### **Global Learning Semesters**

**Course Syllabus** 

Course: MATH-191 Calculus and Analytic Geometry II

Department: Computer Science

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
MATH-191	Calculus and Analytic Geometry II	3
Semester Offered	Contact Hours	Prerequisites
Fall, Spring	56	MATH-190: Calculus and Analytic Geometry I
Department	Level of Course	Language of Instruction
Computer Science	Lower Division	English

#### **Course Description**

The course offers a thorough study of the concepts introduced in MATH-190 course and in addition it introduces the student to new notions. More specifically, the following topics are covered: Applications of the definite integral in geometry, science and engineering, principles of integral evaluation and improper integrals, mathematical modeling with differential equations, the theory of infinite and power series, analytic geometry in calculus and introduction on the conic sections.

#### Instructor

Dr George Chailos

#### **Course Aims and Objectives**

This course provides the student with further study of calculus in both theory and applications. It also prepares the student for the next course in calculus as well as other science courses.

#### **Teaching Methods**

The course is delivered through a mixture of lectures, handouts, tutorials, practical exercises and assignments.

#### **Course Teaching Hours**

56 hours (56 hours lectures/presentations/tutorials). The course is delivered during the Fall and Spring semesters in 14-weeks (4 hours/week).

#### **Evaluation and Grading**

Class Participation/Homework/Quizzes: 0-30% Mid-Term(s): 30-50% Final Exam: 40-50%

# **Readings and Resources**

## **Required Textbook**

Howard A. Anton, Irl Bivens, Stephen Davis, Calculus, Seventh Edition, Wiley 2002. ISBN: 0-471-38157-8.