

Course outline SCIMATH10 -Calculus:

Mathematics is the language used to grasp understanding of, to explore, and to gain insight in any of the sciences: physics, chemistry, biology, as well as engineering. None of these can be well understood or appreciated without sufficient skills in mathematics. The aim of this introductory course in the mathematics track is to learn basic widely-used mathematical techniques, such as differentiation, various techniques for integration, complex numbers and differential equations. These techniques are put into context in projects related to real situations in the fields of physics, chemistry, biology, economics, sociology, etc. In this course students will continue to construct knowledge on their mathematical bases already founded. Students will solve many problems as homework assignments. Furthermore, two exams will assess the students for their level of understanding and their ability to solve relevant mathematical problems. A lot of class time will be used to solve and discuss textbook problems.