UNIVERSIDAD ANA G. MÉNDEZ
UAGM

Requisitos y su equivalencia en universidades de Estados Unidos

Veterinary (VM)				
Requisitos	**Equivalencia UAGM**	**Carolina**	**Cupey**	**Gurabo**
General Chemistry and laboratory (4 credits)	**CHEM 203 (4 Credits)**	X	X	X
	Emphasis in this course is aimed to the study of the states of the matter, atomic and molecular structures, nomenclature of inorganic compounds, classification of elements in the periodic table, chemical bond, chemical equations and reactions, stoichiometry. In the laboratory students are trained in the use of basic laboratory techniques such as the use of volumetric equipment, titration and qualitative analysis. Students are taught to keep a good laboratory notebook and safety on the laboratory.			
Organic Chemistry and laboratory (4 credits)	**CHEM 351 (4 Credits)**	X		X
	The Organic chemistry course studies the carbon and hydrogen compounds and its derivatives with others heteroatom such as: halogens, oxygen, nitrogen, sulfur, phosphorus and some metals. This course discusses the nomenclature and physical properties of the different families of organic compounds. The synthetic methods and the reactions of the alkanes, alkenes, cycloalkanes, alkynes, dienes, alkyl halides, aromatic compounds, and derivatives are also presented. Emphasis is done the reactions mechanisms, specially: SN1, SN2, E-1, E-2, double and triple bonds additions, electrophilic aromatic substitutions in benzene and its derivatives, alcohols dehydration, aldol condensation, Cannizzaro reaction, epoxidation of alkenes, Sandmeyer reaction and Cope and Hofmann amines elimination.			
	PHSC 203 - GENERAL PHYSICS I 4 CREDITS	X	X	X

Physics (3 credits)	The course provides skills to understand the world that surrounds the student. The student will learn to explain physical phenomena and will discover principles and laws that have connections with other disciplines and apply to analog phenomena and broader situations. This way, he will recognize the broad scope of Physics. For this, the student will strengthen the correct use of the language of the discipline, perform cooperative experiments where will manipulate instruments and take measurements that will report clearly and precisely. Topics are covered in sequential manner, integrating an inductive and deductive format. The applications cover from the simple free fall to orbiting satellites, based on the laws of movement and their relation with energy. Slightly emphasisis given on integral calculus. Student will be evaluated with a variety of instruments, in class as well as online Course.			
	PHSC 204 - GENERAL PHYSICS II 3 CREDITS	**X**	**X**	**X**
	The course contains concepts, physical amounts and laws to interpret and to describe to the electromagnetic processes in the nature and the technique, as well as the fundamental characteristics of the waves (mechanical and luminous), presenting with a mathematical level of depth of differentials variations: derive and integration. Algebra and trigonometry will be used with amplitude, as well as the calculations with vectoral amounts. The differential calculus will be used with potential, sine, cosine and exponential functions. The laws of electromagnetism will appear in their integral form, but the situations to solve will be with fields of high symmetry (variant of the cases seen in classes).			
Pre-calculus, Calculus, Statistics (3 credits)	**MATH 151 I PRE-CALCULUS (4 Credits)**	**X**	**X**	**X**
	This is a preparatory course for differential and integral calculus in one variable. It is designed for students who plan to earn a degree in science, engineering, computer science and math education. The fundamental concepts to be studied in this course are equations and inequalities, systems of linear equations, functions (linear, absolute value, radical, quadratic and part-based), polynomial and rational functions, exponential and logarithmic functions.			
	MATH 221 I CALCULUS I 4 CREDITS			**X**
	This course is an introduction to differential and integral calculus in one variable with an emphasis on the process of derivation and integration of functions. It is designed for students planning to earn a degree in science, mathematics, computer science, or engineering. The fundamental concepts and skills to study and develop in this course include: limit, the derivative as a rate of change, derivatives of functions and techniques to calculate them, applications of the derivative, integration as the area under a curve or between curves in an interval, integration of functions and the Fundamental Theorem of Calculus.			
	STAT 201 I INTRODUCTION TO BUSINESS STATISTICS I 3 CREDITS	**X**	**X**	**X**
	Study of central tendency and dispersion measurements, sampling methods, probability theory, binomial probability distribution, normal density probability function and linear regression. One semester, three hours weekly.			
English (6 credits)	**ENGS 152 - FUNDAMENTALS OF SPEAKING, READING, AND WRITING ENGLISH I 3 CREDITS**	**X**	**X**	**X**

	This competency-focused course develops and strengthens students' listening, speaking, reading, and writing proficiency in English through an integrated language arts approach. Students will engage in oral communication competencies to fit the purpose and context of diverse situations. Reading comprehension competencies focus on the analysis of fiction and non-fiction texts from a global perspective to produce different types of paragraphs and short essays expressing diverse points of view. This course involves the responsible use of technology and information skills to generate new knowledge.			
	ENGS 153 - FUNDAMENTALS OF SPEAKING, READING, AND WRITING ENGLISH I 3 CREDITS	X	X	X
	This competency-focused course integrates different rhetorical discourses in a variety of local and international topics in order to generate new knowledge. Students will demonstrate the use of appropriate oral communication competencies in verbal and nonverbal interactions to fit the purpose and context of diverse situations. Reading comprehension competencies will focus on the analysis of fiction and non-fiction texts in order to generate ideas to compose different types of essays. Students apply the writing process and adequate language usage for academic writing on diverse topics. This course requires students to develop a basic research paper on a variety of issues from a global perspective and encourages the responsible use of technology and information skills to generate new knowledge.			
Humanities or Social Sciences (3 credits)	**SOGS 201 - HUMAN BEING AND SOCIAL CONSCIOUSNESS 3 CREDITS**	X	X	X
	The course studies the social interaction and socialization processes that human beings undergo, from different theoretical perspectives. Exploration and explanation of the ways in which social stability is produced and reproduced over time. Critical analysis of social life, with the human being as primary subject and agent within the social structure. Emphasis on the development of different ideologies, forms of thought, and worldviews through which people interpret, and contribute to the production and reproduction of the social whole. The course contributes to the student's scholarly formation by providing a better understanding of the self within diverse social, cultural, and historical contexts. It is a competency-based course that encourages the responsible use of technology and information. This course will develop primary competencies such as, Critical thinking, Scientific inquiry, and Ethics and diversity, through the analysis and reflection on the topics and problems previously mentioned that permit the student to evaluate and propose solutions in regards to them.			
	HUGS 101 WORLD CULTURE I 3 CREDITS	X	X	X
	The course is a critical study of the cultural evolution of humanity from its beginnings to the development of cities and urban life with attention to the ancient cities, especially those of the West. It studies aspects of culture from a transdisciplinary approach. The course is focused on the development, at a basic level, of the competences of critical thinking, ethics and diversity, and integrates the responsible management of technology and information technology for the search and use of information.			