

SUBJECT SYLLABUS ACADEMIC OVERVIEW INTERNATIONAL SCHOOL OF ECONOMIC & ADMINISTRATIVE SCIENCES

COURSE NAME AND CODE: Principles and Reactions of Sustances (962202)

PROGRAM:

Bachelor of Administration & Service (BA&S)

LEVEL OF STUDY: Undergraduate Programme

GENERAL ACADEMIC INFORMATION							
LATEST UPDATE	2020-2						
ACADEMIC	Service, Quality, and Hospitality						
DEPARTMENT		,,					
SUBJECT TYPE					Mandatory		
LANGUAGE					Spanish		
SEMESTER	Programme		Semester				
SEIVIESTER	BA&S	BA&S 2					
NUMBER OF							
ACADEMIC	2						
CREDITS							
HOURS OF							
ACADEMIC	96	CONTA	CONTACT HOURS		HOURS OF INDEPENDENT/AUTONOMOUS WORK	48	
WORK							
LEARNING PREREQUISITES	 Know and master the theories and principles of administration. Know the theories of service and quality. Know the organizational theories. 						
INTERNATIONAL COMPONENT	 National and international standards, policies, regulations and mores related to the professional field. Vocabulary and technical language to communicate in different cultural contexts. Research and/or projects with international and intercultural components. 						



ILO08

personal and work level.

SUSTAINABLE DEVELOPMENT GOALS (SDG)	SDG: 4. Qu	ality				
COURSE DETAILS						
COURSE DESCRIPTION KEY WORDS:	build a con make up a	nplete and structured scientifi	ic research pro are: the probl	dge and analytical thinking typical of service adminates; of this, the course emphasizes how to prope em, the hypotheses and the objectives, among oth	rly write the fo	
KET WORDS.	EICEA ILOS or Progra mme ILOS	Course ILOS	Туре	Content	Teaching and Learning strategy	Assessment Method
COMPETENCES DEVELOPED	ILO02 ILO04 BA&S ILO07 BA&S	Know the main reactions and interactions suffered by chemical substances in the work and industrial environment and how they can affect their functionality, leading to problems of use at a	Knowledge	Module II: selection, formulation and main reactions of substances. Unit 1 Types of chemicals. Chemical solubility. Factors that affect the solubility of a chemical substance. Concentration of chemical substances. Unit 2 Emulsions. Disinfectants. Enzymes	Theoretical Class	Summative Assessment

Unit 3

• Spotters.

• Water treatment chemicals.

Reactions of substances.Soaps and detergents.

• Formulation of chemical substances.

• Bleaches and auxiliary washing products.



Identify criteria for auditing and selecting suppliers or manufacturers of quality chemicals	Skills	 Colorants. Quality control standards. Module III: quality control and audit of suppliers and manufacturers. Unit 1 Quality control of chemical solutions. Chemical substances analysis techniques. Separation and purification of chemical substances. Chemical reactions required for the production of solutions. Unit 2 Equipment for the quality control of chemical substances. Separation and purification unit operations. Regulations applicable to the manufacture and commercialization of chemical substances. Unit 3 Audit of suppliers or manufacturers. Audit mechanisms. Audit forms. Audit report. 	Theoretical Class	Summative Assessment
To know the main substances used, their process of obtaining, formulation, transport and their application at an industrial level in the hotel and tourism, medical-surgical, environmental and professional food industry sectors.	Knowledge	Module I. Manufacture and transport of substances Unit 1 Importance of substances worldwide. generalities and chemical nomenclature Properties of substances. Regulations for the national use of chemical substances. Regulations for the international use of chemical substances. Unit 2	Theoretical Class	Summative Assessment



		 Main chemical substances used in the pharmaceutical industry. Main chemical substances used in the food industry and their reactions in food (Food Chemistry) Biochemistry of food at the human level Manufacturing processes and obtaining chemical substances. Chemical reactions suffered by substances in storage conditions. Unit 3 National regulations for the transport of chemical substances. International regulations for the transport of chemical substances. Selection of substances according to the type of use. 		
To identify and have the ability to perform the various mathematical calculations required for the activities of formulation, obtaining, concentration and selection of a chemical substance destined for a specific end use.	Skills	 Basic principles of reactions of substances. Module II: selection, formulation and main reactions of substances. Unit 1 Types of chemicals. Chemical solubility. Factors that affect the solubility of a chemical substance. Concentration of chemical substances. critical and analytical reasoning to address changes.	Theoretical Class	Summative Assessment

ILO02: Critical Thinking: Evaluate information using critical and analytical reasoning to address changing economic and business situations.

ILO04: Ethics & Social Responsibility: Demonstrate awareness of ethical issues in business environments and contribute to the improvement of social conditions.



	BA&S ILO07: Understand the needs of people and organizations as well as the tendencies of service and hospitality, which prevail in the marketplace in order to design solutions that satisfy the needs of both internal and external customers.
	BA&S ILO08: Understand transformational leadership to improve organizations and human resource development.
BIBLIOGRAPHY	 Day, R. A. (1996). Cómo escribir y publicar trabajos científicos. Washington, D.C.: Organización Panamericana de la Salud, Oficina Sanitaria Panamericana, Oficina Regional de la Organización Mundial de la Salud. Sampieri, R. H., Collado, C. F., & Lucio, P. B. (2014). Metodología de la investigación. México, D.F.: McGraw-Hill Education. Zabala S. (2009), "Guía a la redacción de estilo APA, 6ta edición. Recuperado de: http://www.suagm.edu/umet/biblioteca/pdf/GuiaRevMarzo2012APA6taEd.pdf Da Silva, L. (2005). Metodologia da pesquisa e elaboração de dissertação. Recuperado de: https://projetos.inf.ufsc.br/arquivos/Metodologia_de_pesquisa_e_elaboracao_de_teses_e_dissertacoes_4ed.pdf