



SUBJECT SYLLABUS

ACADEMIC OVERVIEW

INTERNATIONAL SCHOOL OF ECONOMIC & ADMINISTRATIVE SCIENCES

SUBJECT NAME AND CODE: Integral Calculus (21201)

PROGRAM: Bachelor of Business Administration (BBA),
Bachelor of Administration & Service (BA&S)
Bachelor of International Business (BIB)
Bachelor of International Marketing & Logistics Administration (BIML)
Bachelor of Economics & International Finance (BEIF)
Gastronomy (GAS)

LEVEL OF STUDY: Undergraduate Program

GENERAL ACADEMIC INFORMATION			
LATEST UPDATE	2016-1		
VALID FOR	Valid		
ACADEMIC AREA	Mathematics		
SEMESTER	Third		
SUBJECT TYPE	Mandatory		
CREDIT POINTS	2		
CLASSROOM HOURS PER WEEK	4		
PRE-REQUISITES	Differential Calculus		
LANGUAGE	Spanish		
INTERNATIONAL CONTENT	<ul style="list-style-type: none">• Reading materials in English• International bibliography is used		
COURSE DETAILS			
COURSE DESCRIPTION	Considering the importance of mathematics in comprehensive training, it is necessary to encourage the student to acquire the mathematical culture and personal discipline, which allows him to reason, argue, analyze and synthesize; by doing so, the student will be exposed to explore and research other areas of application and will be able to propose mathematical models to various situations in his professional field.		
COMPETENCES DEVELOPED	Competence	Emphasis	Intended Learning Outcome (ILO)*
	To know the fundamental concepts of the integral calculus for understanding and	Knowledge	ILO02 ILO 3 ILO 4

	building mathematical models in economic sciences, engineering and administration.		ILO05
	To master the fundamental concepts of integration in a variable, successions and series.	Knowledge	ILO01, ILO04,
	To develop abilities in reasoning and application of mathematical concepts in the solution of problems related to integral calculus.	Knowledge	ILO01, ILO02
	To generate a positive attitude towards the use of mathematical concepts and tools developed in the course to problem solving in professional contexts	Skill	ILO02 ILO03
	To acquire responsibility in favor of individual work for learning	Skill	ILO03 BBA ILO 07 BIB ILO 08
	<p>* Intended Learning Outcome</p> <p>ILO01: Global Vision: Demonstrate an understanding of multicultural environments both in local and global contexts.</p> <p>ILO02: Critical Thinking: Evaluate information using critical and analytical reasoning to address changing economic and business situations.</p> <p>ILO03: Teamwork: Understand and work with others of different backgrounds to solve problems, develop meaningful relationships, and share knowledge.</p> <p>ILO04: Ethics & Social Responsibility: Demonstrate awareness of ethical issues in business environments and contribute to the improvement of social conditions.</p> <p>ILO05: Understand principles and concepts of administration: Demonstrate specific knowledge in the field according to the level of study (Bachelor).</p> <p>BBA ILO07: Communication: Communicate effectively in written and spoken manner in Spanish and English</p> <p>BIB ILO08: Communication: Communicate effectively in written and spoken manner in Spanish, English, and a third language</p>		
COURSE CONTENTS	<ol style="list-style-type: none"> 1. Integration 2. Integration methods 3. Applications 4. Sequences and infinite series 		
METHODOLOGY	Lectures where the teacher presents basic concepts; direct work with teacher's guidance for strengthening the reasoning ability through argumentation and shared discussion, which seeks to awake curiosity and to create systematic attitudes of inquiry, discovery, approach and problem		

	<p>solving; independent academic activity of the students to prepare class content, expand and confront information, discover new relationships and questions, practice and discuss with their peers or monitors, solve new problems, develop new skills as a result of their personal work, especially autonomy, all of them with the discipline of study and the self-control of their learning, working on themes different from those addressed in the program.</p>
ASSESSMENT	<p>Students will demonstrate analysis and innovation skills solving problems in their professional fields. Assessment is done by midterm exams, quizzes, homework, class participation, and a final exam.</p>