

SUBJECT SYLLABUS

ACADEMIC OVERVIEW
INTERNATIONAL SCHOOL OF ECONOMIC & ADMINISTRATIVE SCIENCES

SUBJECT NAME AND CODE: Microbiology & Food Preservation (1521401 & 1522203)
PROGRAM: Gastronomy
Level of Study Undergraduate Program

GENERAL ACADEMIC INFORMATION	
LATEST UPDATE	2014-1
VALID FOR	Valid
ACADEMIC AREA	Gastronomy
CYCLE	Basic
SEMESTER	First
SUBJECT TYPE	Mandatory
CREDIT POINTS	3
CLASSROOM HOURS PER WEEK	4
PRE-REQUISITES	HSQE
LANGUAGE	Spanish
PROFESSOR'S NAME	María del Pilar Castillo
COURSE DETAILS	
COMPETENCES DEVELOPED	<ol style="list-style-type: none"> To experience personal, corporate and social responsibility (to be aware about fulfilling the due legal rules on food, and the accountability of delivering safe food) To apprehend the connection and integration among knowledge fields, as well as between theory and practice (theoretical knowledge in the classroom – practical knowledge in the laboratory) To critically assimilate and handle data (Ability to analyze the microbiological and other statistical results of programs or issues related to food handling, process variables, and preservation techniques, plus quality features for decision-making whether to legal fulfillment or to improve the food storage) Formulate and solve theoretical and practical problems that arise in the knowledge areas of gastronomy (ability for problem-solving in the classroom to simulate real working life situations, putting theory into practice by means of laboratories).
COURSE CONTENTS	<ol style="list-style-type: none"> BPM review, and microbiology history Bacteria Virus Fungus Parasites Micro-organisms Contamination case Laboratory on micro-organism identification & cultivation Laboratory on intrinsic and extrinsic factors of food Food preservation through temperature & radiation Food preservation through dehydration, chemical agents & vacuum Food quality-safety index: sampling plan Laboratory on the sampling plan Sampling plan: micro-organisms life video Laboratory on commercial sterility Food products
METHODOLOGY	Lecture - Workshop
ASSESSMENT	<p>Written tests: midterm exams, quizzes and written activities.</p> <p>Presentations: expression and communication skill, research, depth</p> <p>Laboratory reports: ability for data analysis and synthesis, as well as practical results</p> <p>Workshop assessment matrices, case study, presentations and final project: analysis and decision making skills, criteria content fulfillment, method, purpose and communication.</p>

LINKS:	
WEEKLY PLAN	Provided by request
DETAILED CONTENT	Provided by request