

COURSE SYLLABUS

COURSE TITLE:	Pre Calculus	COURSE CODE:	MATH110
PREREQUISITES:	None	SEMESTER:	FALL 2020
INSTRUCTOR:	Nuno Santos	CREDITS:	3
EMAIL:	professornunosantos@gmail.com	SCHEDULE:	Friday 12h30-15h30

COURSE DESCRIPTION:

This course introduces students to the concepts of basic calculus needed on the management, finance and accounting fields of study. Students will learn how to perform basic calculations needed on the everyday roles of a manager.

COURSE OBJECTIVES:

The goal is for the students to:

- Acquire a sufficient level of mathematical literacy to be able to take other math-related courses,
- Develop an awareness of the value of algebra as a real-life tool,
- Be able to develop strategies for solving problems.

EXPECTED LEARNING OUTCOMES:

After this course, students should be able to:

- Understand and apply the preliminaries of calculus
- Know how to use the Cartesian system
- The formulas for straight lines
- Know how to create and use graph functions
- Understand the basic operations of functions

MANDATORY TEXTBOOK:

All course materials are provided to students

EVALUATIONS:

The final grade will be determined as follows:

- Mid Term – 30%
- Final Exam – 30%
- Homework – 20%
- In Class Work – 20%

Presence in class is mandatory. More than 2 absences will lead to a failing grade.

GRADING CRITERIA:

Grades will be based on the following evaluation criteria:

CATEGORY	ACHIEVEMENT LEVEL 1 : BEGINNING	ACHIEVEMENT LEVEL 2 : DEVELOPING	ACHIEVEMENT LEVEL 3 : ACCOMPLISHED	ACHIEVEMENT LEVEL 4 : EXEMPLARY
Calculus preliminaries	Student understands less than 20% of the concepts	Student understands between 20% and 50% of the concepts	Student understands between 50% and 80% of the concepts	Student understands at least 80% of the concepts
Functions, Limits, and the Derivative	Student understands less than 20% of the concepts	Student understands between 20% and 40% of the concepts	Student understands between 50% and 80% of the concepts	Student understands at least 80% of the concepts

COURSE SCHEDULE:

Dates	Reading/Homework	Session Content
Session 1 18 Sept	Course work 1.1 Homework 1.1	Chapter 1.1 – precalculus review part 1
Session 2 25 Sept	Course work 1.2 Homework 1.2	Chapter 1.2 – precalculus review part 2
Session 3 2 Oct	Course work 1.3 Homework 1.3	Chapter 1.3 – the cartesian system
Session 4 9 Oct	Course work 1.4 Homework 1.4	Chapter 1.4 – straight lines
Session 5 16 Oct	Mid Term	
Session 6 23 Oct	Course work 2.1 Homework 2.1	Chapter 2.1 – functions and their graphs
Session 7 30 Oct	Course work 2.2 Homework 2.2	Chapter 2.2 - The Algebra of Functions
Session 8 6 Nov	Course work 2.3 Homework 2.3	Chapter 2.3 - Functions and Mathematical Models
Session 9 13 Nov	Course work 2.4 Homework 2.4	Chapter 2.4 - Limits
Session 10 20 Nov	Course work 2.5 Homework 2.5	Chapter 2. 5 - One-Sided Limits and Continuity
Session 11 4 Dec	Course work 2.6 Homework 2.6	Chapter 2.6 - The Derivative
Session 12 11 Dec	Final Exam	Final Exam



The schedule of Final Exams will be confirmed and published by 31 October 2020. The last day of the semester is 18 December 2020. DO NOT PLAN ANY TRAVEL BEFORE THIS DATE AS THERE ARE NO MAKE-UP EXAMS.