 11 - 12 Or at any mutually convenient time
<b>Text:</b> Math 118, Business Calculus, based on Calculus and Its Applications, 10 <sup>th</sup> Edition. 2008. Authors: Bittinger and Ellenbogen with the access code, OR just the access code for full online access, including the text.	Course Compass ID: Math 118.N01: fitt67534 Math 118.E59: fitt85075 Be sure you register in the correct section.

# I. Course Description and Objectives:

- The course is an introduction to basic calculus with emphasis on applications to business, economics, management, information science, technologies and related fields. Topics include relations and functions, exponential and logarithmic functions, limits, continuity, derivatives, techniques of differentiation, chain rule, applications of differentiation, anti-derivatives, the definite integral, the Fundamental Theorem of Calculus and applications of integration.
- The prerequisite for this course is Math 117 or Math 120 with a C or better.
- A copy of the course syllabus can be found at the following URL: <u>http://www.bucks.edu/syllabi/syllabus.php?lookup=MATH118</u>
  - A. Planned Sequence of Topics and/or Learning Activities
    - 1. Precalculus review
      - a. Polynomials
      - b. Algebraic Expressions
      - c. Quadratic equations
      - d. Relations and Functions
      - e. Graphing functions
    - 2. Exponential and Logarithmic Functions
      - a. Exponential Functions
      - b. Logarithmic Functions
      - c. Tables and Calculators
      - d. Applications
      - e. Technological matrices
    - 3. Differential Calculus
      - a. Limit of a function
      - b. Continuity
      - c. The Derivative
      - d. Techniques of Differentiation
      - e. Derivatives of Products and Quotients

- f. Chain rule
- g. Applications
- 4. Integral Calculus
  - a. The Antiderivatives
  - b. The Definite Integral
  - c. The Fundamental Theorem of the Calculus

# II. Testing/Grading Procedures:

A. There will be a quiz for each chapter covered, and four tests and a final examination given at the points in the course indicated on the assignment sheet. Before each test, try the practice test on CourseCompass so you will know what to expect. No make-up tests will be given during the course. Tests will be given online at the testing center and will comprise 50% of your grade.

Homework assignments will count as 30% of your grade. Quizzes will count as 20% of your grade.

B. The following scale will be used to calculate a final average:

Α	90 - 100	С	70 - 76
B+	87 - 89	D+	67 - 69
В	80 - 86	D	60 - 66
C+	77- 79	F	below 60

C. Students have the right to review and the responsibility to retain a copy of their own work and/or correspondence, including that posted to a web course space. Students are urged to retain all graded work until final grades have been received from the college. Student access to a BCCC web course space is available only during the stated semester/session as indicated by the College's academic calendar. All web course sites including content are routinely removed from the server at the conclusion of each semester/session.

Please refer to the college catalog for the policy on cheating and plagiarism. The college policy will be strictly enforced. The college and this instructor consider cheating and plagiarism as serious offenses. The expectation is that the principles of truth and honesty will be rigorously followed in all academic endeavors. This assumes that all work will be done by the person who purports to do the work without unauthorized aids.

# III. Attendance and Withdrawal Policy:

- A. Course withdrawal ends on November 1, 2011.
- B. Class attendance is a requirement for success in any mathematics class. If you are unable to attend a session due to an emergency or illness, please inform me beforehand, if possible. Classes will begin promptly and roll will be taken at the beginning of each class.
- C. If you stop attending class, OR do not complete the course requirements, and don't withdraw you will receive an F. I will NOT withdraw you from the course.

# IV. Extra Help:

If you are having difficulty with the subject matter please take the opportunity to contact me and get some help. Tutoring is available in the Tutoring Center located in Library 121.

CourseCompass provides many tools that are designed to help you in the study of mathematics. You can download the PowerPoint presentations, access the student study guide, learn how to use your calculator and take practice quizzes.

#### V. Disability Accommodations

In compliance with the bucks County Community College policy and equal access laws, appropriate academic accommodations can be made for students eligible for such support. Students are encouraged to register with the Disability Services Office (215 968 8463) to verify their eligibility for appropriate accommodations. Please make any requests for academic accommodations or other concerns as early in the semester as possible.

#### **VI.** Distance Learning Procedures

a) For DL students, go through the orientation sent to your Bucks email account. All procedures for accessing CourseCompass will be covered in detail. You will learn how to access the materials needed to succeed.

**b)** Communication is an essential ingredient for success in this course. Please check in with me at least once a week using email. **Please be sure to include your name, class and section in the subject line.** 

c) Tutoring free of charge is available in the Tutoring Center located in Library 121.

d) There is a great deal of flexibility with distance learning mode of learning, but it requires a great deal of motivation on the part of the student. Tests and course work can be scheduled at times that are convenient to you, day or evening. However, so that you do not fall behind, it is important to keep as closely to the posted deadlines as possible.

#### **VII. Required Materials**

Text: *Math 118 Business Calculus*, a customized text based on *Calculus and Its Applications*, 10<sup>th</sup> Edition. Bittinger and Ellenbogen. . Be sure to buy the text that includes the CourseCompass access code. The ISBN numbers you will need are as follows:

ISBN: 978-0-558-33149-8 or 0-558-33149-1

Required calculator: TI-83, TI-83+, TI-84 or similar.

CourseCompass provides many tools that are designed to help you in the study of statistics. You can download the PowerPoint presentations, access the student study guide, learn how to use your calculator and take practice quizzes.

	Phone Number:	Fax Number:
Dr. Fitt	215 968 8260	215 491 5426
Mathematics Office	215 968 8305	215 968 8294
Distance Learning Office	215 968 8052	215 968 8148
Testing Center	215 504 8594	
Tutoring Center	215 968 8307	
Registration	215 968 8100	