# MAC2233 Business Calculus Spring 2020

Instructor: Ondrej Zjevik

#### **Office Hours:**

- M: 5:20-6:20 (I-75 campus)
- W: 12:30-1:30 (AC1-226)
- F: 10:30-1:30 (AC1-389)
- or by Appointment

## **Course Description and Purpose**

Calculus is the basic mathematics course studied by all students of science as well as many other disciplines. The application of calculus to solve practical and theoretical problems started with Isaac Newton and Gottfried Leibniz in the late 17th century, who first applied its great computational power to describe the motion of the planets. Applications of calculus are found today in areas ranging from high energy physics to molecular biology and from ecology and the environment to economics and finance; it is generally regarded as the introduction to the study of higher mathematics.

This course will provide you an intuitive understanding of the basic concepts you need as you pursue careers in business, economics, and the life and social sciences. This course deals with basic concepts, techniques and applications of limits, continuity, derivatives, and indefinite integrals.

Textbook: Barnett: Calculus for Business, Economics, Life and Social Sci Brief Ver, 14e

Sections to be covered: 2.1-2.7 (skip 2.6), 3.1-3.4, 4.1-4.6 (skip 4.3), 5.1 & 5.5 (&5.3 #9-20)

# **Learning Objectives**

Upon completion of this course, you will have:

- 1. An appreciation of the spirit, style, and content of calculus;
- 2. Competence in translating abstract ideas into concrete examples; and
- 3. An ability to comprehend the ideas involved in: the Tangent Problem, the Maximum and Minimum value of a quantity.
- 4. You will become proficient in the art of reasoning critically, solving problems, and analyzing data.

## **Course Prerequisites**

A "C" or higher in College Algebra, or a 72 or higher on the Florida College-level Mathematics Placement exam. Students lacking this prerequisite will be dropped during the first week of class. Review the <u>Course</u> <u>Catalog</u> web page for prerequisites information.

#### **College of Business Students**

Students admitted to a College of Business program in the Fall 2016 and later terms (a) failing to complete the seven Common Prerequisite Courses (or equivalents) with a 2.5 or higher, or (b) failing to pass any of the seven Common Prerequisite Courses (or equivalents) in two attempts, can no longer continue to pursue any major within the College of Business.



Each of these seven courses cannot be attempted more than twice. Drops after the add/drop period, which result in a DR grade, are considered an attempt in the course and count as an unsuccessful enrollment.

## **Textbook and Course Materials**

**Textbook- Barnett: Calculus for Business, Economics, Life and Social Sci Brief Ver, 14e** packaged with MyMathLab access code OR MyMathLab Access Code alone (MyMathLab program contains an electronic textbook version).

**Note**: FIU bookstore only carries an 18 weeks access code. If purchased directly through MyMathLab, you will have 18 weeks or 24 months options for purchase.

#### Course ID: zjevik30613

Link to register: <u>https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/get-registered/index.html</u>

If you are not able to purchase an access code immediately, you can use a **temporary access code**. A temporary access code can be obtained directly from the MyMathLab site. A temporary access code is valid for ONLY 14 calendar days and it allows you to get started with your assignments on the first day of classes. After the code expires you will be prompted to enter the permanent code or purchase the code using a credit card. You will not be allowed to continue your course until a permanent code is entered. You cannot buy/enter a permanent code until the temporary code expires.

Support for MyMathLab: https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/support/index.html

### **Important Information**

Before starting this course, please review the following pages:

- <u>Policies</u>
- <u>Academic Misconduct Statement</u>
- <u>Accessibility and Accommodation</u>
- Technical Requirements and Skills

# **Course Communication**

Communication in this course will take place via **Canvas Messages**. It is recommended that students check Canvas and their FIU email at least once every 24 hours during week days.

**Writing to Faculty:** In order to ensure effective communication with your instructor, please include in the subject line the following: Course and section number, your first and last name, and an identifying topic. Remember, while you have 5 or maybe 6 instructors in a semester, your instructors have 300 - 500 or more students each semester. Clear, professional emails will generally bring resolution more quickly. It is a good idea to reread before you send. Visit our <u>Writing Resources</u> for more information on professional writing and technical communication skills.

## Zoom Video Conference

Zoom is an online meeting room where you can interact with your professor and fellow students by sharing screens, sharing files, chatting, broadcasting live audio, and taking part in other interactive online activities.

We will be utilizing this tool for virtual office hours by appointment, as needed.

Please review <u>Zoom Video Conference</u> instructions and resources. You may access Zoom meetings from the course menu.

## Course Components.

- Exams: This class will have 4-chapter exams, each worth 12.5% and a cumulative final worth 20%.
- **Online Homework:** Every section will have a homework. Questions can be attempted unlimited amount of times.
- **Online Quizzes:** Every homework will have an associated quiz. A quiz can be attempted 3 times and the highest grade will be recorded.
- In-class quizzes/class participation: There might be up to two quizzes per week. The online poll site we will use is: <u>https://qlicker.zjevik.com/ (Links to an external site.)</u> Please make an account with your FIU email and use the code 9J15ZM to enroll in the class.

## Grading

<b>Course Requirements</b>	Total
4 Exams (12.5% each)	50%
Homework	12%
Quizzes	12%
Attendance: In-classes quizzes	6%
Final	20%
Total	100%

Letter	Range (%)	Letter	Range (%)	Letter	Range (%)
А	Above 93	B-	79 - 82		
A-	89 - 92	C+	75 - 78	D	59 - 69
B+	86 - 88	С	69 - 74	F	0 - 58
В	83 - 85				

# **Expectations of this Course**

We want you to become the agent of your own learning. We want you to leave this class with confidence in your own ability to do math and the understanding that problem solving is often about perseverance and that math makes sense. You will gain mathematical and analytical tools not only to succeed in future coursework but also to become a critical consumer of mathematical information you encounter in everyday life.

#### Where to get help:

- AAA Tutorial Office in GC 267 or call 305-348-6425. They also offer free printing if you bring your own paper. Online tutors available.
- The Learning Center in GL120. If you go and there are tutors available, you will get immediate help. Otherwise, you will have to make an appointment. The phone number is 305-348-2180. For those of you living closer to the Biscayne Bay campus, the Math Lab there is in ACI 160 and the phone number is 305-919-5927.
- The Office of Multicultural Programs and Services in GC 216. Tutoring is available to all students, whether you are a minority or not, but by appointment only. The phone number is 305-348-2436.
- Where to get help with technical support:
  - o <u>Canvas: Chat</u>
  - <u>MyMathLab Support</u>

**Disability Services:** Students with disabilities should contact Disability Resource Center in Graham Center, Rm. 190. I am available to meet with you and discuss the necessary academic accommodations upon receiving documentation from DRC.

### **Class Policies**

Drop Date: March 16th

**Incomplete Grade Policy:** The incomplete grade (IN) is given to a student who has substantially completed most of the course work but is unable to finish an exam or another assignment because of circumstances beyond the student's control. An incomplete grade must be made up within two semesters. There is no extension of the two semester deadline. The student must not register again for the course to make up the incomplete. Every incomplete grade must be approved by the Mathematics Department. An IN grade cannot be given if it is necessary for the student to repeat the course.

**Make-up Policy:** There will be no make-up tests. If you miss a test due to illness or other emergency and provide documentation, your final exam will count in place of the missed test. There will be no make-ups for MyMathLab assignments. Technological issues are not a valid reason for missing online assignments. Personal travel plans are not a valid reason for missing a test. University related absences that require special scheduling must be arranged one week prior to the test.

**Final Exam Policy:** If you have taken all exams (or you have missed one examine due to an excused absence), the final exam will replace your lowest test grade as long as it is beneficial to your overall grade. You may not replace more than one test grade with the final. Note that this means your final exam grade has substantially more impact on your overall result in the class.

Calculator Policy: NO calculators are not allowed in this course.