

AMERICAN UNIVERSITY

SCHOOL OF MEDICINE

ARUBA

COURSE CATALOG

FALL 2023



AMERICAN UNIVERSITY
SCHOOL OF MEDICINE
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I. Welcome message from the Dean



Dear AUSOMA Medical Student,

Congratulations on taking this next major step in becoming a physician. Your hard work and perseverance have paid off. The task that you have undertaken here will be arduous, and may bring uncertainty and frustration, but it offers many rewards as you progress towards the eventual destination of medical service to others as a physician.

The first phase of this journey is to develop an understanding of the scientific basis for the normal workings of the human body with emphasis on how this can go wrong. The curriculum at AUSOMA is designed to provide this understanding and will be validated by passing the USMLE Step I examination, the exam that is required of all students of medicine regardless of location of their training.

The second stage of your medical training is to navigate the clinical sciences program. There you will learn how to recognize and treat illness in your patients. Again, your training at AUSOMA will be validated by the passing of additional USMLE exams, opening the door to your future as a physician.

We at AUSOMA are here to see that you have every opportunity to meet your goal. We are committed to your success! You have worked hard for the privilege of pursuing a medical career, and in many cases, you have needed to make great personal sacrifices.

Aruba will be your home for the next year and more. Living in a foreign cultural environment will not always be easy but will offer much added value to your studies. Remember that you are a guest of the island and its people. It will be your responsibility to honor your hosts. They are welcoming and gracious and will help you as much as they can.

Sincerely,

A handwritten signature in black ink that reads "A. Khan" with a long horizontal line extending to the right.

Dr. Abrar Khan
Dean of Basic Science

Caribbean Campus
Physical Address: Wilhelminastraat 59, Oranjestad, Aruba
Telephone: +297-7338766

Executive USA Office
1172 Satellite Blvd
Suwanee, Georgia 30024 USA
Telephone: 1-877-428-2766
Fax:

Email: info@AUSOMA.org

II. AUSOMA's Vision, Mission and Educational Competencies

Vision

To develop culturally diverse individuals into compassionate physicians and leaders in their respective medical fields without the life-long crippling debt.

Mission

The mission of AUSOMA is to provide high quality cost conscious medical education with cutting edge technology and student friendly learning environment. It aims to provide an educational curriculum to meet the demands of a changing market with ever increasing competitiveness. The AUSOMA trained graduate shall possess sharpened interpersonal clinical oriented communication skills, understand the importance of independence as well as interdependence, be able to integrate acquired pieces of knowledge into an overall whole. He/she shall be able to solve and deal with patient problems in an efficient manner.

Educational competencies

AUSOMA has identified and defined six educational competencies aligned with the six ACGME competencies. The program educational competencies (PEC) and the corresponding program educational objectives (PEOs) of AUSOMA are shown in the following table:

PEC	PEO
	The objective of the AUSOMA MD program is to train students to become physicians with the ability to
PEC 1: Basic Knowledge of medicine	PEO1: Apply medical knowledge to dedicated patient care
PEC 2: Clinical and diagnostic skills	PEO2: Use the acquired knowledge towards right discretion to diagnose and treat patients
PEC 3: Patient centered medicine	PEO3: Understand the influence of socio-economic, behavioral, ethnic, cultural & religious factors on patients during treatment
PEC 4: Interpersonal rapport and communication	PEO4: Effectively and empathetically communicate with patients, patient families and fellow team members for quality healthcare
PEC 5: Medical professionalism	PEO5: Adhere to the highest ethical standards and professional protocols while dealing with patients
PEC 6: Evidence based practice and lifelong learning	PEO6: Treat newly emerging diseases based on community medical evidences and continue learning till the end of their practicing career

III. Academic Calendar Fall 2023 – Summer 2024

FALL – 2023

- Last day of registration for new students: August 25
- Orientation for new and continuing students: September 4
- First day of classes: September 5
- Last day of registration for current students: September 11
- Last day for withdrawal: September 18
- Registration for next semester begins: November 1
- Final Exams: December 11-15
- Last day of classes: December 15
- Last day of submission of grades: December 18
- Tuition Due for Next Semester: January 1

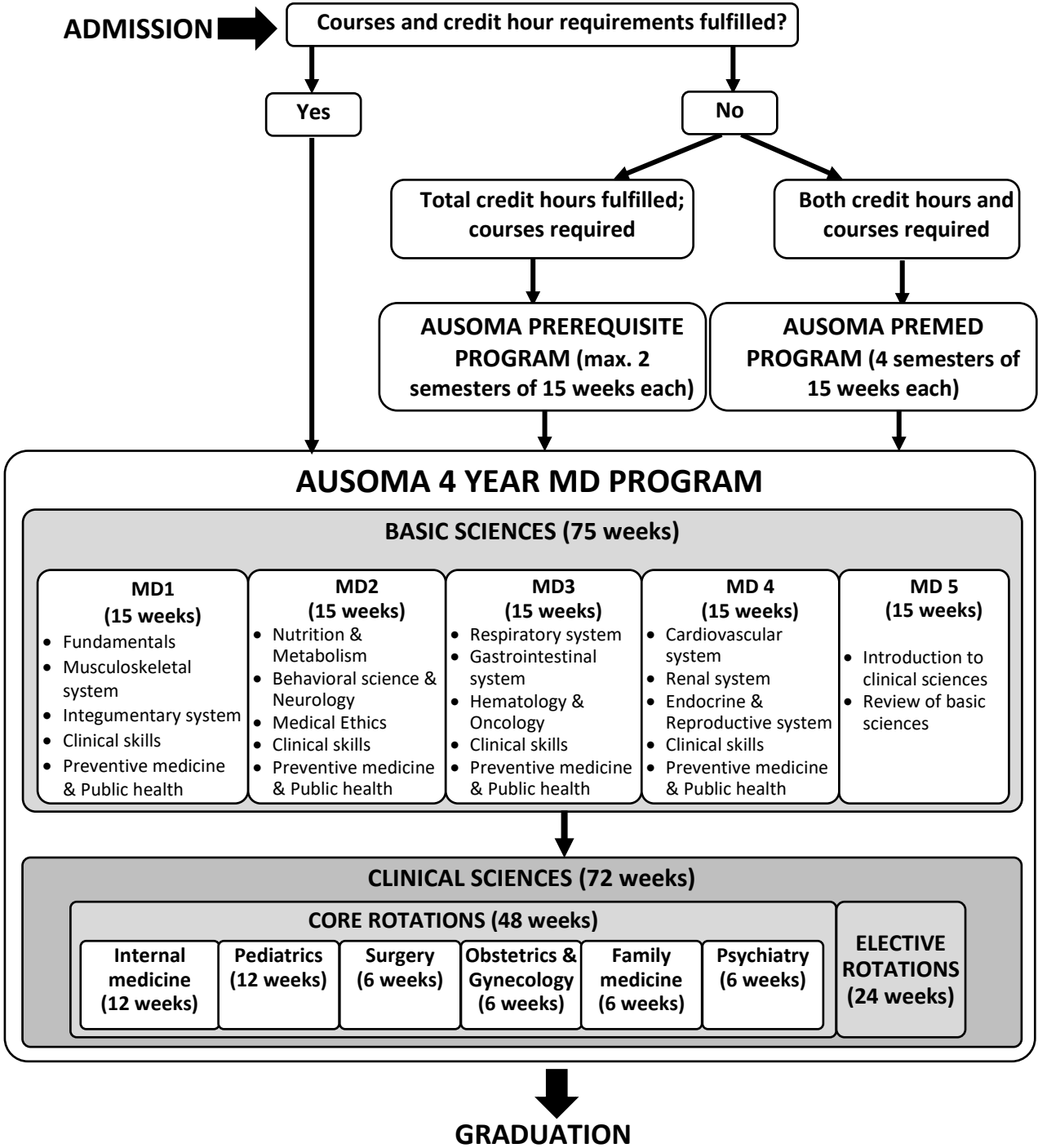
SPRING – 2024

- Last day of registration for new students: December 30
- Orientation for new and continuing students: January 8
- First day of classes January 9
- Last day of registration for current students: January 15
- Last day for withdrawal: January 19
- Registration for next semester begins: March 1
- Final Exams: April 15-19
- Last day of classes: April 19
- Last day of submission of grades: April 22
- Tuition Due for Next Semester: May 1
- **Aruba Holidays: (No Class)**
 - January 25 Betico Croes Day
 - February 12 Carnival Day
 - March 18 National Anthem & Flag Day
 - March 29 Good Friday
 - April 1 Easter Monday

SUMMER – 2024

- Last day of registration for new students without late fees: April 26
- Orientation for new and continuing students: May 6
- First day of classes: May 7
- Last day of registration for current students: May 13
- Last day for withdrawal: May 20
- Registration for next semester begins: July 1
- Final Exams: August 12-16
- Last day of classes: August 16
- Last day of submission of grades: August 19
- Tuition Due for Next Semester: September 1
- **Aruba Holiday: (No Class)**
 - May 18 Ascension Day

IV. AUSOMA Educational Program Overview



V. AUSOMA Educational Program Details

V.A. Pre-Medical Program

The premedical program consists of six traditional college semesters packed into four accelerated semesters of pre-medical studies. High school graduates with scholastic achievements can enroll for a 5-year program through this premed program and graduate to become qualified candidates for medical licensure.

V.A.1. Semester 1 (26 Credits)

- PM1108. General Biology
- PM1208. General Chemistry
- PM1304. Pre-calculus Math
- PM1403. English

PM 1108 General Biology

This course will focus on the fundamentals of biology. Areas studied include basic ideas such as cell biology and genetics. Both animal and human biological systems will be covered to give students an overview of the different biological strategies employed on earth for survival and reproduction.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 1208 General Chemistry

This course is aimed at the discussion of 3 blocks of 2 sub-blocks each. Block 1 - i. Basics in Chemistry, PTE, Atomic Structure, Bonding in molecules, Compounds, Stoichiometry ii. Chemical Kinetics, Equilibrium, Thermochemistry. Block 2- i. Physics in Chemistry, Phases and changes in Phases ii. Solutions, Solubility and Solubility constants, aqueous solutions, Cations, Anions, Concentration, Salts Block 3; i. Reactions, Bronsted/Lewis/Arrhenius Acid-Base, pH-pOH, strong/weak acids & bases, salts of weak acids/bases, buffers ii. Reaction, Red-Ox, Electro Chemistry, Emf, Thermodynamics

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 1304 Pre-calculus Math

This course is aimed at the discussion of 3 blocks containing related topics.

Topics include Basics in Math, natural/rational/irrational numbers, polynomials, exponents, rules, Equations/Inequalities in algebra, Absolute value, Complex numbers, Geometry, Analytics, Trigonometry, Functions, Graphs, Angles(sum/difference/formulas), Triangles, Algebra of Functions/Inverse/Quadratic, Transformation of Functions, Polynomial/Rational/Algebraic Functions, Exponential/ Logarithmic /Combined Functions, Matrices, multiplication, inverse

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 1403 English

This course will focus on the fundamentals of medical research and medical communication. To provide students with a foundation in the basic principles and processes of critical analysis of research articles and the in-depth process of Medical Communication between doctors and patients.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

V.A.2. Semester 2 (22 Credits)

- PM2108. Basic Anatomy and Physiology
- PM2208. Organic Chemistry
- PM2308. Physics

PM 2108 Basic Anatomy and Physiology

This course will focus on introduction to specific subjects in biology namely anatomy and physiology. Both animal and human biological systems will be covered to give students an overview of the anatomical and physiological processes.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 2208 Organic Chemistry

This course is aimed at the discussion of 3 blocks of 2 sub-blocks each. Block 1- i. Nomenclature (IUPAC rules/systematic), Isomers (structural, stereo, geometric, optical, diastereomers, enantiomers), Bonding/covalent, atomic orbitals, ii. Alkanes, Alkenes, Alkynes, Alkyl Halides, Aromatic Compounds, Substitution/Elimination reactions. Block 2- i. Alcohols, Ethers, Aldehydes/Ketones, Synthesis and Reactions, ii. Carboxylic Acids and Derivatives, Synthesis and Reactions. Block 3. i. Carbohydrates, mono- di- poly-saccharides, Reactions, Amines/N-containing compounds, Amino Acids/Peptides/Proteins, ii. Separation/Purification processes/Lab equipment/Spectroscopy.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 2308 Physics

The course is modified to include activities and examples integrated with anatomy and physiology mainly the physics at small dimensions, and end with the mechanics of human motion, the energetics of metabolism, the fluid dynamics of blood flow through vessels, the mechanisms for speaking and hearing, and the optical imaging system we call the eye. To understand the physics of human organs and of humans themselves. In addition to applying physical concepts to the body, to understand the body from a viewpoint that is more numerical than is often adopted in biological and medical presentations.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

V.A.3. Semester 3 (22 Credits)

- PM3107. Introduction to Histology
- PM3204. Behavioral Sciences
- PM3306. Introduction to Biochemistry
- PM3404. Biostatistics
- PM3503. Introduction to Microbiology

PM 3107 Introduction to Histology

This course is an introduction to Histology. Its aim is to examine the general principles by which human tissues are organized and to be able to identify the basic tissue types and understand the relationship between tissue composition and organ function. This course will provide basic knowledge concerning the structure and function of normal cells, tissues and organs, which is a prerequisite for the study of their pathology.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 3204 Behavioral Sciences

This course introduces students to systematic, controlled investigation of behavior of the organism and interactions among organisms. It teaches how human behavior can be studied through naturalistic experimental observations and rigorous formulations.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 3306 Introduction to Biochemistry

This course will focus on the basics of Biochemistry. Areas studied include chemistry of macromolecules like carbohydrates, lipids, amino acids, proteins, nucleic acids, enzymes. Only human biochemistry will be covered to give students an overview of chemical reactions that operate in the human body to keep it healthy. Students will apply these basics when they study medical Biochemistry during medical training.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 3404 Biostatistics

This module is designed to teach students the basic knowledge needed for promoting health and preventing specific diseases at individual as well as population level. The elements taught in this module include measures of health status, stages of disease and levels of prevention, major epidemiologic study designs, concepts of prevalence, incidence, screening, bias, statistical distribution, statistical hypothesis and hypothesis testing.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components.

PM 3503 Introduction to Microbiology

This course will focus on the study of living organisms which are invisible to the naked eye like bacteria, viruses, fungi, parasites. Accordingly this course will cover bacteriology, virology, mycology and parasitology with focus on effect of these microorganisms on human health and disease.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components

V.A.4. Semester 4 (23 Credits)

- PM4108. Introduction to Anatomy
- PM4208. Introduction to Physiology
- PM4303. Introduction to Immunology
- PM4502. Introduction to Physical Diagnosis
- PM4602. Medical Terminology

PM 4108 Introduction to Anatomy

This course will focus on the fundamentals of Anatomy. The students will be given an overview of the different systems of the human body like musculoskeletal, circulatory, respiratory, digestive, urinary, reproductive, and endocrine organ systems.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components

PM 4208 Introduction to Physiology

This course expands on the physiological principles founded in Human Systems Physiology. Its main objective is to establish the concept that physiology is not simply a set of individual biological components and functions, but that systems work together as an integrated unit to maintain health and well-being. It is designed to provide students with an understanding of the function & regulation of the human body and physiological integration of the organ systems to maintain homeostasis. Course content will include neural & hormonal homeostatic control mechanisms, as well as study of the musculoskeletal, circulatory, respiratory, digestive, urinary, reproductive, and endocrine organ systems.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components

PM 4303 Introduction to Immunology

This course introduces students to the immune system and mechanisms of immunity in the human body. The course covers concepts of the human body's barriers to pathogens, types of immunity namely innate and adaptive immunity and the synergy between the two, defects in the immune system like inappropriate inflammation, autoimmune diseases and immunodeficiency disorders.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components

PM 4502 Introduction to Physical diagnosis

This course is designed to teach each medical student the basic skills needed for medical practice. These skills include effective communication, scheme-based history taking and physical examination, development of clinical reasoning, formation of an initial diagnostic plan, interpretation of basic diagnostic studies, performance of selected procedures, provision of counseling and feedback, and articulate clinical case presentations.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components

PM 4602 Medical terminology

This module is medical terminology that introduces students to the language of medicine. Students will gain an understanding of basic elements, rules of building and analyzing medical words, and medical terms associated with the body as a whole. Students will acquire a foundation in basic medical terminology through a study of root words, prefixes and suffixes. Utilizing a systems approach, the student will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, oncology, and pharmacology.

Instructional methods include lecture, small-group sessions and self-study.

Assessment includes First block exam (15%), Second block exam (15%), Final exam (50%) and Internal assessment (20%) which includes quizzes and non-exam components

V.B. Prerequisite Program

Prerequisite science courses are offered to applicants who have at least 90 credit hours from an accredited university but who are deficient in one or more of these courses. Applicants are first admitted into the Prerequisite Program, and, upon successful completion of all Prerequisite Program requirements, they are automatically admitted into the Medical Program of AUSOMA provided they are cleared by the Promotions committee as having academic, disciplinary or behavioral good standing on their record or in their student files. The complete list of Prerequisite courses can be completed in under 8 months. A student may enroll in up to 22 credit hours of Prerequisite courses per semester with advice and consent of the Admissions Committee.

Prerequisite science courses are taught in Aruba by medical school faculty and will satisfy the entrance requirements for science prerequisite courses. All pre-Medical or prerequisite courses must be separate from the Basic Science courses. No prerequisite or Pre-Medical course can be the same course as in the Basic Sciences program.

Please contact the Admissions Office for additional program details. The Admissions Committee will place students in only those courses required to complete their prerequisites or for which there is a grade of D or F or for which the grade is more than 5 years old.

V.C. Medical Program- Basic Sciences

The 19 months of basic sciences are distributed across 5 semesters and include 11 organ systems, Medical ethics module, 4 modules of Clinical skills training, 4 modules of Preventive medicine and are combined with Clinical Board Series utilizing patient and physician educators to maximize the experience for each student. Each semester runs for 15 weeks.

V.C.1. Year 1 MD1 Semester:

Year 1 MD-1 semester	28 Credit Hours
MD 1001: Foundational Principles of Basic sciences	13 Credit Hours
MD 1002: Musculoskeletal system	8 Credit Hours
MD 1003: Integumentary system	2 Credit Hours
MD 1004: Clinical Skills-1	2 Credit Hour
MD 1005: Preventive Medicine, Public Health and Quality Health Parameters	3 Credit Hours

MD 1001: Foundational Principles of Basic sciences (System Chair: Dr Gil L Apacible)

The Foundational Principles of Basic Sciences module introduces the principles of basic and clinical sciences and lays the foundation for medical practice. It provides students with tools to effectively master application-based material in the subsequent organ-system-based modules. The module will prepare students to recognize and apply key concepts of cellular structure and adaptation and response to cellular and organ injury, stress and environmental threats, including inflammation, tissue perfusion, and neoplasia. This module will also introduce the students' role in clinical medicine and patient-centered care.

Instructional methods will include lecture, small-group sessions, laboratory work, self-study and clinical experience with real and simulated patients.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 1002: Musculoskeletal system (System Chair: Dr Gil C Apacible)

This is an interdisciplinary integrated module of musculoskeletal system. Basic sciences of anatomy, biochemistry, histology, physiology, microbiology, pathology, and pharmacology of the musculoskeletal system are correlated with clinical disorders of this system. The goal of this integrated course is to provide the medical student with comprehensive knowledge about bones, joints, muscles, tendons, ligaments, and associated soft tissues related to clinical manifestations of diseases.

The teaching methods include lectures, seminars and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 1003: Integumentary system (System chair: Dr Abigail Apacible)

Basic sciences of anatomy, biochemistry microbiology, pathology, pharmacology, and physiology of the integumentary system are correlated with clinical disorder of this system. The goal of this integrated course is to provide the medical student with comprehensive knowledge about skin and associated soft tissues related to clinical manifestations of diseases. This module covers the normal microscopic anatomy and function of skin, basic biological concepts and terminology related to basic skin lesions. Medical entomology will be discussed with emphasis on vectors and mode of transmission. Common clinical skin conditions such as heat stroke, wound healing, burns, protozoans, and worms will be explained. Concepts of pharmacodynamics and pharmacokinetics as well as drugs affecting the adrenergic and cholinergic systems are introduced.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 1004: Clinical skills-1 (Module coordinator: Dr Shakeel Ahmed)

The Clinical Skills course is designed to teach each medical student the basic skills needed for medical practice. These skills include effective communication, scheme-based history taking and physical examination, development of clinical reasoning, formation of an initial diagnostic plan, interpretation of basic diagnostic studies, performance of selected procedures, provision of counseling and feedback, and articulate clinical case presentations. In the first semester, the module starts with highlights of professionalism and ethics while conducting a thorough clinical history and performing vital signs. Then these skills will be centered around the integumentary and musculoskeletal systems.

Teaching methods include lectures, HPE sessions and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

**MD 1005: Preventive medicine, Public health and quality health parameters
(Module Coordinator: Dr Pamphil Igman)**

This module is designed to teach students the basic knowledge needed for promoting health and preventing specific diseases at individual as well as population level. The elements taught in this module include measures of health status, stages of disease and levels of prevention. This module also introduces students to the importance of epidemiology and biostatistics, major epidemiologic study designs, concepts of prevalence, incidence, screening, bias, statistical distribution, statistical hypothesis and hypothesis testing. Epidemiology related to the organ systems in the first semester will also be covered.

The course will be presented in the form of series of lectures, clinical case scenarios, problem-solving, student presentations, and small group discussions.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

V.C.2. Year 1 MD2 Semester:

MD-2 semester	27 Credit Hours
MD 2006: Nutrition and Metabolism	6 Credit Hours
MD 2007: Behavioral Sciences and Neurology	13 Credit Hours
MD 2008: Medical Ethics	2 Credit Hours
MD 2009: Clinical Skills-2	2 Credit Hour
MD 2010: Preventive Medicine, Public Health and Quality Health Parameters	4 Credit Hours

MD 2006: Nutrition and metabolism (System Chair: Dr Malpe Surekha Bhat)

Nutrition and metabolism introduce students to an understanding of biochemical pathways related to the three main components of our diets: carbohydrates, proteins and fats. It also helps to understand diets and their physiological effects on the human organism. The macromolecules that constitute the body and their metabolic fate; the effect of the types of food we eat, fad diets, supplements of vitamins and minerals and how they influence our well-being, will deepen the students understanding of the genesis of diseases like obesity, dyslipidemias, metabolic syndrome, Type 2 Diabetes mellitus. fad diets, taking supplements and vitamins. Knowledge of micronutrients is applicable to everyday practice. This class builds over previous basics learned on amino acids and proteins.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 2007: Behavioral Sciences and Neurology (System Chair: Dr Frank Navarrete)

This class encompasses the connection of the Nervous system and Human Behavior. The behavioral science portion of this clinically oriented course will teach students relevant principles of human behavior including biological, social, and cultural substrate. The course will cover the psychosocial aspects of human development across lifespan and relevant developmental milestones in medicine. The course will also address childhood and early-onset disorders, learning theories, transference and countertransference, defense mechanisms, cognitive disorders, mood disorders, anxiety disorders, psychotic disorders, personality disorders, malingering and factitious disorders, somatic symptoms and related disorders, eating disorders, sleep pattern and sleep disorders, child and elderly abuse, domestic violence, change in the elderly, death and bereavement, substance abuse disorders/ psychoactive drug intoxication and withdrawal, sexual dysfunctions and paraphilia. The course will furthermore discuss psychopharmacology, including antidepressants, antipsychotics, mood stabilizers, anxiolytics, central nervous system stimulants, and opioid withdrawal and detoxification. In the Neuroscience portion of this course students will learn the discipline of neuroscience and will cover the topics of neuro-embryology, neuro-histology, neuro-physiology, neuro-pathology and neuro-pharmacology.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 2008: Medical Ethics (Module Coordinator: Dr Pamphil Igman)

Medical Ethics consists of introducing ethical, professional and legal issues that arise in the practice of medicine. Medical ethics includes core principles of ethics, concepts of legal competence, informed consent, confidentiality, reportable illnesses, ethical issues in patients with HIV infection, voluntary and involuntary hospitalization, advance directives, death and euthanasia, medical malpractice, and impaired physicians. This course will provide students with basic tools used to identify ethical, professional, and legal conflicts in clinical settings, as well as resources used to critically evaluate and address questions and concerns that these conflicts present.

The course will be presented in the form of series of lectures, clinically ethical case scenarios, problem-solving, student presentations, and small group discussions.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 2009: Clinical Skills-2 (Module coordinator: Dr Frank Navarrete)

The Clinical Skills course is designed to teach each medical student the basic skills needed for medical practice. These skills include effective communication, scheme-based history taking and physical examination, development of clinical reasoning, formation of an initial diagnostic plan, interpretation of basic diagnostic studies, performance of selected procedures, provision of counseling and feedback, and articulate clinical case presentations. In the second semester these skills will be centered around nervous system, behavioral science, nutrition and metabolism. The module starts with understanding and evaluation of mental health and cognitive performance of the patient, moves into the clinical history taking and examination of the nervous system and ends with health promotion of nutrition for the most common diseases in medical practice.

Teaching methods include lectures, HPE sessions and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

**MD 2010: Preventive medicine, Public health and quality health parameters
(Module Coordinator: Dr Pamphil Igman)**

This module is designed to teach students an introduction to the different topics in public health. The elements taught in this module include major sources of morbidity and mortality in the United states, major metrics of public health in the US, demographic and epidemiologic transitions experienced by developed countries and data sources in public health. Epidemiology of nutritional, behavioral and neurological disorders are also covered in this module.

The course will be presented in the form of series of lectures, clinical case scenarios, problem-solving, student presentations, and small group discussions.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

V.C.3. Year 1 MD3 Semester:

MD-3 semester	28 Credit Hours
MD 3011: Respiratory System	9 Credit Hours
MD 3012: Gastrointestinal system	9 Credit Hours
MD 3016: Hematology and Immunology	4 Credit Hours
MD 3014: Clinical Skills-3	2 Credit Hour
MD 3015: Preventive Medicine, Public Health and Quality Health Parameters	4 Credit Hours

MD 3011: Respiratory System (System Chair: Dr Reem Rachel Abraham)

This course covers the respiratory system from all aspects of its anatomic and histologic structure, as well as physiological functions and pathological of the respiratory system. It also covers the various pathological conditions and their histopathological appearances. The course also covers the most common microbiological agents affecting the system. The drugs acting on the respiratory system are also discussed with emphasis on their uses and side effects. The course is accompanied by a short introduction to the clinical presentation of the patient with a respiratory disease.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 3012: Gastrointestinal system (System Chair: Dr Deepthi Mankar)

The course on Gastrointestinal system focuses on the understanding of the structures, biochemical aspects, physiological functions, pathological disorders, microbial, parasitic and viral infections and pharmacological requirements for treatment of gastrointestinal diseases. In addition, the clinical skills to examine the GIT and recognize its major diseases will be introduced to students. Also included is the prevention of diseases in the system.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 3016: Hematology and Immunology (System Chair: Dr Tulika Mishra)

This unit will provide students with a solid understanding of current hematological and immunological concepts. The ontogeny, identification, morphology and function of blood cells are studied. Hematopoiesis and its role in hemostasis and immune function are considered. Hematological disease perturbations are also covered. Host immune responses to pathogens from initial non-specific immune reactions through to the development of adaptive responses and immunological memory are studied. Underpinning concepts such as the danger hypothesis and immune efficacy against various pathogen classes are emphasized.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 3014: Clinical Skills-3 (Module coordinator: Dr Shakeel Ahmed)

The Clinical Skills course is designed to teach each medical student the basic skills needed for medical practice. These skills include effective communication, scheme-based history taking and physical examination, development of clinical reasoning, formation of an initial diagnostic plan, interpretation of basic diagnostic studies, performance of selected procedures, provision of counseling and feedback, and articulate clinical case presentations. In the third semester, these skills will be centered around respiratory system, gastrointestinal system, hematology and oncology. The semester starts with gastrointestinal system with a focus clinical history taking and examination, then the respiratory system and evaluation of diseases during the physical examination and ends with hematology system.

Teaching methods include lectures, HPE sessions and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

**MD 3015: Preventive Medicine, Public Health and Quality Health Parameters
(Module Coordinator: Dr Pamphil Igman)**

In this module, occupational health elements, environmental health elements, quality improvement, behavioral factors in health promotion and community screening are covered. This module also includes epidemiology of respiratory diseases, prevention of tuberculosis, epidemiology of gastrointestinal disorders and prevention of HIV and AIDS. Using the fundamental concepts and principles of preventive medicine and public health, students will also be able to realize the importance of incorporating health promotion and disease prevention into clinical practice. The course will furthermore allow students to acquire knowledge about evidence-based medicine and to start applying that knowledge in the real world. The students will learn how to critically review medical literature, analyze, interpret, and apply the information in clinical practice.

The course will be presented in the form of series of lectures, clinical case scenarios, problem-solving, student presentations, and small group discussions.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

V.C.4. Year 2 MD4 Semester:

MD-4 semester	30 Credit Hours
MD 4016: Cardiovascular System	10 Credit Hours
MD 4017: Renal system	4 Credit Hours
MD 4018: Endocrine and Reproductive System	10 Credit Hours
MD 4019: Clinical Skills-4	2 Credit Hour
MD 4020: Preventive Medicine, Public Health and Quality Health Parameters	4 Credit Hours

MD 4016: Cardiovascular System (System Chair: Dr Shakeel Ahmed)

This course will focus on the fundamentals of Cardiovascular Diseases. Areas studied include basic ideas such as Embryology, Anatomy, Physiology, Pathology and Pharmacology pertaining to the Cardiovascular System.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 4017: Renal system (System Chair: Dr Reem Rachel Abraham)

This course will focus on the fundamentals of renal diseases. Areas studied include basic ideas such as Embryology, Anatomy, Physiology, Pathology and Pharmacology pertaining to the Cardiovascular System.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 4018: Endocrine and Reproductive System (System Chair: Dr Salman Khan)

This course focuses on the structure of endocrine glands/ reproductive organs; synthesis, mechanism of action and degradation of the chemical messengers secreted by them; physiological functions of the glands and organs; endogenous regulatory mechanisms to maintain milieu interior of the chemical messengers, clinical conditions associated with disturbances in the milieu, laboratory investigations to detect/ diagnose the conditions, pharmacological interventions to restore the milieu and management of these conditions. Students will be exposed to clinical scenarios both classic as well as of current interest to achieve evidence based as well as lifelong learning. They will be trained in history taking, physical examination and differential diagnosis, comprehension of triggers that cause disruptive patterns of behavior and social issues that could limit the physical as well as psychological freedom of the affected individual.

Teaching methods include lectures, and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

MD 4019: Clinical Skills-4 (Module coordinator: Dr Frank Navarrete)

The Clinical Skills course is designed to teach each medical student the basic skills needed for medical practice. These skills include effective communication, scheme-based history taking and physical examination, development of clinical reasoning, formation of an initial diagnostic plan, interpretation of basic diagnostic studies, performance of selected procedures, provision of counseling and feedback, and articulate clinical case presentations. This module starts with focused clinical history in the cardiovascular system, physical examination and health promotion. The understanding of heart murmurs, recognition of the most common types of murmurs and a review of electrocardiogram, the most important arrhythmias and conditions are also included. The module also includes focused clinical history, examination and health promotion of the male and female genitourinary and endocrine system and ends with a thorough physical examination from head to toe.

Teaching methods include lectures, HPE sessions and small group discussions of clinically-oriented problems to enhance self-directed learning.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

**MD 4020: Preventive Medicine, Public Health and Quality Health Parameters
(Module Coordinator: Dr Pamphil Igman)**

In this module, prevention of cardiovascular disease, prevention of renal and urinary disease, diabetes mellitus type II, and prevention in maternal and child health are covered. This module also covers prevention of disability in the elderly, epidemiology and prevention of communicable diseases, including epidemiology and prevention of sexually transmitted diseases, epidemiology and prevention of HIV and AIDS, prevention and control of health associated infections, and prevention of arthropod-borne viral diseases.

The course will be presented in the form of series of lectures, clinical case scenarios, problem-solving, student presentations, and small group discussions.

Assessment includes Final exam (50%), Block exam (30% in total from all block exams), Non-exam assessment (20% in total from Attendance, Assignments, Class assessments)

V.C.5. Year 2 MD5 Semester:

MD-5 semester	27 Credit Hours
MD 5021: Introduction to Clinical Medicine	12 Credit Hours
MD 5022: Review of Basic Sciences	15 Credit Hours

Course Coordinator: Dr Tiara Calvo Leon

Co-coordinator: Dr Abrar Khan

NBME Chief Proctor: Dr Abigail Apacible

MD 5021: Introduction to Clinical Medicine (Dr Tiara Calvo Leon)

ICM aims to assimilate new methods and sharpen the student's history taking skills, including all the aspects of chief complaint, presenting problem, history of present illness, past medical history, family and social history, review of systems, and mental status exam. ICM also aims in assessing the student's clinical examination skills that the students should possess for smooth transition from basic sciences to clinical science.

The student's history taking, and clinical examination skills are assessed through in person classroom setting examinations.

ICM also includes:

- Comprehensive Integration of Clinical Judgment
- Foundations of Medicine
- Basic Life Support (BLS)
- Health Insurance Portability and Accountability Act (HIPAA)

Assessment includes Final exam (40%), Block exam (50% in total from all block exams), Non-exam assessment (10% in total from Assignments, BLS and HIPAA)

MD 5022: Review of Basic Sciences (Dr Tiara Calvo Leon)

AUSOMA will offer students with United States Medical Licensing Examination (USMLE) review programs and help prepare them for USMLE success. Students will get to review all system-based courses from MD-1 through MD-4

Students receive Monday through Friday live lectures as well as MCQ practice question sessions by in-house faculty

Both courses of MD5 are completed on campus in Aruba.

Assessment includes Final exam (50%) and Block exam (50% in total from all block exams)

At the end of MD5 semester, students are required to take and pass the NBME CBSE exam to be eligible to sit for the USMLE Step 1 exam

V.D. Medical Program - Clinical Sciences

The Clinical Sciences & Rotations portion of the program prepares students to deal directly with patients in real world environments. The AUSOMA Staff will work directly with students to assist full advantage of clinical rotations and placement in residency positions.

Students eligible for clinical rotations will have clinical sites available to them in Atlanta, Georgia USA, UK, and Aruba. With our 5th Year program, we will also tutor and assist students in passing the USMLE exams.

V.D.1. Core rotations:

CC 1012: Internal Medicine (12 Weeks). Students are exposed to adult patients with a variety of disease processes. Objective components emphasized are medical history taking, physical examination skills, case presentation, differential diagnosis of disease processes, and development of a strong foundation of internal medicine knowledge.

Student evaluation is based on the Clinical Component – 90% and the NBME Shelf Exam – 10%.

CC 2012: General Surgery (12 Weeks) Overall goal is to give broad exposure to surgery and understanding of the medicine of surgery. It will not serve as a comprehensive course in surgery, but rather a foundation for the role surgery plays in the care of the hospitalized patient. Students will develop an understanding of the common surgical diseases, as well as develop a framework for self-study. In addition, basic manual skills such as suturing and knot tying will be emphasized.

Student evaluations are based on the Clinical Component – 90% and the NBME Shelf Exam – 10%.

CC 1006: Pediatrics (6 Weeks). Designed to introduce core principles and become familiar with common illnesses of pediatrics, common causes of death in childhood, normal growth and development, concepts of family centered care, and variation in the immunology, biochemistry, pathology, and physiology that occurs as the child ages.

Student evaluations are based on the Clinical Component – 90% and the NBME Shelf Exam – 10%.

CC 2006: Obstetrics / Gynecology (6 Weeks). Provides a foundation of knowledge and skills through exposure to normal and pathological conditions associated with the female reproductive organs such as menstruation, conception, and pregnancy. Broader concepts of primary care for women with emphasis on preventive care and periodic screening will also be covered.

Student evaluations are based on the Clinical Component – 90% and the NBME Shelf Exam – 10%.

CC 3006: Psychiatry (6 Weeks). Emphasis on major psychiatric syndromes. Students will work on a multidisciplinary team and are required to be able to employ bio-psycho-socio-cultural model of assessments and treatments to patients with psychiatric illness.

Student evaluations are based on the Clinical Component – 90% and the NBME Shelf Exam – 10%.

CC 4006: Family Medicine (6 Weeks). Strengthen basic skills such as interviewing, history taking, physical examination, and physical diagnosis. The assessment and management of both routine and complicated medical conditions will be integrated with the application of the principles of quality, cost-effective health care, patient education, and health promotion.

Student evaluations are based on the Clinical Component – 90% and the NBME Shelf Exam – 10%.

V.D.2. Elective rotations (24 weeks):

Students can choose their specialty of interest from a list of specialties listed in the table below

Pre-requisite: For anatomy- all core clerkships; For rest of the specialties- third year clinical medicine

Credit hours: Four (4) for each specialty

Days offered: Monday to Friday for each specialty

Duration: 4 weeks for each specialty

Meeting time: 8 am to 5 pm

Evaluation: Non-cognitive aspects and other parameters established by the proctor

Specialty	Description
Anatomy	This elective offers the student the opportunity to develop an understanding of select regions of the human body. Emphasis on functional and clinical correlations is provided. Students will consolidate their learning by assisting in the laboratory instruction of the Gross Anatomy class.
Anesthesiology	This elective is designed to provide an experience in the selection and conduct of anesthesia. Attention will be given to the preoperative evaluation of the patient, the actual conduct of the anesthetic procedure, and post-anesthetic management of routine and complicated patients. Different types of anesthesia and their unique applications will be covered. There will be opportunities to improve competence in the performance of basic clinical skills; special emphasis will be given to develop skills in airway management and resuscitation techniques.
Cardiology	This elective is a clinical experience during which the student and physician join the cardiovascular health care team, developing the student's skills which are useful in the diagnosis and management of cardiovascular disease. The student will participate in the evaluation and management of a wide variety of cardiology cases. Emphasis will be placed on the proper history, physical examination, laboratory, and x-ray studies of the adult cardiac patients, by team approach on interdisciplinary service. The student will improve physical examination skills and understand the pharmacology and indication for the use of commonly employed cardiovascular drugs.
Cardiovascular surgery	This elective is designed to familiarize students with day to day management of patients suffering from cardiovascular diseases. In the clerkship, the student will work as a junior intern under the supervision of his proctor. The student will observe the responsibility and privilege of managing patients with a wide variety of cardiothoracic and vascular disorders. In addition to this, the student will be given the opportunity to observe the work of the cardiovascular anesthesiologist, cardiologists in the cardiac catheterization laboratory and the post-operative care in the cardiovascular intensive care unit.
Clinical pharmacology	This elective is designed to introduce the student to the principles of pharmacotherapy, including therapeutic drug monitoring, as these principles apply to the clinical setting. The student will enhance its ability to apply pharmacological principles to clinical medicine and be introduced to the resource materials available for information on drugs, drug therapy, drug literature evaluation and communication of drug information to health care professionals. In addition, the student will be familiarized with the principles of drug absorption, distribution, and elimination as they apply to patients with different diseases and of varying age groups, and the principles of antimicrobial therapy.
Dermatology	The dermatology clerkship is designed to provide the student with an extensive, in-depth exposure to clinical dermatology. Students will be involved in the evaluation and management of patients in the adult, pediatric, and surgical dermatology clinics. Clerkship students also do the initial evaluation of inpatients on the dermatology consultation service and participate in the management of these inpatients. Participation in daily morning conferences prior to clinic hours provides students with didactic instruction through exposure to the current dermatology literature, review of materials, and slide review sessions
ENT	This elective lays emphasis on training students in all areas of otolaryngologic practice. Head and neck surgery, facial plastics, sinus surgery, and sleep surgery.

Emergency medicine	This clerkship offers the unique opportunity to study the wide variety of problems in the Emergency Room. Students will function as primary emergency physicians under the supervision of an attending physician, and will be responsible for the evaluation, treatment and disposition, as well as any procedures. Students will gain experience in the examination and treatment of multiple patients at varying levels of acuity and complexity. Training and experience in medical procedures is emphasized. The student will be able to see the stabilization, disposition and proper referrals, when it applies.
Family medicine	The Family Practice Clerkship has been designed to provide students a general overview, an experience involving fundamental aspects of family medicine. Preventive practices, health maintenance, initial evaluation, treatment of hospitalized patients and patient education issues will be explored. The student will participate in the care of patients as well as developing a treatment and follow-up plan under the supervision of an attending physician.
Gastro-enterology	The student will receive clinical experience in the diagnosis and management of patients with gastro-intestinal problems. Specialized exam techniques and clinical management skills are emphasized. Detailed history and physical examination and differential diagnosis and management of gastrointestinal cases are the core of the experience.
General surgery	This clerkship offers the students the opportunity to participate in pre- and post-operation diagnosis and management of the most frequent cases of surgery. The general purpose of this elective is to involve the students in the initial work-up of patients, assisting in surgery as well as participating in the emergency room. It helps the students to develop basic skills in taking medical records, physical examination, and discussion of differential diagnosis pertinent to the field of general surgery.
Infectious diseases	Students who take this elective will enhance their ability to care for patients with infections or suspected infections, emphasizing etiology, epidemiology, pathogenesis, clinical diagnosis, treatment and prevention. They will substantially expand their knowledge of antibiotics and their ability to use them correctly and will further develop their infectious diseases and general clinical problem-solving skills.
Internal medicine (Ambulatory)	The students will have the opportunity to see patients on the "front line" as they present with their acute illness, perform their initial workup as well as diagnostic and therapeutic plan under the supervision of his proctor. The student will develop the ability to diagnose and treat important illnesses and common symptoms seen in primary care and understand the social and emotional context in which illnesses occur. In addition, the students will refine skills on taking careful history and performing a good Internal Medicine physical examination.
Nephrology	The Nephrology clerkship is designed to provide the student with an introduction to the pathophysiologic basis of renal disease. Clinical relevance of the pathophysiologic process is emphasized. Focus is on active student participation in the diagnosis and management of patients with acute and chronic renal disease under close supervision of faculty. In addition, elaboration on the principles of fluid and electrolyte therapy as well as the diagnosis and management of hypertension will be an integral part of the clerkship rotation. Patients with chronic renal failure often present with diseases involving multiple organ systems.
Neurology	Students will review the neurological examination and study the most common treatment and prognosis in the field, and learn the treatment for common neurological problems, including neurological emergencies. They will participate in the diagnostic work-up, and follow-up of patients and are expected to be able to independently search the literature for various neurological problems.
ObGyn	This elective exposes students to basic skills in the diagnosis and management of pregnancy and common gynecologic problems. The training is supervised by the faculty at all sites. The goal of the program is to develop within students the knowledge, skills, maturity, and judgment required to provide excellent patient care in both the physical and emotional aspects of gynecologic and obstetric practice.
Ophthalmology	The clerkship includes didactic instruction, participation in the outpatient clinic, and observation of surgery. This clerkship is designed for qualified students to take increasing responsibility with patients. Students will be expected to learn how to use major diagnostic equipment, to perform a thorough eye exam and to recognize common ocular diseases, and to provide initial management of ocular emergencies.

Orthopedics	The objective of this clerkship is to expose students to the usual problems presented at a general orthopedic service. Throughout the clerkship, emphasis will be given to the recognition and evaluation of orthopedic conditions that require daily diagnosis and treatment. Learn basic principles of managing open and closed fractures, dislocations and subluxations. Students will be taught how to describe the clinical and radiological features of fractures. They will also gain knowledge about vascular, neurological and musculoskeletal complications of fractures.
Pain management	Relates the anatomy, physiology, biochemistry and psychosocial components of pain to the understanding and care of patients with acute, chronic, or cancer pain. Students are involved with faculty on a one-to-one basis while interviewing, examining, and treating patients. Students may also learn to perform epidural, spinal, and peripheral nerve blocks.
Pathology	This elective will introduce the student to the role of tissue examination in modern medicine. The student will be involved with both the gross and microscopic aspects of surgical and/or autopsy pathology. During this clerkship the student will be involved in a variety of experiences, including: correlation of gross, histopathologic, and cytopathologic (when applicable) findings with the clinical presentation of the patient, as well as the pathophysiologic mechanisms involved, will be emphasized.
Pediatrics	This clerkship is designed to provide further exposure to the field of General Pediatrics, as pertains to the well-rounded formation of a primary care physician. The student will further develop the clinical knowledge, diagnostic, management and procedural skills necessary to establish an appropriate diagnostic work-up and management strategies in a pediatric patient. The student will also obtain a complete medical history, perform a thorough medical examination, and formulate a working diagnosis for the most common illnesses encountered in pediatric patients will be emphasized.
Preventive medicine	Provides senior medical students an opportunity to learn firsthand the principles and applications of general preventive medicine, occupational medicine, public health and quality improvement. This is accomplished with clinical and field experiences as well as interactive exercises pertinent to the specialty. Experiential learning forms the backbone of this rotation.
Pulmonary	This elective will provide an overview of the evaluation and management of adults with a variety of acute and chronic diseases of the respiratory system. During this rotation, the student should improve his or her ability to elicit an appropriate history concentrating on the cardinal symptoms of respiratory illnesses, perform an exam of the respiratory system, and interpret the significance of findings. Exam findings and history will be combined with additional tests such as x-ray, pulmonary functions, and arterial blood gas studies to formulate an appropriate differential diagnosis and management plan.
Psychiatry	During this clerkship, the students will become skilled at performing a comprehensive history and physical examination (when appropriate). This includes performance of a mini-mental status examination. They will also develop a comprehensive treatment plan, including awareness of the psychopharmacologic agents, indications and significant adverse effects. Students will be taught how to evaluate and manage psychiatric emergencies. Demonstrate appropriate professional demeanor and ethics and respect for patients' confidentiality.
Radiology	This is an introductory course to general diagnostic radiology. Students will be exposed to the basic principles of radiation physics, including image production, radiation protection and types and purposes of contrast material. They will gain knowledge on ordering radiology examinations appropriately and judiciously. Students will also learn to distinguish normal from abnormal findings on plain radiographic examinations. Students should be able to use radiographic findings to narrow differential diagnoses or to develop a tentative diagnosis.
Urology	This elective is designed to provide students with a broad background in clinical aspects of urology. This includes current developments in patient management as well as various areas of research in the specialty. The urology clerkship should enable students to decide whether they are interested in a career in urology and the best way to prepare themselves to attain that goal.

VI. Academic leadership and administrative staff

VI.A. Dean, Basic Science

Dr Abrar Khan MBBS, MS, PhD

Professor, Anatomical and developmental sciences

Professor, Pathological processes and therapeutics

Email: abrar.khan@ausoma.org

VI.B. Associate Dean, Academic Affairs

Dr Malpe Surekha Bhat, PhD

Professor, Biochemistry and Genetics

Professor, Basic Medical Research

Email: surekha.bhat@ausoma.org

VI.C. Associate Dean, Student Affairs

Dr Tiara Calvo Leon, MD

Associate Professor, Functional and diagnostic sciences

Email: tiara.calvo@ausoma.org

VI.D. Associate Dean, Premedical program

Dr Abigail Apacible, DDS

Associate Professor, Premedical sciences

Associate Professor, Anatomical and developmental sciences

Email: adca.dds@ausoma.org

VI.E. Director of operations

Mr Kanaan Baroud

Email: kanaan.baroud@ausoma.org

VI.F. Associate Registrar

Dr Baily Cua-Apacible

Email: bcua.a@ausoma.org

VI.F. Chief Librarian

Dr Patricia Brumley

Email: brumleyp@gmail.com

VI.G. Immigration consultant

Ms Zobaida Baroud

Email: zobaida.baroud@ausoma.org

VI.F. IT consultant

Mr King Grajo

Email: king.grajo@ausoma.org

VII. Departments and Faculty

VII.A. Anatomical and developmental sciences (Anatomy, Histology, Embryology)

<u>Chair:</u>	Dr Gil Apacible MD, MA	Professor
<u>Faculty:</u>	Dr Gil Apacible MD, MA	Professor
	Dr Abrar Khan MBBS, MS, PhD	Professor
	Dr Abigail Apacible, DDS	Associate Professor
	Dr Gil C Apacible II, DDS	Associate Professor

VII.B. Functional and diagnostic sciences (Physiology, Clinical Skills)

<u>Chair:</u>	Dr Tiara Calvo Leon, MD	Associate Professor
<u>Faculty:</u>	Dr Tiara Calvo Leon, MD	Associate Professor
	Dr Shakeel Ahmed, MD	Professor
	Dr Reem Rachel Abraham, PhD	Professor
	Dr Frank Michael Navarrete, MD	Associate Professor

VII.C. Nutritional, biochemical and molecular sciences (Biochemistry, Nutrition, Genetics)

<u>Chair:</u>	Dr Malpe Surekha Bhat, PhD	Professor
<u>Faculty:</u>	Dr Malpe Surekha Bhat, PhD	Professor
	Dr Frank Michael Navarrete, MD	Associate Professor
	Dr Priti Singh MD, MSc	Assistant Professor

VII.D. Pathological processes and therapeutics (Pathology, Microbiology, Immunology, Pharmacology)

<u>Acting Chair:</u>	Dr Abrar Khan MBBS, MS, PhD	Professor
<u>Faculty:</u>	Dr Abrar Khan, MBBS, MS, PhD	Professor
	Dr Shakeel Ahmed, MBBS, MD	Professor
	Dr Tulika Mishra, Ph D	Professor
	Dr Salman Khan, PhD	Associate Professor
	Dr Deepthi Mankar, MD	Assistant Professor

VII.E. Mind, behavior and global health (Neuroscience, Behavioral science, Preventive medicine, Epidemiology)

Chair: Dr Frank Michael Navarrete, MD Associate Professor

Faculty: Dr Frank Michael Navarrete, MD Associate Professor
 Dr Pamphil Igman, DVM, MD Assistant Professor
 Dr Gil C Apacible II, DDS Associate Professor

VII.F. Department of basic medical research (Basic research skills, Biostatistics)

Chair: Dr Malpe Surekha Bhat, PhD Professor

Faculty: Dr Malpe Surekha Bhat, PhD Professor
 Dr Tulika Mishra, Ph D Professor
 Dr Pamphil Igman, MD Assistant Professor

VII.G. Medical education unit

Chair: Dr Malpe Surekha Bhat, PhD Professor

Faculty: Dr Malpe Surekha Bhat, PhD Professor
 Dr Reem Rachel Abraham, PhD Professor

VII.H. Department of premedical sciences

Chair: Dr Abigail Apacible, DDS Associate Professor

Faculty: Dr Abigail Apacible, DDS Associate Professor
 Dr Priti Singh MBBS, MD Assistant Professor

VIII. Committees, chairs and members

VIII.A. Admission Committee

1. **Dr Malpe Surekha Bhat, Chair**
2. Dr Frank Michael Navarrete
3. Dr Pamphil Igman

VIII.B. Curriculum Committee

1. **Dr. Malpe Surekha Bhat, Chair**
2. Dr. Gil Apacible
3. Dr. Nazir Umrani
4. Dr. Frank Navarrete
5. Dr. Abigail Apacible
6. Dr Abrar Khan (invited member)
7. Dr Kavita Kotte (invited member)
8. Dr Mannan Chaudhry (invited member)

VIII.C. Students Promotion Committee

1. **Dr Gil Apacible, Chair**
2. Dr Abrar Khan
3. Dr Tiara Calvo Leon

VIII.D. Disciplinary and Grievance Committee

1. **Dr Frank Michael Navarrete, Chair**
2. Dr Tulika Mishra
3. Dr Pamphil Igman

VIII.E. Faculty research committee

1. **Dr. Tulika Mishra, Chair**
2. Dr. Salman Khan
3. Dr. Frank Navarrete

VIII.F. Student Wellness Committee

1. **Dr. Pamphil Igman, Chair**
2. Dr. Tiara Calvo
3. Dr. Shakeel Ahmed
4. Dr. Gil C Apacible (Dr Segie)

VIII.G. Strategic Planning, Information Management and Campus Affairs

1. **Mr. Kanaan Baroud, Chair**
2. Dr Abrar Khan
3. Dr Baily Cua-Apacible
4. Mr Jawad Shaikh

IX. Administration and faculty directory

1. Dr Abigail Apacible adca.dds@ausoma.org
2. Dr Abrar Khan abrar.khan@ausoma.org
3. Dr Baily Cua-Apacible bcua.a@ausoma.org
4. Dr Deepthi Mankar deepthi.mankar@ausoma.org
5. Dr Frank Michael Navarrete frank.navarrete@ausoma.org
6. Dr Gil C Apacible segieddm@ausoma.org
7. Dr Gil L Apacible gil.apacible@ausoma.org
8. Mr Kanaan Baroud kanaan.baroud@ausoma.org
9. Mr King Grajo king.grajo@ausoma.org
10. Dr Malpe Surekha Bhat surekha.bhat@ausoma.org
11. Dr Pamphil Igman pamphil.igman@ausoma.org
12. Dr Patricia Brumley patricia.brumley@ausoma.org
13. Dr Priti Singh priti.singh@ausoma.org
14. Dr Reem Rachel Abraham reem.abraham@ausoma.org
15. Dr Salman Khan salman.khan@ausoma.org
16. Dr Shakeel Ahmed shakeel.ahmed@ausoma.org
17. Dr Tiara Calvo Leon tiara.calvo@ausoma.org
18. Dr Tulika Mishra tulika.mishra@ausoma.org
19. Ms Zobaida Baroud zobaida.baroud@ausoma.org

X. List of textbooks**MD Basic Sciences (MD 1, 2, 3 & 4)****1. ANATOMY**

CLINICALLY ORIENTED ANATOMY by Keith L. Moore, Arthur F. Dalley, Arthur F. Dalley and Anne M.R. Agur, Published by Lippincott, Williams and Wilkins, Edition 8 ISBN-13: 978-1975104962 ISBN-10: 197510496X

2. BEHAVIORAL SCIENCE

- a. Jekel's Epidemiology, Biostatistics, Preventive Medicine, and Public Health, by D. L. Katz, J. G. Elmore, D. M.G. Wild, & S. C. Lucan. Elsevier Saunders, Fourth Edition, ISBN: 978-1-4557-0658-7
- b. "Basic & Clinical Biostatistics, 5th Edition."

3. BIOCHEMISTRY

- a. Lippincott Illustrated Reviews: Biochemistry (Lippincott Illustrated Reviews Series) Seventh, North American Edition by Denise Ferrier ISBN-13: 978-1496344496 ISBN-10: 1496344499
- b. Harper's Illustrated Biochemistry Thirty-First Edition 31st Edition by Victor Rodwell, David Bender, Kathleen Botham, Peter Kennelly, P. Anthony Weil. ISBN-13: 978-1259837937; ISBN-10: 1259837939

4. CLINICAL SKILLS

Bate's guide to Physical Examination and History taking, by Barbara Bates, Lynn S Bickley. 12th edition ISBN-13: 978-1469893419, ISBN-10: 9781469893419

5. EMBRYOLOGY

The Developing Human –Clinically Oriented Embryology by Keith L. Moore and T.V.N. Persaud, Published by Saunders – Elsevier, Edition 9, ISBN: 978 -1-4377-2002-0

6. GENETICS

Thompson & Thompson Genetics in Medicine (9th Ed.) by Nussbaum, Mcinnes & Willard. Elsevier Australia ISBN 9780323547628

7. HISTOLOGY

Junqueira's Basic Histology: Text and Atlas, 15e. Anthony L. Mescher Publisher: McGraw-Hill Education ISBN-13: 978-1260026177; ISBN-10: 1260026175

8. IMMUNOLOGY

- a. Lippincott Illustrated Reviews: Immunology Second, North American Edition by Thao Doan, Roger Melvold, Susan Viselli, Carl Waltenbaugh. ISBN-13: 978-1451109375; ISBN-10: 9781451109375
- b. Cellular and Molecular Immunology by Abul Abbas, Andrew Lichtman, Shiv Pillai, 10th Edition, eBook ISBN: 9780323757508, Paperback ISBN: 9780323757485

9. MEDICAL ETHICS

- a. Resolving Ethical Dilemmas: A guide for Clinicians Sixth Edition, by Bernard Lo. Lippincott Williams & Wilkins, a Wolters Kluwer. ISBN-13: 978-1975103545, ISBN-10: 1975 103548
- b. "Medical Law & Ethics, 6th Ed."
- c. "Resolving Ethical Dilemmas: A Guide for Clinician, 6th Ed"
- d. "Medical Ethics for Dummies"

10. MICROBIOLOGY

Lippincott's illustrated reviews: Microbiology 4th edition Author: Cynthia Nau Cornelissen Paperback ISBN: 978-1496395856 Imprint: Wolters Kluwer

11. NEUROSCIENCE

- a. Essential Neuroscience by Allan Siegel, Wolters Kluwer, Fourth edition ISBN-13, 978-1451189681
- b. Clinical Neuroanatomy for Medical Students: by Richard S. Snell. 7th edition, ISBN 978-0781794275

12. NUTRITION

Understanding Normal And Clinical Nutrition (8th Ed.) by Sharon Rady Rolfes, Kathryn Pinna, Elley Whitney. Wadsworth Cengage learning. ISBN-13: 978-0-495-55646-6 ISBN-10: 0-495-55646-7

13. PATHOLOGY

Robbins Basic Pathology (Robbins Pathology) 10th Edition by Vinay Kumar, Abul K. Abbas, Jon C. Aster MD. ISBN-13: 978-0323353175; ISBN-10: 0323353177

14. PHARMACOLOGY

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