

# TEALTHES SCIENCES

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We seek to prepare students to become health professionals making a huge impact on society and are capable of fulfilling the needs of the MENA region and the world.

Dr. Nisreen Alwan

Associate Dean of Academic Affairs



**Dr. Hamdi Sheibani**Acting Dean,
College of Health Sciences

### **Message from the Dean**

The College of Health Sciences was established in 2019 and aims to exemplify and build on the University's mission to be a leading and innovative academic and research institute in the UAE and the region.

The College consists of two departments:

- Department of Environmental and Public Health with two undergraduate programs - BSc in Public Health and BSc in Environmental Health and Safety
- Department of Biomedical Sciences with three undergraduate programs - BSc in Human Nutrition and Dietetics, BSc in Molecular and Medical Genetics, and BSc in Biomedical Sciences - Laboratory Medicine

Here in the College of Health Sciences, we prepare students to become health professionals capable of fulfilling the healthcare needs of Abu Dhabi, the UAE, GCC countries, and the world.

The College has had a very successful start due to the diligence of our faculty in providing competent and personalized teaching in public health, environmental health and safety, nutrition, and biomedical sciences. They work hard to deliver cutting-edge healthcare research opportunities and career-oriented experiences and proactively engage with and contribute to the communities in which we live and work. We provide state-of-the-art teaching laboratories and successful internships and practicum placements. Our support staff also offers exceptional support and encouragement to our students.

As we expand to meet the healthcare needs of the UAE and beyond, we will introduce additional programs. These include undergraduate programs in Basic Medical Sciences (pre-med) and Health Communication and Informatics, and a post-graduate program in Public Health (MPH).

I invite you to take advantage of the career-defining opportunities offered by the College of Health Sciences. We look forward to welcoming you to our community.



### Vision

To become the leading provider of healthcare professionals in the UAE and MENA region and serve as a hub for healthcare research leading to advances in the fields of biomedical sciences, clinical care, and health.

### Mission

To produce graduates who are equipped with both the theoretical and practical scientific and technical knowledge to analyze, evaluate, and communicate directly with patients, their families, and fellow healthcare professionals, excel in a career in the field of healthcare, understand societal health issues, and are prepared to lead in the field of medicine and health sciences, supporting the ambitions of the UAE to become a world-class healthcare provider and medical research hub.

### Why the College of Health Sciences?

- The College of Health Sciences was established to meet the increasing demand for qualified healthcare professionals in the UAE, consistent with the nation's drive to become a regional hub for healthcare education, service, and research.
- You will be taught by international faculty with established academic clinical experience and research profile.
- Programs were developed in partnership with Trinity College Dublin and American University of Beirut.
- All programs are aligned to national and international professional accreditation bodies, are recognized by Abu Dhabi's Department of Health, and are fully accredited by the Commission for Academic Accreditation of the UAE Ministry of Education.
- The BSc in Molecular and Medical Genetics, BSc in Environmental Health and Safety, and BSc in Human Nutrition and Dietetics are unique undergraduate academic programs in the UAE.
- An additional academic program, currently under CAA evaluation, to be added shortly includes Master of Public Health (MPH).
- Key clinical and industry partners include VPS/Burjeel Medical City, National Reference Laboratory/Cleveland Clinic Abu Dhabi, Mediclinic Abu Dhabi, Cure Advanced Diagnostics, SEHA/DoH, Ittihad Paper Mill, Atomena, Tractebel, and Bee'ah.

### **Student Diversity of College of Health Sciences**

The College has students from 64 nations across the globe. Over 26% of the undergraduate students are UAE Nationals. The student profile reflects the diversity of the UAE.

Our students come from various countries including Arab countries, Australia, Tanzania, Canada, India, Nigeria, and Pakistan.

### **Students' Activities**

The College of Health Sciences has won many competitions in the UAE, such as Think Science, International Conference on Advanced Materials, Green Youth Majilis of Sustainable Campus Initiative, Sharjah Innovation, Eco City World Summit and SILA Connect, Public Health Ambassador Program and Public Health Think Tank Competition.

### **Job Placements and Internships**

For the students to get their way to the prestigious companies, the following services are available:

- Career services to seek guidance from professional career advisors
- Career fairs that are attended by local and international companies
- On-campus student employment program

The Internship program increases students' employability which makes it an important part of students' graduation. By undertaking a supervised compulsory training course, students will have the opportunity to put into practice what they have learned in theory. Internship is a supervised, training course which carries credit. Each internship is planned and organized by the Career Development Department, in conjunction with the respective college, in such a way as to ensure the efficient execution of the program.

### **Accreditation**



ADU is internationally accredited by the Senior College and University Commission of the Western Association of Schools and Colleges (WSCUC).

WSCUC is the highest form of accreditation available in the USA, and accredits such prestigious institutions as Stanford University, California Institute of Technology, The University of California System, and the California State University system.

Agency for Public Health Education Accreditation (APHEA)

APHEA represents the five leading associations of public health in the European Region and is committed to assuring and improving the quality of educational activities throughout the European Region and the globe. Accreditation is aimed at supporting the continued amelioration of education and training for public health workforces throughout the world by providing an international and transparent quality recognition.



### For more information

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COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE		
General Education Requirements: 27 Credit Hours							
ARL 101 (A)	Communication Skills in Arabic I (A)	ENG 200	English II	ISL 100 (A)	Islamic Culture (A)		
MTG 100	Math for Life	FWS 205	UAE and GCC Society	STT 100	General Statistics		
FWS 100	Academic Skills for Success	FWS305	Technical Communication for Work Place	FWS 310	Fundamentals of Innovation and Entrepreneurship		
Degree Requirements: 41 Credit Hours							
CHE205	General Chemistry I	CHE 201L	General Chemistry Lab	BIO 205	General Biology I		
BIO 205L	General Biology Lab	BME 380	Human Biology I	BME 381	Human Biology II		
BMS 23110A	Protein Structure & Function	BMS 23110B	Protein Activity & Regulation	BMS 23110C	Enzymology		
PBH 405	Chronic and Infectious Diseases	PBH 101	Introduction to Public Health	BMS 302	Professional Practice Skills		
BMS 23010B	Gene Expression	BMS 23010C	Molecular Genetic & Molecular Processes	BMS 23140A	Metabolism & Immune Cell Function		
			Major Requirements: 51 Credit Hours				
BMS 34010B	Quantitative Analysis	BMS 34010C	Bioinformatics	BMS 34010A	Biotechniques		
BMS 3470A	Clinical Microbiology	BMS 3470B	Clinical Biochemistry I	BMS 400	Clinical Laboratory Management		
BMS 34110B	Metabolic Diseases I	BMS 44110B	Metabolic Diseases II	BMS 34210A	Immunology I		
BMS 44210A	Immunology II	BMS 4470A	Histopathology	BMS 4470B	Haematology I		
BMS 34130A	Cancer Biology I	BMS 301	Systematic and Cellular Pathology	BMS 44130A	Cancer Biology II		
BMS 401	Clinical Biochemistry II	BMS 402	Haematology II				
Major Research, Placements and Electives: 12 Credit Hours							
BMS 44910A	Biomedical Science Research Poster	BMS 44910B	Biomedical Science Oral Presentation	BMS 44910C	Biomedical Science Research Report		
BMS 3401	Biomedical Science Placement I	BMS 4401	Biomedical Science Placement II				



The cutting-edge BSc in Biomedical Sciences - Laboratory Medicine provides a multidisciplinary hub for innovation that integrates the fields of research, medicine, and biology. It expands scientific knowledge and delivers insight into the processes involved in human health and disease.

With research, education and exemplary service, our mission is to advance laboratory science and improve laboratory diagnostics by sharing our experience in the UAE and abroad. Students will be prepared to play a role in Laboratory Medicine field to sustain and appreciate a healthy working environment that provides opportunities for cooperation, success, and professional development on a regular basis.

You will gain practical experience to prepare you for a profession in this in-demand field. We offer excellent internship opportunities through affiliations with medical centers and other regional hospitals and diagnostic facilities. We incentivize and promote the continuous advancement of all students and assure hands-on training about new technologies and up-to-date knowledge in biomedical sciences.

# Graduates of the program will acquire the following knowledge and skills

They will perform analysis of complex chemical components of the human body fluids, assessment of cellular blood components, identification of microorganisms and their resistance to antibiotics, preparation of blood components for patient therapy, molecular and cellular detection of diseases, and evaluation of new methods, procedures and equipments used in the laboratory.

The accuracy of the findings ranging from procedures to the appropriate use of equipments is constantly checked by laboratory medicine experts and any issues that contribute to abnormalities are solved.

Graduates will learn and or improve their communication skills in order to work with other members of the healthcare team, to educate and handle individuals under their supervision creating and supporting a healthy working environment.



### Viyal Soni - Current Student

As a student enrolled in the BSc Biomedical Sciences program, a practical program with a large focus on hands-on experience, adjustments to my learning methods were necessary given the current state of the world. ADU has made an immense effort throughout 2021 to continue our education through distance learning with lecturers and staff optimistically guiding us through this period. At first, I struggled to manage my time. A line between academics and personal time is difficult to find in the comfort of one's home; however, dedication allowed me to develop and hone this skill. Likewise, various positives can be taken away from my experience with distance learning; the most notable being virtual labs. These simulations allowed my colleagues and I to experience scenarios and develop problem-solving skills at a scale that cannot be replicated in dry labs. Overall, throughout 2020 as well as the shift in learning medium, I have grown immeasurably as a student. I look confidently towards 2021 to explore my major in more depth, and hopefully gain hands-on experience with laboratory procedures at ADU.



### Career Prospects

The increase in the ageing population is expected to lead to an even greater need globally to diagnose medical conditions such as cancer or type 3 diabetes through laboratory procedures. In the USA alone, the overall employment of medical laboratory scientists and technicians is projected to grow by 13% from 2016 to 2026, faster than average for all other occupations. The work setting includes hospitals, research labs, educational institutions, and diagnostic facilities. Roles comprise of the following but are not limited to:

- Medical Laboratory Scientist
- Diagnostic Product Developer
- Healthcare Administrator
- Laboratory Technician
- Research Technologist
- Physician Assistant
- Research Scientist

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSETITLE			
General Education Requirements: 36 Credit Hours								
ARL 101 (A)	Communication Skills in Arabic I (A)	ENG 200	English II	FWS 305	Technical Communication for Work Place			
ISL100 (A)	Islamic Culture (A)	ITD 100	Introduction to Information and Digital Technology	MTT 101	Pre-Calculus			
FWS 310	Fundamentals of Innovation and Entrepreneurship	FWS 301	Developing Future Leaders	FWS 211	Fundamentals of Emotional Intelligence			
FWS 205	UAE and GCC Society	STT 100	General Statistics	FWS 100	Academic Skills for Success			
	College Requirements: 3 Credit Hours							
ASC 301	Research Report Writing							
Major Requirements: 73 Credit Hours								
BIO 205	General Biology I	BIO 205L	General Biology Laboratory I	CHE 205	General Chemistry I			
CHE 201L	General Chemistry Laboratory I	EHS 205	Introduction to Environmental Health & Safety	EHS 300	Housing & Sustainable Communities			
EHS 310	Food Safety & Management	EHS 399	Internship	EHS 400	Toxicology			
EHS 320	Waste Management	EHS 410	Impact Assessment	EHS 415	Environmental Health Regulation & Compliance			
EHS 420	Hazardous Materials	EHS 425	Pollution Monitoring & Control	EHS 425 L	Pollution Monitoring & Control Lab			
EHS 430	Health Risk Management	EHS 499	Undergraduate Research	ENS 205	Introduction to Environmental Science			
ENS 210	Natural Resources Conservation	ENS 220	Environmental Policy	HSC 200	Introduction to Health Management			
HSC 201	Determinants of Public Health	HSC 205	Biostatistics	HSC 210	Epidemiology & Population Health			
HSC 305	Occupational Health & Safety	HSC 315	Global Issues in Environmental Health					
Elective Courses: 18 Credit Hours								
OE1	Open Elective 1	OE2	Open Elective 2	OE3	Open Elective 3			
OE4	Open Elective 4	OE 5	Open Elective 5	OE 6	Open Elective 6			





The Bachelor of Science in Environmental Health and Safety (BSc in EHS) is a cutting-edge multidisciplinary program designed to meet the growing needs of industry and provide students with the skills to ensure occupational environmental protection, health, and safety in the workplace. The program covers major environmental issues including sustainability, renewable energy, water quality and management, pollution monitoring, hazardous materials operations and awareness, risk assessments, waste management, and occupational health and safety.

You will be provided with high-end knowledge in environmental health and safety and internship training that bridges academic knowledge with practical application in the workplace. You will learn how to identify and minimize the effects of different types of hazards that can affect the health and safety of employees. These include those related to ergonomics, thermal, chemical, electrical, mechanical, and radioactivity, as well as hazardous materials and waste. The program covers the fundamental scientific, legal, and technological principles underlying environmental health issues, looking at the circumstances giving rise to health inequalities, analyzing the environmental impact and health risks, and identifying appropriate interventions.

Abu Dhabi University's BSc in EHS is a distinctive program in the UAE. Our growing industry collaborations with organizations such as Environment Agency-Abu Dhabi (EAD), Occupational Safety and Health Center-Abu Dhabi (OSHAD), Camfil Clean Air Solutions, Abu Dhabi Food Control Authority (ADFCA), and Abu Dhabi Quality Conformity Council (QCC) enrich the research and learning opportunities.



### Student's Testimonial

#### **Mohamed Al Hosani**

"The Environmental Health and Safety program has enabled me to develop my skills and obtain better career opportunities. I graduated in Fall 14/15 and I am currently working as EHS Manager at Abu Dhabi Ports. During my undergraduate degree in the College of Health Sciences, I was able to acquire a high standard of knowledge and information. I also had the opportunity to participate in workshops and conferences where I met people from different industry sectors. All of this was possible due to the continuous support from the professional faculty, who focus on linking the theoretical part of the program with industry."



### **Career Prospects**

Graduates of the EHS program will be qualified to work in a diverse range of public and private organizations across all sectors. These include but are not limited to ADNOC group of companies, OSHAD, EAD, ADFCA, National Drilling Company, Abu Dhabi Ports, Baraka Nuclear Power Plant, Abu Dhabi Waste Management Center-Tadweer, Environmental Protection and Safety Section (EPSS)-Abu Dhabi Municipality, Etihad Airways, Federal Authority for Nuclear Regulation, Abu Dhabi National Chemical Companies (ChemaWEyatt), Abu Dhabi Water and Electricity Authority (ADWEA), and Ministry of Energy and Industry. Roles include:

- Environment, Health & Safety Officer/Manager
- Occupational Health & Safety Specialist/Auditor
- Sanitation Director
- Workplace Safety Assessor

- Food Safety Inspector
- Hazardous Waste Specialist
- Risk Assessment Consultant
- Impact Assessment Expert

### Graduates of the program will acquire the following knowledge and skills

- Identify information required to describe and manage the EHS issues at an institutional, regional, and global level.
- Assess the economic and social implications of environmental health and safety issues and their connection with both naturallyoccurring environmental conditions and conditions created through human actions.
- Assess the effects of environmental policy on environment, health, and safety.
- Formulate recommendations for EHS standards for a sustainable society.
- Develop action plans for implementation of local and global EHS policies and regulations.
- Write, speak, and use electronic communication tools to communicate with the public and professionals concerning EHS issues.
- Apply critical thinking methods when making decisions and value judgements on EHS issues.
- Exhibit teamwork and leadership skills when working with groups on EHS issues.

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSETITLE			
General Education Requirements: 27 Credit Hours								
ARL 101 (A)	Communication Skills in Arabic I (A)	ENG 200	English II	ISL 100 (A)	Islamic Culture (A)			
STT 100	General Statistics	FWS 100	Academic Skills for Success	FWS 205	UAE and GCC Society			
FWS 211	Fundamentals of Emotional Intelligence	FWS 305	Technical Communication for Work Place	FWS 310	Fundamentals of Innovation and Entrepreneurship			
Degree Requirements: 29 Credit Hours								
BIO 205	General Biology	BIO 205L	General Biology Lab	HMG 380	Human Anatomy and Physiology I			
HMG 381	Human Anatomy and Physiology II	CHE 205	General Chemistry	CHE 201L	General Chemistry Lab			
CHE 207	Organic Chemistry	BMS 247	Basic Biochemistry	HSC 205	Biostatistics			
PBH 320	Community and Public Health Nutrition	HMG 2201	Introduction to Counselling Theory and Skills					
	Major Requirements: 43 Credit Hours							
HND 221	Principles of Human Nutrition	HND 222	Assessment of Nutritional Status	HND 220A	Work Shadowing A			
HND 220B	Work Shadowing B	HND 223	Menu Planning and Evaluation	HND 224	Nutritional Metabolism			
HND 227	Nutrition through the Life Cycle	HND 225	Management of Foodservices	HND 226	Food Chemistry			
HND 226L	Food Chemistry and Analysis Lab	HND 331	Food Microbiology and Sanitation	HND 333	Food Processing			
HND 333L	Food Processing Lab	HND 332	Medical Nutrition Therapy I	HND 332L	Medical Nutrition Therapy Lab			
HND 334	Medical Nutrition Therapy II	HND 334L	Medical Nutrition Therapy Lab II	HND 335	Quantity Foods			
HND 336	Sports Nutrition							
Research Study/Seminars and Professional Practice: 31 Credit Hours								
HND 337	Seminar: Current Research in Nutrition	HND 338	Human Nutrition Research Tutorial	HND 420	Seminar in Foodservice Systems			
HND 421	Seminar in Clinical Dietetics	HND 340 I	Dietetic Practicum I	HND 340 II	Dietetic Practicum II			
HND 440 III	Dietetic Practicum III	HND 440 IV	Dietetic Practicum IV					





Human Nutrition and Dietetics is the application of the science of food and nutrition to the prevention and treatment of disease and promotion of health. ADU's Bachelor of Science in Human Nutrition and Dietetics degree is accredited by the UAE Commission for Academic Accreditation (CAA) and combines the academic and supervised practice experience to qualify graduates to become licensed dietitians in the UAE. The program equips students with the knowledge and skills needed for entry-level practice as dietitians, both at a national and international level. The four year program has an integrated supervised practice (Practicum) component of at least 1200 hours with affiliated organizations in the UAE, including VPS Healthcare, Cleveland Clinic Abu Dhabi (CCAD), and Mediclinic Al Noor Hospital, as well as regional medical centers.

# Graduates of the program will acquire the following knowledge and skills

- Educate and advise patients/clients on how food and healthy eating behaviors can prevent illness and achieve and maintain optimal health
- Assess patient/client dietary and health needs
- Develop meal plans for nutrition-related conditions
- Monitor and evaluate the results of the diet therapy for improvement of medical conditions
- Educate and work with other healthcare professionals on food and nutrition issues
- Deliver group nutrition sessions to a variety of populations for health promotion campaigns
- Conduct research and professional development
- Participate in media, social media, and public relations to promote and advance the profession



#### Huda Khaled Aanee - Current Student

As a Nutrition and Dietetics student at Abu Dhabi University, I am learning about health promotion and nutrition intervention in chronic and cardiovascular diseases. I have learned how to be kinder to my body and how to help others find peace in theirs through healthy, conscious eating and exercise. I chose this major because I want to help fight malnutrition in all of its forms. The courses exposed me to a variety of skills and expanded my knowledge in food science and processing, case analysis, and research, Nutrition Care Process, counseling, and menu planning, all of which helped me to hone my craft. Throughout my studies, I also developed a strong relationship with my professors and colleagues through frequent class discussions and interactions and am grateful for their guidance and mentorship. As part of the inaugural Nutrition and Dietetics cohort at ADU, I look forward to seeing the program grow and develop after my graduation.



### **Career Prospects**

There is a global demand for dietitians and nutritionists to provide care for patients with various medical conditions and advise people on health. Employment opportunities for dietitians and nutritionists are expected to grow 15% from 2016 to 2026, which is a faster growth rate than the average for all other occupations. A degree in Human Nutrition and Dietetics can lead to a career working in a variety of roles within the fields of food, nutrition, and health. The work settings where dietetics can work include hospitals and other healthcare facilities, foodservice companies, community and public health settings, sports nutrition facilities, educational institutions, and research labs. The roles they may have include the following:

- Clinical Dietitian
- Specialized Dietitian: Renal, Diabetic, Pediatric, Oncology
- Sports Dietitian
- Medical Product Representative
- Food Safety Dietitian
- Quality Control Specialist
- Private Practice/Consulting
- Culinary Dietitian
- Health Educator
- Community/Public Health Nutritionist
- Nutrition Educator
- Research Coordinator

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE		
General Education Requirements: 27 Credit Hours							
ARL 101 (A)	Communication Skills in Arabic I (A)	ENG 200	English II	ISL 100 (A)	Islamic Culture (A)		
MTG 100	Math for Life	FWS 205	UAE and GCC Society	STT 100	General Statistics		
FWS 100	Academic Skills for Success	FWS305	Technical Communication for Work Place	FWS 310	Fundamentals of Innovation and Entrepreneurship		
Degree Requirements: 44 Credit Hours							
CHE205	General Chemistry I	CHE 201L	General Chemistry Lab	BIO 205	General Biology I		
BIO 205L	General Biology Lab	HMG 380	Human Anatomy and Physiology I	HMG 381	Human Anatomy and Physiology II		
BMS 23110A	Protein Structure & Function	BMS 23110B	Protein Activity & Regulation	BMS 23110C	Enzymology		
HSC 210	Introduction to Epidemiology	BMS 302	Professional Practice Skills	PBH 101	Introduction to Public Health		
BMS 23010A	Genome Biology	BMS 23010B	Gene Expression	BMS 23010C	Molecular Genetic and Molecular Processes		
BMS 23140A	Metabolism and Immune Cell Function						
			Major Requirements: 48 Credit Hours				
BMS 34010B	Quantitative Analysis	BMS 34010C	Bioinformatics	BMS 34010A	Biotechniques		
HMG 399	Epidemiology and Public Health Genetics	BMS 3470B	Clinical Biochemistry I	BMS 34110B	Metabolic Diseases I		
HMG 35110B	Principles of Medical Genetics	BMS 34210A	Immunology I	HMG 442	Inherited Immunodeficiencies		
BMS 34110A	Neurobiology I	HMG 44110A	Inherited Neurological Disorders	BMS 34130A	Cancer Biology I		
HMG 44130A	Inherited Cancer Genetics	HMG 2201	Introduction to Counselling Theory and Skills	HMG 2301	Medical Genetic Counselling		
Major Research, Placements and Electives: 12 Credit Hours							
HMG 44910A	Human Genetics Research Poster	HMG 44910B	Human Genetics Oral Presentation	BMS 44910C	Human Genetics Research Report		
BMS 3401	Biomedical Science Placement I	BMS 4401	Biomedical Science Placement II				





Molecular and Medical Genetics is the field of biology that studies the genetic basis of disease, with the intention of developing improved diagnostics to prevent or treat genetic disorders. ADU's Bachelor of Science in Molecular and Medical Genetics is a degree, accredited by the UAE Commission for Academic Accreditation (CAA), that combines academic and supervised practice experience to prepare graduates for their future roles as clinical geneticists or research technologists. The program will equip you with the knowledge and technical skills in molecular biology and human genetics needed to succeed in the medical genetics field. The four-year program includes intensive laboratory practical training within the university and two integrated supervised placements with affiliated organizations in the UAE, including VPS Healthcare, Cleveland Clinic Abu Dhabi (CCAD), and regional medical centers.

# Graduates of the program will acquire the following knowledge and skills

You will be able to address issues relating to the application of experimental analysis to solving problems in genetics, follow a career involving genomics and clinical genetics, as well as be prepared for advanced study with an MSc in Molecular and Precision Medicine, which will be offered soon at Abu Dhabi University.

### Student's Testimonial

#### Fathima Hasnain Nadeem Hussain - Current Student

It is an honor being a student in the Molecular and Medical Genetics program under the College of Health Sciences, Abu Dhabi University. The entire faculty including the Dean of the College are accessible, supportive, well equipped, patient, and understanding in resolving the key issues and requirements. The serene environment of the University helps me to focus and achieve challenging goals. It has been a right platform to transform myself through gaining knowledge under the expertise of renowned faculty. The courses enable me to widen my horizons in various aspects of genetics. I am looking forward in understanding the human genome better in the following years. This fascinates me as an opener to visualize how a small change in the human genome can make us live longer or age slowly. I would highly recommend this program to the future generations who are passionate in learning more about genetics. The day is not far where a thorough understanding of the human genome will enable us in treating many incurable diseases.



### **Career Prospects**

The BSc in Molecular and Medical Genetics offers you the opportunity to receive training in a discipline growing in demand in today's society. You will acquire the theoretical and practical skills needed to work in both the public and private sectors and develop yourself professionally in both applied and clinical research in genomics, biomedicine, biotechnology, or pharmaceuticals. You will be equipped to work in universities, hospitals, government departments, research institutes, biotechnology, and the pharmaceutical industry. Roles include:

- Molecular Genetics Technologist
- Molecular Laboratory Technologist
- Clinical Laboratory Technician
- Scientific Laboratory Technician
- Cytogeneticist
- Biotechnologist
- Embrvoloaist
- Immunogeneticist
- Medical Sales Representative
- Physician Assistant
- Health Ministry Officer

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE				
University Requirements: 36 Credit Hours									
ARL 101 (A)	Communication Skills in Arabic I (A)	FWS 301	Developing Future Leaders	ENG 200	English II				
FWS 305	Technical Communication for Work Place	ISL 100 (A)	Islamic Culture (A)	MTG100	Math for life				
ITD 100	Introduction to Information and Digital Technology	FWS 310	Fundamentals of Innovation and Entrepreneurship	FWS 100	Academic Skills for Success				
FWS 211	Fundamentals of Emotional Intelligence	FWS 205	UAE and GCC Society	STT 100	General Statistics				
College Requirements: 3 Credit Hours									
ASC 301	Research Report Writing								
	Major Requirements: 66 Credit Hours								
BIO 205	General Biology I	BIO 205L	General Biology Laboratory I	CHE 205	General Chemistry I				
CHE 201L	General Chemistry Laboratory I	EHS 205	Introduction to Environmental Health & Safety	ENS 205	Introduction to Environmental Science				
HSC 200	Introduction to Health Management	HSC 201	Determinants of Public Health	HSC 205	Biostatistics				
HSC 210	Epidemiology & Population Health	HSC 305	Occupational Health & Safety	HSC 315	Global Issues in Environmental Health				
PBH 101	Introduction to Public Health	PBH110	Intro to Happiness & Positive Psychology	PBH 300	Health Sociology				
PBH 310	Principles of Health Promotion	PBH 320	Community and Public Health Nutrition	PBH 399	Public Health Research Seminar				
PBH 400	Internship	PBH 405	Chronic and Infectious Diseases	PBH 410	Research Methods for Public Health				
PBH 420	Practice of Health Promotion	PBH 425	Maternal and Child Health	PBH 499	Undergraduate Research				
Open Elective Courses: 15 Credit Hours									
OE 1	Open Elective 1	OE 2	Open Elective 2	OE 3	Open Elective 3				
OE 4	Open Elective 4	OE 5	Open Elective 5						





The UAE has vast public health challenges. This degree will provide teaching and learning situations that will build up student's knowledge of human public health issues and practices that are relevant to the UAE. The program will provide a career-focused training that fits the needs of the UAE and community development. Public health focuses on large-scale health issues, determinants, and solutions. Graduates will deal with complex health issues, such as controlling communicable diseases and improving healthcare policies. Students can specialize in a range of fields including health policy management, environmental health and health promotion. The BSc in Public Health is designed for students who thrive on making a positive impact on the lives of others. This program is ideal for students with an interest in the connection between the local community and general health issues.

The BSc in Public Health is one of the few programs in the UAE and the region, that offers public health education at the undergraduate level. The program is accredited by the Agency for Public Health Education Accreditation (APHEA), a prestigious European accreditation agency.

# Graduates of the program will acquire the following knowledge and skills

- Define the core areas of public health (Epidemiology, Environmental Health, Biostatistics, Health Service Administration/Health Policy Management, and Social & Behavioral Sciences)
- Analyze health-related issues that are common in the community of the UAE and global public health
- Define public health problems and public health assets across the ecological model and understand ethical practice and research
- Define and explain the public health functions of promotion, protection, and assurance and their role in protecting the health of the public
- Explain recommended solutions for defined problems using knowledge of the broad and interconnecting causes of the UAE's health problems
- Effectively communicate (orally and in writing) health-related issues and activities to professional and lay audience and explain the cultural sensitivity in public health practices
- Compare strategies for implementing and evaluating health programs, therefore, improving the health status in communities in the UAE.
- Compare private and public health sectors that support public health within the UAE.
- Demonstrate leadership skills while supporting public health problem-solving.

### Student's Testimonial

#### **Asma Parvez**

"I was attracted to enroll in the Public Health program at Abu Dhabi University since it is one of its kind to be offered as a Bachelor of Science in the UAE. Throughout the course of my degree, I have gained an immense amount of knowledge, both theoretical and practical from professors who are experts in their field. The curriculum of Public Health is very exciting; I have learned so much about the different aspects of public health and I'm confident that it will help me further enrich my career goals and aspirations."



### **Career Prospects**

Graduates of the Public Health program will be qualified to work in a diverse range of public and private organizations across the health sector including but not limited to governmental health authorities, hospitals, insurance companies, and public health research centers.

- Health Services Administration
- Biostatistics/Epidemiology
- Health Education/Behavioral Science
- Environmental Health
- Nutrition
- Public Health Practice/Program Management