



UNIVERSIDAD
ANA G. MÉNDEZ

UAGM

**Addendum to the 2019-2020 Graduate Catalog
Universidad Ana G. Méndez Online Campus**

This addendum includes the new undergraduate programs to be offered starting on January 2020 and tuition costs revision.

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Master of Science with a specialty in Nutrition Sciences

The program of **Master of Science with a specialty in Nutrition Sciences** is designed for students who are interested in advanced academic training in food and nutrition in order to enhance their health-related profession. Program graduates will be able to assume a variety of careers in health care, community, entrepreneurship, as well as education.

Core Courses			
Course	Title	Credits	Pre-requisite
MSNT 500	Sports and Exercise Nutrition	3	
MSNT 510	Lifecycle Nutrition	3	
MSNT 520	Health Communication	3	
MSNT 530	Nutrition for Health	3	
ENTR 602	Business Plan Development	3	
TOTAL		15	
Specialty Courses			
Course	Title	Credits	Pre-requisite
ENTR 603	Design and Organizational Structure for Business	3	
MSNT 550	Epidemiology of Public Health for Health Professionals	3	
MSNT 560	Nutrition and Disease Prevention	3	
MSNT 570	Nutrition in Alternative and Complementary Medicine	3	
MSNT 592	Research Methodology	3	
MSNT 540	Nutritional Problems: A Global Perspective	3	
TOTAL		18	
Elective (Choose one)			
Course	Title	Credits	Pre-requisite
PSYC 510	Motivation and Learning	3	
MHSA 674	Human Development	3	
TOTAL CREDITS		36	

Minimum graduation GPA of 3.0

ENTR 602 - The Business Plan

Credits - 3

Pre-requisite - None

Planning in emerging ventures has many purposes and uses. Firstly, planning serves as a mechanism to guide the entrepreneurial intentions and behavior, while monitoring the expected versus actual results. Secondly, access to finance requires the preparation of formal written plans that allow investors to see a glimpse of the yet inexistent venture. Throughout this module, planning in nascent firms will be discussed from the perspective of nascent entrepreneurs and potential investors. At completion of this module, the students are expected to have prepared a formal business plan ready for soliciting finance or venture capital. Therefore, the course dynamic will take an action learning approach in which the students will be writing their business plan as they are being introduced to different concepts. The development of the formal business plan will be aided using business planning software.

ENTR 603 - ORGANIZATIONAL STRUCTURE AND DESIGN FOR PYMES

Credits - 3

Pre-requisite - None

This course is to help students obtain in-depth understandings of organizations through good comprehension of central theoretical perspectives and paradigms. This course will focus on determinants of an organization's success, focusing particularly on structure and design issues, as well as external environmental factors that impact organizational structure and functioning. A systems theory approach will be taken, making links to the strategic management, power and control literatures, as well as different forms of organizing (rational to natural organizing). Finally, the effect of macro-level factors on individual decisions and behaviors, and thus organizational effectiveness, will be examined from a multiple levels-of-analysis perspective.

MSNT 500 - Sports and Exercise Nutrition

Credits - 3

Pre-requisite - None

The course integrates nutrition principles, standards and guidelines, focusing on understanding how dietary needs have implications in sports and exercises. The content gives students comprehensive knowledge of nutrition and how it supports training, recovery and performance in sports and exercises, taking into account diet plans, supplements, eating disorders and exercise patterns, among others.

MSNT 510 - Life Cycle Nutrition

Credits - 3

Pre-requisite - None

The course will enable students to explore the role of nutrition from preconception until the older adult stage. Each life cycle is discussed taking into account physiological changes, as well as lifestyle factors and nutritional requirements. The content includes the study of special nutritional needs, aspects about physiology, and health concerns. Physical growth, eating problems and other nutrition-related conditions are examined for each stage of life. Recommendations for improving the nutritional well – being of individuals throughout the life cycle will be discussed.

MSNT 520 - Health Communication

Credits - 3

Pre-requisite - None

Comprehensive overview of health communication that addresses different forms of delivering high quality health promotion messages at the individual, family, professional, organizational and societal level. Discussion includes various communication methods, mass media, the art of public speaking and social marketing, in order to persuade, influence, empower and support. Health communications includes how messages from interpersonal, organizational, cultural and media sources affect health behaviors, attitudes, actions of individuals and beliefs, in a variety of settings.

MSNT 530 - Nutrition for Health

Credits - 3

Pre-requisite - None

This course emphasizes the role of nutrition and lifestyle choices in promoting optimal health. Discussion of how dietary intake influences health and wellbeing. The content integrates aspects of food choices and health, and nutrition principles in the life cycle.

MSNT 540 - Nutritional Problems: A Global Perspective

Credits - 3

Pre-requisite – None

The course will focus on nutrition issues and problems related to global health inequality. Students will explore the nature and extent of global inequalities, according to health and nutrition, as well as the implications of the health crisis that afflicts countries, with special attention to problems such as food habits, malnutrition and food security. The content includes the discussion about how to improve health and well-being to reduce observed disparities.

MSNT 550 - Epidemiology of Public Health for Health Professionals

Credits - 3

Pre-requisite - None

This course presents the basic tenets of epidemiology of public health for health professionals. Emphasis will be on definition, identification and prevention of nutrition related disease, as well as improving health of a population by improving nutrition. Malnutrition will be discussed on an environmental, economic and societal level to equip students with the necessary knowledge to explain, communicate and apply the basic principles of epidemiology in their professions and how their disciplines contributes to public health goals.

MSNT 560 - Nutrition and Disease Prevention

Credits - 3

Pre-requisite – None

Discussion of the etiology of major nutrition problems in different populations, the role of the diet in disease prevention and treatment, and the promotion of health through nutrition. The course focuses on improving food choices, dietary intake, and nutritional status. Students will examine nutrition issues facing at-risk populations, including pregnant and lactating women, infants, children, adolescents, adults and the elderly.

MSNT 570 - Nutrition in Alternative and Complementary Medicine

Credits - 3

Pre-requisite - None

This course discusses the role of nutrition in alternative and complementary medicine. Evidence based recommendations will be presented for the use of alternative and complementary medicine the wide range of approaches to health and well – being will be emphasized. The most commonly used therapies will be discussed as an adjunct to conventional medical care.

MSNT 592 – Research Methodology

Credits - 3

Pre-requisite - None

This course presents the principal methods of human nutrition research with focus on the role of the nutritionist as part of a research team. Qualitative and quantitative research, research ethics, quality control, selection of dietary assessment methodology and sources of funding are discussed. A research study is conducted as part of this course and results are shared with other students and faculty members. The students will have the opportunity to analyze research articles from well-recognized journal of nutrition topics.

MHSA 674 – Human Development

Credits - 3

Pre-requisite - None

The course deals with theories of human development. It includes an analysis of the relationship among physical, intellectual, and social influences on all stages of human development.

PSYC 510 – Motivation and Learning

Credits - 3

Pre-requisite - None

This course focuses on different theories concerning motivation and learning processes. Their scope, importance and relation to human behavior will be discussed.

Master of Science in Nursing with specialty in Executive Nursing

In the **Master of Science in Nursing with specialty of Executive Nursing**, the graduate may exercise leadership in his role as administrator, in diverse health scenarios, in a precise, effective and ethically responsible manner. He will be an administrator capable of assimilating the transformations in the health industry to convert current and future challenges into opportunities by making appropriate decisions, both for the administration and the patient. It will promote the union of thought and action of the members of the nursing or multidisciplinary team that it leads, around the projects and processes necessary to respond to the vision and business opportunities.

Core Courses			
Course	Title	Credits	Pre-requisites
ADMI 500	Managing Organizations	3	
ITMA 501	Technology and Information Management	3	
HESM 520	Fundamentals of Accounting and Finance in Health Services	3	
HESM 560	Applied Biostatistics	3	
HESM 570	Fundamentals of Epidemiology	3	
MGMT 230	Human Resources Management and Handling Diversity	3	
HEMG 610	Ethical and Legal Aspects in Health Care Services Management	3	
	TOTAL	21	
Specialization Courses			
Course	Title	Credits	Pre-requisites
NURS 600	Health Policy, Finance and Regulatory Environments	3	
STMG 601	Strategic Management	3	
MANA 625	Total Quality Management	3	
NURS 601	Quality Assurance and Risk Management in Healthcare Organizations	3	
NURS 602	Management and Leadership in Nursing Seminar	3	
	TOTAL	15	
Electives (Choose one)			
Course	Title	Credits	Pre-requisites
STMG 608	Strategies for Change, Professional and Entrepreneurial Development	3	
HEMG 600	Fundamentals in the Evaluation of Health Services	3	
PRMG 530	Project Management I	3	
	TOTAL	3	
	TOTAL CREDITS	39	

ADMI 500- Managing Organizations

Credits - 3

Pre-requisite - None

This course studies the evolution of diverse perspectives on management and introduces the student to basic philosophies, techniques, policies, structures and operations of businesses. The course emphasizes the dynamics and complexity of establishing, handling and developing a competitive business.

HESM 520- Fundamentals of Accounting and Finance in Health Services

Credits - 3

Pre-requisite - None

This course explores the essential practices of accounting and finance applied to the health sector. The student will apply the concepts learned from the environment of healthcare settings, including costs, forecast, future costs, direct and indirect costs, "ratios", patient's day's costs, case mix, productivity, inventory analysis, balance sheet, EBITDA, among others. It will focus on the development and interpretation of daily and monthly financial reports as a measure of risk prevention and institutional stability.

HESM 560- Applied Biostatistics

Credits - 3

Pre-requisite - None

Study of the principles and basic concepts of applied statistics and inferential analysis principles in health services. Emphasis is placed on the assessment and analysis of descriptive statistics, hypothesis testing and estimation. It covers the basics of inferential statistics applied to hypothesis testing, mean proportions and variances in the process of health management and evaluation. Identify and recognize the importance of regression and correlation analysis.

HESM 570- Fundamentals of Epidemiology

Credits - 3

Pre-requisite - None

It emphasizes the importance of the manager and evaluator of health services and its importance as a leader in creating solutions that meet the needs of communities. Application of the epidemiological method in the management of health services. It will take into account the principles of epidemiology as a control and eradication of diseases to solve the health problems of the population. The course describes the natural history of the disease and the inclusion of statistics strategies for health promotion and disease prevention. It also discusses the advantages and limitations of various epidemiological designs.

HESM 600- Fundamentals in the Evaluation of Health Services

Credits - 3

Pre-requisite - None

Discussion of the development of the discipline, the scope, effectiveness and efficiency of the evaluation of health services. After completing the course, the student will demonstrate the added value of discipline, the importance of the specialty and the models of greater relevance in health services. We will study the components of planning, institutional goals, budget development, strategic thinking and continuous qualitative and quantitative monitoring mechanism in the healthcare scenario.

HESM 610- Ethical and Legal Aspects in Health Care Services Management

Credits - 3

Pre-requisite - None

The course will train students in the knowledge related to the legal and ethical issues in research and evaluation in the health sector in Puerto Rico and the United States. Will prepare the student to exercise control in matters relating to patient rights, risk management, ethics and compliance. Meet specific regulations, Patients' Rights HIPAA Law, Federal Law 45 CFR 46 Parts A, B, C and D and biosafety principles. As an educational resource, case studies will be included.

ITMA 501 - Technology and Information Management

Credits - 3

Pre-requisite - None

The course will enable students to attain a sound working knowledge of the technologies that govern the most relevant aspects of IT/IS. Students will acquire an overall view and technological foundation with a special focus on the field of management.

MANA 625 – Principles of Total Quality

Credits - 3

Pre-requisite - None

Analysis and discussion of the elements of total quality management, change and its effects on organizational behavior. Also, the course examines the effects of changes in management of organizations in general, the responsibilities of the manager, and the behavior of the employees in the organization.

MGMT 230 – Human Resources Management and Handling Diversity

Credits - 3

Pre-requisite - None

Study of models and strategies of management and human resource development from the perspective of diversity in the workplace. Analysis and evaluation of basic fundamentals in strategic planning of human resources to promote and ensure the inclusion of a diverse workforce in all aspects of organizational life. Implementation of theories and strategies of human resources linked to recruitment, selection, training and development, compensation, benefits and incentives, retention and succession of a diverse workforce, aligned to the objectives and business results, changes in the labor market, globalization and competitive advantage.

NURS 600 – Health Policy, Finance and Regulatory Environments

Credits - 3

Pre-requisite - None

The purpose of this course is to examine the fundamentals of health policy, the financial structure of the health systems, and regulatory environments that have an impact on nursing practice and care to the individual, family, and community as patients, while emphasizing on those issues affecting the health policy and the focus on the influence of the nursing profession in policy matters and regulations.

NURS 601 – Quality Assurance and Risk Management in Healthcare Organizations

Credits - 3

Pre-requisite - None

In this course students examine healthcare quality assurance and risk management and the methods that are utilized to achieve improvements in healthcare organizations. Topics include the link between patient safety and legal and regulatory compliance; the role of accreditation organization requirements in patient safety; evidence-based outcomes and standards of care; the development and archiving of reports, data, and device evidence in medical error situations; and managing patient safety compliance through credentialing of healthcare professionals.

NURS 602 – Management and Leadership in Nursing Seminar

Credits - 3

Pre-requisite - None

In this course, the student will analyze the fundamentals of leadership and management in health services. Emphasis is placed on the application of advanced communication skills in collaboration with the multidisciplinary team. The different types of leadership, the characteristics of a leader, and organizational changes for a better teamwork will be discussed. They will also evaluate the leadership theories and models to foster safe environments and effective work. Through the seminar, they will apply the problem-solving step methods to address complex issues within health organizations.

PRGM 530 – Project Management I

Credits - 3

Pre-requisite - None

General aspects studies related to the Project Management methodology. Emphasis on the essential concepts of this methodology. Differentiation of projects and operations. General analysis of the process groups that make up the Project Management model. Study of the life cycle of a project and the review of the phases in Project Management. Emphasis on the development of competences and skills related to the Project Management methodology.

STMG 601 - Strategic Management

Credits - 3

Pre-requisite - None

In Analysis and application of concepts such as ethics and social responsibility. Evaluation and application of elements related to identifying opportunities and analysis of business strengths and weaknesses. Emphasis in the application of the vision, mission, goals and objectives for the development of strategies in the planning process. Development of a strategic plan that includes identification and evaluation of alternatives for its control. This course is targeted to the development and application of analytical skills related to strategic planning.

STMG 608 - Strategies for change, professional and entrepreneurial development

Credits - 3

Pre-requisite - None

Strategic analysis of topics in the areas of power relations and resistance to change, motivation, and human behavior. Tolerance and respect for diversity and group dynamics. Evaluation and design of strategies for the development of a world-class organizational culture. Emphasis in environmental and structural forces within the organization. Appraises the different variables related to the organizational capacity for managing change and the development of plans and strategies.

Master's in Public Affairs with specialization in Criminal Justice

Graduates of the **Master's in Public Affairs with specialization in Criminal Justice** will be trained to administer, design and evaluate service programs within the components of the Criminal Justice System of Puerto Rico related to prevention, security, protection and investigation of crime and delinquency.

Core Courses			
Course	Title	Credits	Pre-requisite
MSPA 500	Theory, Practice and Change in the Administration of Public Policy	3	
MSPA 505	Computer Education for Public Administrators	3	
MSPA 510	Research and Quantitative Methods in Public Administration	3	
MSPA 520	Administrative Law and Ethics	3	MSPA 500
MSPA 530	Planning and Evaluation: Theories, Methods, and Techniques	3	MSPA 510
MSPA 540	Seminar: Planning, Development and Evaluation of Human Resources	3	MSPA 520
MSPA 550	Fiscal Resources Management	3	MSPA 530
TOTAL		21	
Specialization Courses			
Course	Title	Credits	Pre-requisite
CRJU 500	Foundations, Practice and Changes in the Administration of the Criminal Justice System	3	MSPA 500
CRJU 520	Philosophy of Punishment	3	MSPA 500
CRJU 565	Seminar: Program Design and Evaluation in the Criminal Justice System	3	MSPA 530
CRJU 715	Seminar: Special Situations in the Administration of Correctional Programs	3	
MSPA 710	Research Seminar	3	MSPA 510 + 24 crs
TOTAL		15	
Electives			
Course	Title	Credits	Pre-requisite
CRJU 505	Fundamental Principles of Law	3	
CRJU 510	Law and Society	3	
CRJU 540	The Police and Juridical Changes	3	
CRJU 575	Rehabilitation and Delinquent Treatment Programs	3	
CRJU 600	Seminar: Crime, Victims and Society	3	
CRJU 630	Organization and Administrative Techniques of the Police System	3	
CRJU 635	Mental Health and the Law	3	
CRJU 640	Addiction: Legal and Psycho-Social Aspects	3	
CRJU 645	Comparative Correctional Systems	3	
CRJU 650	Special Law in Criminal Justice Administration	3	
CRJU 730	Criminality, Crime Control and Criminal Justice	3	
MSPA 600	Seminar: Special Topics in Public Affairs	3	
TOTAL		3	
TOTAL CREDITS		39	

CRJU 500 - Foundations, Practice and Changes in the Administration of the Criminal Justice System

Credits - 3

Pre-requisite – MSPA 500

Theoretical, judicial and practical principles inherent in the criminal justice system in Puerto Rico. Students will be involved in problem-solving situations which will permit them to analyze, evaluate and propose alternative solutions to practical administrative problems.

CRJU 505 - Fundamental Principles of Law

Credits - 3

Pre-requisite - None

Constitutional rights with an emphasis on civil rights, penal rights and criminal procedures in Puerto Rico. It will also include the sources of positive right, the Constitution and jurisprudential decisions.

CRJU 510 - Law and Society

Credits - 3

Pre-requisite - None

The course deals with the relationship between law and society. It centers a theoretical and investigative vision of our legal systems and procedural and substantive aspects of the legislative process. A discussion of the influence of social factors in the approval process of the law, vis-a-vis the influence of the law on societal changes will be included.

CRJU 520 - Philosophy of Punishment

Credits - 3

Pre-requisite - MSPA 500

Meaning on punishment throughout history, theories on its origin, its cultural relativity and dominant philosophies. Students will view the different arguments proposed historically to defend or reject punishment, social protection and rehabilitation, among others, and the alternative methods of punishment.

CRJU 540 – The Police and Juridical Changes

Credits - 3

Pre-requisite - None

Study of the dynamics involved in the functioning of the police as it is impacted by changes operating at the legislative level and subsequent judicial interpretations. The course will analyze the effects that these have on criminal investigations and how they affect the rights of delinquent persons.

CRJU 565 - Seminar: Program Design and Evaluation in the Criminal Justices Systems

Credits - 3

Pre-requisite – MSPA 530

Various aspects of administrative programming and evaluation will be examined. The course involves theoretical and research concepts and problems analysis related to programming and program evaluation in the criminal justice system. It also includes design and study of evaluation instruments for police correctional and criminal justice administration programs. Students will engage in analysis and management of strategies for operationalizing objectives, decision-making and problem-solving.

CRJU 575 - Criminal Treatment and Rehabilitation Programs

Credits - 3

Pre-requisite - None

Analysis of the corrective philosophy and existing public policy regarding the rehabilitation of criminals and the relevant legal and constitutional dispositions. It will also analyze the different treatment and rehabilitation programs currently in effects at the various penal institutions in response to public policy. Treatment and rehabilitation models proposed and or currently operating in Puerto Rico, the United States and other countries; their expectations, findings, and scientific groundings. Students will also look at trends and reforms in rehabilitation programs for inmates.

CRJU 600 - Crime Victims and Society

Credits - 3

Pre-requisite - None

Analysis of the responsibility of the state in protecting the life and property of its citizens. It will examine the possibility of the state compensating the victim of a crime for damages resulting from the criminal act. It will also look at the doctrine of restitution, compensation for damages by the offender, as part of a sentence intended to alleviate the impact of the damages and as part of the rehabilitation process of the criminal. Policies and practices regarding this issue in other jurisdictions will be comparatively analyzed.

CRJU 630 – Organization and Administrative Techniques of the Police System

Credits - 3

Pre-requisite - None

Study of the organization and administration of the Puerto Rican police force. Emphasis is given to organizational theory, administrative techniques, procedures, and police administration and supervision programs. It analyzes the alternative objectives, strategies, programs, institutional approaches, roles, perspectives and interagency relations of the police.

CRJU 635 – Mental Health and the Law

Credits - 3

Pre-requisite - None

The course centers on analysis of the relationship between the mental health system and the law. It includes an in-depth look at the application of behavioral sciences techniques to the legal framework. Discussion concerning such as

diagnosis, risk, treatment, hospitalization, and mental disability viewed from a psycho-legal perspective, as well as the rights and responsibilities of institutional clients, their employees and the state, will also be included.

CRJU 640 – Addiction: Legal and Psych- Social Problem

Credits - 3

Pre-requisite - None

Study of the medical-legal aspects of drug addiction and alcohol abuse. It includes an analysis of the legal structure, from the framework of state and federal laws in the use and abuse of drugs and alcohol. It also discusses legislation, treatment and prevention programs.

CRJU 645 – Comparative Correctional Systems

Credits - 3

Pre-requisite - None

The course consists of a comparative study of correctional systems in Europe, United States, Canada, Latin America and Japan. The study will be carried out from the perspectives of historical development, administrative organization, correctional development, administrative organization, correctional philosophy, human resources, and treatment and rehabilitation programs for inmates. It will also consider the administrative and judicial mechanism to protect the rights of inmates as well as post- prison assistance. Trends and prison reforms in each country will also be reviewed.

CRJU 650 – Special Law in Criminal Justice Administration

Credits - 3

Pre-requisite - None

Analysis of the special laws which regulate our legal conduct, including the basis for their creation, enforcement techniques, and jurisprudence. Students will discuss laws relating to weapons, confiscation, explosives, controlled substances, illegal numbers games electoral law, transit vehicles, and mortgage institutions, among others.

CRJU 715 – - Seminar: Special Situations in the Administration of Correctional Programs

Credits - 3

Pre-requisite - None

The course focuses on an analysis of the correctional scenario including the psychological, administrative, and disciplinary perspectives. Students will explore the subculture of the penitentiary and how it is manifested. This course will focus on themes, situations, controversies, and problems inherent this scenario, scientific findings, programs dynamics and decisions or legislation which impacts the correctional system.

CRJU 730 – Criminology, Crime Control and Criminal Justice

Credits - 3

Pre-requisite - None

Critical analysis of criminality from a sociological perspective. Particular emphasis is placed on the relationship of public policy, and the criminal justice administration: decision-making; programs implementation and evaluation of police participation. Students discuss different strategies and models to reduce crime as well as the new tendencies toward privatization of criminal justice services.

MSPA 500 - Theory Practice Change in the Administration of Public Policy

Credits - 3

Pre-requisite - None

This course deals with modern age theories and ideologies which guide and shape the development, administration and evaluation of public policy. It Focuses on and understanding of the concepts of individualism, collectivity and community development by behavioral philosophers and scientists. It provides for a planning, as well as its methods and application the course also present a critical analysis of the various models which translate public policy and its application to specific approaches and concrete actions.

MSPA 505 - Computer Education for Public Administrators

Credits - 3

Pre-requisite - None

The course covers basic knowledge in the use of computers (computer literacy three basic areas are developed: (1) the ability to use the technological innovations, (2) the ability to incorporate the technological innovations in to particular area of interest and (3) the ability to implement strategies and policies geared to the improvement of the administration team.

MSPA 510 - Research and Quantitative Methods in Public Administration

Credits - 3

Pre-requisite - None

This course deals with the concepts in research methodology and the statistic related to the process which are applicable to the Public Affairs program. A multidisciplinary approach appropriate for the Public Affairs professions will be presented. The course will also develop in students the capacity for objective decision making with a minimum of prejudice and subjectivity. The course emphasizes practical elements of methodology and applied statistics will be emphasized.

MSPA 520 - Administrative Law and Ethics

Credits - 3

Pre-requisite - MSPA 500

Students become familiar with the set of legal norms and regulations concerning the various organizations, institutions, and public agencies, as well as with the justice system, the ordinances of services legally pertaining to these agencies, and the relations between these agencies and the individuals receiving those services. It includes the study of the dispositions which govern administrative processes, as well as ethical models in public administration.

MSPA 530 - Planning and Evaluation in Public Administration: Theories Methods and Techniques

Credits - 3

Pre-requisite - MSPA 510

The purpose of this course is to prepare students to deal with problems management, solutions and evaluate outcomes once one of the alternative studied was implanted. It is assumed that the student taking the course has not theoretical basic on the subject to be studied so that a panoramic view of the theories of the alternatives. The main approach of the course is strategic planning, which in recent decades has become the practice in all organizations, both public, private and nonprofit. The student will learn to think strategically to address the challenges of public organizations, the nonprofit and the communities.

MSPA 540 - Seminar: Planning, Development and Evaluation of Human Resources

Credits - 3

Pre-requisite - MSPA 520

The course will cover (1) concepts and theories on communication, leadership, human motivation, perception, emotions, personality of organization and Administration in Puerto Rico Analysis of the components with comprise: the Administration of Human Resources such as: recruitment and selection of personnel, job classification and evaluation, personnel training, retirement, motivation and human relations in Public Administration as well as pattern of individuals and group associations in the organizational scene.

MSPA 550 - Fiscal Resources Management

Credits - 3

Pre-requisite - MSPA 520

Study of the fiscal administration and formulation in the public sector and in nonprofit organizations. Analysis and evaluation of concepts, theories, models, scopes and strategies in the budgetary process.

MSPA 600 – Seminar: Special Topics in Public Affairs

Credits - 3

Pre-requisite - MSPA 510 + 24 crs.

Analysis and discussion of current issues and trends related to public affairs. Emphasis is placed in critical reading and analysis of case studies.

MSPA 710 - Research Seminar for Public Affairs

Credits - 3

Pre-requisite - MSPA 510 + 24 crs.

The seminar offers students the opportunity to carry out an investigation integrating the knowledge obtained through the analysis of administrative systems and their contingent functions and how they affect public and private institutions. Students will analyze planning, organizational, and design activities and the decision-making process in the organization.

Master of Science with specialization in Telecommunications and Networks Systems Administration

The program provides students with an in-depth knowledge of the principles of a Converged Networks including design, implementation, security and management with a strong hands-on approach.

Required Courses			
Course	Title	Credits	Pre-requisite
TCOM 500	Applied Mathematics in Telecommunications (admission req.)	3	Calculus I
TCOM 513	IT Project Management	3	Admission to program
TCOM 503	Introduction to TCP/IP	3	Admission to program
CYBR 501	Network Security I	3	
CYBR 502	Computer Security I	3	
TCOM 514	Telecommunications Governance I	3	
TCOM 606 or TCOM 609	Network Design Project Thesis II	3	Permission of Project Advisor
TOTAL		21	
Elective Courses (9 crs) (Select one area)			
Course	Title	Credits	Pre-requisite
Internet (9crs)			
TCOM 511	Internet Technologies	3	TCOM 503
TCOM 512	Introduction to Networks	3	TCOM 511
TCOM 521	Networking Fundamentals	3	As required by advisor
TCOM 556	IP Tel & Design and Implementation of Voice Networks	3	TCOM 503
TCOM 523	Wireless Networks	3	TCOM 503
Network Securities (9crs)			
CYBR 521	Network Security II	3	CYBR 501
CYBR 522	Computer Security II	3	CYBR 502
CYBR 600	Cyber Security Forensics	3	CYBR 502
Telecommunications Governance & Auditing (9 crs)			
TCOM 515	Telecommunications Governance II	3	TCOM 514
TCOM 522	Telecommunications Management and Policy	3	TCOM 513
TCOM 524	Technological & Scientific Innovation	3	
TOTAL DE CRÉDITOS		30	

CYBR 501 - Network Security I

Credits - 3

Pre-requisite - None

Introduces basic concepts of network security with a strong emphasis on cryptography and cryptographic techniques. Topics to be covered include classical encryption, data encryption standard, advanced encryption standard, symmetric key ciphers, public and private key cryptography and key management. Introduction to number theory concepts needed to understand public key cryptograph.

CYBR 502 - Computer Security I

Credits - 3

Pre-requisite - None

The fundamental tools and techniques for computer security are discussed in the context of the pervasive role and impact that computer technology has over the individual, the enterprise and on society-at-large. Topics covered include computer viruses, operating systems, program security, database security, legal, privacy and ethical issues.

CYBR 521 - Network Security II

Credits - 3

Pre-requisite – CYBR 501

Introduces advanced concepts of network security with an emphasis on hashing functions and algorithms and their applications to network security. Topics to be covered include message authentication, digital signatures, kerberos, electronic mail security, pretty good privacy, s/mime, IP security (IPSEC), secure socket layer (SSL), transport layer security (TLS), wireless security (WEP,WPA,WPA2), intrusion detection systems (IDS), intrusion prevention systems (IPS) and firewalls.

CYBR 522 - Computer Security II

Credits - 3

Pre-requisite - CYBR 502

Selected advanced topics in computer security are discussed in the context of the pervasive role and impact that computer technology has over the individual, the enterprise and on society-at-large. Core topics to be covered include penetration testing with Kali Linux which will take up the first half of the course. Other selected topics will vary from time to time and will typically include information assurance, data backup and redundancy, digital rights management, botnets, risk analysis and identity theft.

CYBR 600 - Cyber Forensics

Credits - 3

Pre-requisite - CYBR 502

Introduction to computer forensics. Overview of evidence acquisition and archiving. Locard's Exchange Principle and the order of volatility (rfc 3227). Preservation of volatile and non-volatile data. Analysis of data files including graphics files, email, executable and non-executable files. Report writing, expert testimony and ethics. Case studies and forensic software tools. Overview of DOS File System.

TCOM 500 - Applied Mathematics in Telecommunications

Credits - 3

Pre-requisite - None

This course covers elementary discrete mathematics for computer science and engineering. It emphasizes mathematical definitions as well as applicable methods. Topics include formal logic notation; sets, functions, relations; elementary graph theory; Number theory; growth of functions; permutations and combinations, counting principles; discrete probability. Further selected topics may also be covered, such as state machines and invariants.

TCOM 503 - Introduction to TCP/IP

Credits - 3

Pre-requisite – Admission to the program

The Internet is also one of the world's most powerful communication tools. This course will discuss and present the underlying applications, components and protocols of TCP/IP and its necessary link to the Internet. The Introduction to TCP/IP course will help participants learn how to identify TCP/IP layers, components and functions. Navigation tools, TCP/IP services and troubleshooting methodologies are also covered in this course.

TCOM 511 - Internet Technologies

Credits - 3

Pre-requisite - None

The Internet Technologies course begins with an overview of the Internet, its history, organization and structure. Once the general structure is understood, we look at different ways to access the Internet, both as an individual user and as a group of users. Areas such as copyrights issues, bandwidth considerations, portal development, practical research using the internet, FTP and electronic mail, HTML, web servers, graphics, scripts, tables, audio, video and security are covered.

TCOM 512 - Introduction to Networks

Credits - 3

Pre-requisite - None

This course introduces participants to the key concepts of data communications, telecommunications, networking, technologies, components, and protocols used in local area networking (LAN) and wide area networking (WAN) environments. Students will learn about the popular LAN protocols of Ethernet, Token Ring, and asynchronous transfer mode (ATM), with emphasis on all speeds of Ethernet. This course also introduces the most widely used network operating systems.

TCOM 513 - Information Technology (IT) Project Management

Credits - 3

Pre-requisite – Admission to the program

Information Technology (IT) Projects are major organizational investments. In today's Global Economy the level of success of these projects is paramount to Enterprise Sustainability and continued business. This class will concentrate on providing not only the basic PM skills but will concentrate on the particular techniques designed for technology-based projects, ITPM. It will discuss and explain PMBOK techniques (Project Management Body of Knowledge), the ITPM cycle, tools and processes, scope definition, verification and control. ITPM estimation techniques, risk management, analysis, assessment, monitor and control methods will be covered also. Implementation, closure and evaluation techniques specifics for ITPM projects will also be presented and discussed.

TCOM 514 - Telecommunications Governance I

Credits - 3

Pre-requisite - None

IT governance is an integral part of the business and an integral part of corporate governance. IT governance consist of the leadership, organizational structures and processes that ensure that the organization's IT sustains and extends the organization strategies and objectives. The key goal of technology governance is enterprise sustainability. This series of two courses will cover the framework elements, areas of focus, risk management, strategic alignment, performance measures, IT value delivery and resource management in the design of an effective IT governance plan and strategy. This first course will focus on the basics of IT governance including the legal framework, global standards and considerations, governance archetypes and will study practical cases in various organization types.

TCOM 515 - Telecommunications Governance II

Credits - 3

Pre-requisite – TCOM 514

IT governance is an integral part of the business and an integral part of corporate governance. It governance consist of the leadership, organizational structures an processes that ensure that the organization's IT sustains and extends the organization strategies and objectives. The key goal of technology governance is enterprise sustainability. This series of two courses will cover the framework elements, areas of focus, risk management, strategic alignment, performance measurements, IT value delivery and resource management in the design of an effective IT governance plan and strategy. This second course will focus on the mechanisms for implementing IT governance, linking strategies and performance, leadership principles, business intelligence, real time business intelligence, changing landscape of the telecommunications industry. Multiple cases will be presented, and the students will create a BI based strategy and roadmap.

TCOM 516 - Telecommunications Management & Policy

Credits - 3

Pre-requisite – TCOM 513

This course presents and discuss the most relevant aspects of the telecommunications sector from policy, business and technology perspectives. It presents and studies the driving forces behind the changes in the telecommunications policy and the significant impact of legal and regulatory changes on business operation. It focuses on the globalized enterprise challenges, opportunities and threats. Such key issues as global economy and its impact on information and communications technologies (ICT's), enterprise strategy and telecommunications, standards, ISO's and good practices, challenges and risk involved in information and telecommunications management are thoroughly covered. The role of ICT's in innovation, value creation and global strategic positioning are also presented through actual cases.

TCOM 521 - Networking Fundamentals

Credits - 3

Pre-requisite - As required by advisor

This course introduces participants to the key concepts of data communications, telecommunications, networking, technologies, components, and protocols used in local area networking (LAN) and wide area networking (WAN) environments. Students will learn about the popular LAN protocols of Ethernet, Token Ring, and asynchronous transfer mode (ATM), with emphasis on all speeds of Ethernet. This course also introduces the most widely used network operating systems. Basic network design and security concepts are discussed.

TCOM 523 - Wireless Networks

Credits - 3

Pre-requisite – TCOM 503

This course covers fundamental concepts related to wireless networks including wireless channel characteristics, wireless data transmission, multiple access protocols, error control, wireless standards, and cellular concepts and resource allocation. It provides a broad understanding of modern wireless networks, in particular local area networks and cellular networks. Students are exposed to design and analysis concepts that are essential in the development of wireless networks.

TCOM 524 - Technological & Scientific Innovation

Credits - 3

Pre-requisite – None

Innovation; practical creativity; effective creative scientific thinking methods and procedures; new ideas development are all key elements of a successful scientist. This course will introduce and cover the scientific methods used in innovation and creative thinking. Will introduce innovation from the standpoint of the modern school of innovation scholars such as, Schumpeter, Eric Rogers, Von Hippel, Altshuller (the engineer that created TRIZ or theory of inventive

problem-solving), Alex Osborn, Robert Sternberg and others. Will cover innovation toolkits such as Altshuller's innovation pyramid, Burgelman and Seigel's minimum winning game, Osborn and Parnes' creative problem-solving (CPS), Altshuller's TRIZ, Amabile's internal and external motivation, Guilford's convergent and divergent thinking and Ries' build-measure-learn wheel. Will also cover Christensen's disruptive innovation process, Usher's path of cumulative synthesis, Van de Ven's leadership rhythms, d.school's design thinking modes, Henderson and Clark's four types of innovations, Rogers' adoption and diffusion curve, Abernathy and Utterback's three phases of innovations, Chesbrough's open innovation, March's exploration vs exploitation, Powell and Grodal's networks for innovation and Boyd's OODA loop.

TCOM 556 - Design and Configuration of Voice Networks

Credits - 3

Pre-requisite - None

This course explains the structure and design of telecommunication networks, both large and small. It begins with an overview of the public telephone network and describes the large networks and transmission facilities that switch telephone calls. Presents and explains the many and varied techniques, solutions, principles, and challenges both carriers and end users develop, experience, and overcome in implementing Voice-over IP services. Then it focusses the PBX switching systems that are essential to most businesses.

TCOM 606 - Network Design Project

Credits - 3

Pre-requisite - None

Development, analysis, simulation and implementation of a significant design project related to the area of Computer Networks. Discussion of design constraints and manufacturing cost, compatibility with the environment, aesthetics, safety, possible social, political, or ethical implications. Development of a prototype including discussion of the design cycle and experimental verification or simulations. A detailed written report and final presentation are required.

TCOM 609 - Thesis, Continuation

Credits - 3

Pre-requisite – Permission of project advisor

The purpose of this course is to establish the relationship and working environment between the student and thesis advisor. The student must select a subject matter and obtain advisor's approval. The thesis advisor will provide feedback and guide the student through the process of writing his thesis including guiding the student through the investigation proposal and process and is course studies the principles and methods and techniques of scientific investigation and proper academic redaction. At the end of the course the student will have the written thesis proposal. Of not finishing it he will be to register the course again to culminate properly his proposal. For more details on the matter the student will have to be read to the Graduate Catalog and Academic Norms.

Tuition Costs

The UAGM-Online Campus catalog is amended with this document as for a reduction in tuition costs and general fees for United States Residents (continental states only). Also, the graduation fees were revised.
Effective Date January 2020

This bulletin is intended to inform current and prospective students of fiscal policies, tuition fee cost, fees and other charges, as approved for the academic year 2019-2020 This information is available on the website of the institution: <http://agmonline.suagm.edu/>

Charges per Credits	
PUERTO RICO & INTERNATIONAL RESIDENTS	
GRADUATE PROGRAMS (Master's degrees)	\$260.00
Agribusiness, Human Resources, Marketing and Sales Management, Management, Supply Chain Management and Logistics, Management and Strategic Leadership, Project Management, Instructional Design and Technological Integration with E-Learning, Teaching English as a Second Language, Environmental Planning, Criminal Justice, Nutrition Sciences, Executive Nursing, Telecommunications and Network Systems Administration	
General Fees	
PUERTO RICO & INTERNATIONAL RESIDENTS	
General Fees:	\$260.00

CONTINENTAL UNITED STATES RESIDENTS ONLY	
GRADUATE PROGRAMS	\$350.00
Agribusiness, Human Resources, Marketing and Sales Management, Management, Supply Chain Management and Logistics, Management and Strategic Leadership, Project Management, Instructional Design and Technological Integration with E-Learning, Teaching English as a Second Language, Environmental Planning, Criminal Justice, Nutrition Sciences, Executive Nursing, Telecommunications and Network Systems Administration	
General Fees	
CONTINENTAL UNITED STATES RESIDENTS ONLY	
General Fees:	\$98.00
General Fees: Summer	\$42.50

OTHER FEES AND CHARGES	
Transcript	\$6.00
Graduation Fee	\$185.00
Diploma Duplicate	\$25.00
Degree Certification	\$5.00
Graduation or Administrative Graduation Certification	\$35.00
Apostille Fee	\$40.00
Shipping Fee	Varies by country