

**Study plan for students joining the Biomedical Science program in Fall**

(Revised Jan 2020)

**Fall 1st Semester**

Code	Course	T	P	Cr	Prereq.
	English 202 (Core requirement)	3	0	3	
MEDI 102	Health Professions Education	2	0	3	
CHEM 101	General Chemistry I	3	0	3	
CHEM 103	Exp. General Chemistry I	0	3	1	CHEM 101
PUBH 151	Biostatistics for Health Sciences	3	0	3	
MEDI 101	Human Structures and Function I	2	3	3	
	Total			16	

**Fall 3rd Semester**

Code	Course	T	P	Cr	Prereq.
	Core courses			9	
BIOM 217	Human Genetics	2	3	3	MEDI 101 & 103
CMPS 101	Introduction to Computer	3	2	3	
BIOL 241	Microbiology	2	3	3	BIOL101 Override
	Total			18	

**Fall 5th Semester**

Code	Course	T	P	Cr	Prereq.
BIOM 324	Medical Virology	1	2	2	BIOM 243
BIOM 346	Clinical Chemistry	3	3	4	CHEM 351
BIOM 426	Clinical Immunology	2	3	3	BIOM 243
BIOM 402	Special Topics	2	0	2	
BIOM 463	Endocrinology	3	0	3	MEDI101&103
	Core courses	0	0	3	
	Total			16	

**Fall 7th Semester**

Code	Course	T	P	Cr	Prereq.
BIOM 301	Laboratory management	3	0	3	
BIOM 444	Histopathology	1	3	2	BIOM 212
BIOM 422	Diagnostic Microbiology	1	3	2	BIOM 322
BIOM 452	Immunochem. & Blood Bank	2	3	3	BIOM 451
BIOM 497	Research Project	3	0	3	Dept. App.
BIOM 411	Major Elective ( Forensic Science)	2	0	2	
	Total			15	

**Spring 2nd Semester**

Code	Course	T	P	Cr	Prereq.
	English 203 (Core requirement)	3	0	3	
MEDI 103	Human Structures and Function II	2	3	3	MEDI 101
BIOM 212	Human Histology	2	3	3	
CHEM 209	Fundamentals of Organic Chemistry	2	3	3	CHEM 101&103
	Core courses			6	
	Total			18	

**Spring 4th Semester**

Code	Course	T	P	Cr	Prereq.
	Core courses			9	
BIOM 320	Medical Molecular Biology	2	3	3	BIOM 217
CHEM 351	Basic Biochemistry	3	0	3	CHEM 209
CHEM 352	Experimental Biochemistry	0	3	1	CHEM 351
BIOM 243	Introduction to Pathology	2	0	2	
	Total			18	

**Spring 6th Semester**

Code	Course	T	P	Cr	Prereq.
BIOM 418	Pharmacology & Toxicology	2	0	2	MEDI101&103
BIOM 446	Urine Analysis & Body Fluids	1	3	2	MEDI101&103
BIOM 322	Medical Microbiology	3	3	4	BIOL 241
BIOM 451	Hematology & Hemostasis	2	6	4	BIOM 243
BIOM 323	Medical Parasitology	2	3	3	BIOL 241
	Total			16	

**Spring 8th Semester**

Code	Course	T	P	Cr	Prereq.
BIOM 491	CP in Chemistry	0	9	3	BIOM 346
BIOM 492	CP in Hematology	0	9	3	BIOM 451
BIOM 493	CP in Immunology	0	9	3	BIOM 426
BIOM 494	CP in Microbiology	0	9	3	BIOM 422
BIOM 495	CP in Immunohematology	0	9	3	BIOM 452
BIOM 496	Professional Development	3	0	3	Dept. App.
	Total			18	

**Study plan for students joining the Biomedical Science program in Spring**

(Revised Jan 2020)

**Spring 1st Semester**

Code	Course	T	P	Cr	Prereq.
	English 202 (Core requirement)	3	0	3	
MEDI 102	Health Professions Education	2	0	3	
CHEM 101	General Chemistry I	3	0	3	
CHEM 103	Exp. General Chemistry I	0	3	1	CHEM 101
PUBH 151	Biostatistics for Health Sciences	3	0	3	
MEDI 101	Human Structures and Function I	2	3	3	
	Total			16	

**Fall 2nd Semester**

Code	Course	T	P	Cr	Prereq.
	English 203 (Core requirement)	3	0	3	
MEDI 103	Human Structures and Function II	2	3	3	MEDI 101
BIOM 212	Human Histology	2	3	3	
CHEM 209	Fundamentals of Organic Chemistry	2	3	3	CHEM 101 & 103
	Core courses			6	
	Total			18	

**Spring 3rd Semester**

Code	Course	T	P	Cr	Prereq.
	Core courses			9	
BIOM 217	Human Genetics	2	3	3	MEDI 101 & 103
CHEM 351	Basic Biochemistry	3	0	3	CHEM 211
CHEM 352	Experimental Biochemistry	0	3	1	CHEM 351
BIOM 243	Introduction to Pathology	2	0	2	
	Total			18	

**Fall 4th Semester**

Code	Course	T	P	Cr	Prereq.
	Core courses			9	
BIOL 241	Microbiology	2	3	3	BIOL101 override
CMPS 101	Introduction to Computer	3	2	3	
BIOM402	Special Topics	2	0	2	
	Total			17	

**Spring 5th Semester**

Code	Course	T	P	Cr	Prereq.
BIOM 320	Medical Molecular Biology	2	3	3	BIOM 217
BIOM 322	Medical Microbiology	3	3	4	BIOL 241
BIOM 451	Hematology & Hemostasis	2	6	4	BIOM 243
BIOM 323	Medical Parasitology	2	3	3	BIOL 241
	Core Courses			3	
	Total			17	

**Fall 6th Semester**

Code	Course	T	P	Cr	Prereq.
BIOM 324	Medical Virology	1	2	2	BIOM 243
BIOM 346	Clinical Chemistry	3	3	4	CHEM 351
BIOM 426	Clinical Immunology	2	3	3	BIOM 243
BIOM 422	Diagnostic Microbiology	1	3	2	
BIOM 463	Endocrinology	3	0	3	MEDI101&103
BIOM 452	Immunochem. & Blood Bank	2	3	3	BIOM 451
	Total			17	

**Spring 7th Semester**

Code	Course	T	P	Cr	Prereq.
BIOM 301	Laboratory management	3	0	3	
BIOM 444	Histopathology	1	3	2	BIOM 212
BIOM 497	Research Project	3	0	3	Dept. App.
BIOM 418	Pharmacology & Toxicology	2	0	2	MEDI101&103
BIOM 446	Urine Analysis & Body Fluids	1	3	2	MEDI 101&103
BIOM 213	Major Elective (Human Embryology)	2	0	3	
	Total			15	

**Fall 8th Semester**

Code	Course	T	P	Cr	Prereq.
BIOM 491	CP in Chemistry	0	9	3	BIOM 346
BIOM 492	CP in Hematology	0	9	3	BIOM 451
BIOM 493	CP in Immunology	0	9	3	BIOM 426
BIOM 494	CP in Microbiology	0	9	3	BIOM 422
BIOM 495	CP in Immunohematology	0	9	3	BIOM 452
BIOM 496	Professional Development	3	0	3	Dept App.
	Total			18	

## DEGREE REQUIREMENTS

A minimum of 135 credit hours are required to complete the major in Biomedical Sciences, including the following:

- A minimum of 33 credit hours in Core Curriculum requirements
- A minimum of 61 credit hours in Major Requirements
- A minimum of 24 credit hours in Major Supporting Requirements
- A minimum of 13 credit hours in College requirement
- A minimum of 4 credit hours in Major Electives

### Core Curriculum Program (33 CH)

#### Common package (15 CH)

- ARAB 100 Arabic Language I
- ARAB 200 Arabic Language II
- ENGL 202 English Language I Post Foundation
- ENGL 203 English Language II Post Foundation
- DAWA 111 Islamic Culture

#### Social/Behavioral Sciences package (3 CH)

Courses in CCP defined Social/Behavioral Sciences package

#### Qatar History package (3 CH)

Students must complete a minimum of 3 Credit Hours from courses listed in the Qatar and Gulf History Sub-package.

#### Natural Science/Mathematics package (3 CH)

Courses in CCP defined Natural Science Package

#### General Knowledge package (3 CH)

Courses in CCP defined General Knowledge package

#### General Skills package (3 CH)

Courses in CCP defined General Skills package

#### Supplemental College Requirement package (3 CH)

First Year Seminar UNI 100

### Major Requirements (61 CH)

Students must complete a minimum of 61 credit hours in Major required courses:

- BIOM 320 Medical Molecular Biology
- BIOM 301 Lab Management and QC
- BIOM 322 Medical Microbiology
- BIOM 323 Medical Parasitology
- BIOM 324 Medical Virology
- BIOM 346 Clinical Chemistry
- BIOM 418 Pharmacology and Toxicology
- BIOM 422 Diagnostic Microbiology
- BIOM 426 Clinical Immunology
- BIOM 444 Histopathology
- BIOM 446 Urine Analysis and Body Fluids
- BIOM 451 Hematology and Hemostasis
- BIOM 452 Immunohematology & Blood Bank
- BIOM 463 Endocrinology
- BIOM 491 Clinical Practice in Chemistry
- BIOM 492 Clinical Practice in Hematology
- BIOM 493 Clinical Practice in Immunology
- BIOM 494 Clinical Practice in Microbiology
- BIOM 495 Clinical Practice in Immunohematology
- BIOM 496 Professional Development
- BIOM 497 Research Project

#### Major Supporting Requirements (24 CH)

Students must complete a minimum of 24 credit hours in Major Supporting courses:

- MEDI 103 Human Structure & Function II
- BIOL 241 Microbiology
- BIOM 212 Human Histology
- BIOM 217 Human Genetics
- BIOM 243 Introduction to Pathology
- CHEM 209 Fundamentals of Organic Chemistry
- CHEM 351 Basic Biochemistry
- CHEM 352 Experimental Biochemistry
- CMPS 101 Introduction to Computer Science

**Major College Requirements (13 CH)**

Students must complete a minimum of 13 credit hours in Major college requirement:

- MEDI 101 Human Structure & Function I
- MEDI 102 Medical Education
- CHEM 101 General Chemistry I
- CHEM 103 Exp. General Chemistry
- PUBH 151 Biostatics for Health

**Major Electives (4 CH)**

Students must complete a minimum of 4 credit hours in Major Elective courses:

- BIOM 213 Embryology
- BIOM 400 Seminar
- BIOM 401 Special Topics
- BIOM 402 Special Topics
- BIOM 411 Forensic Science
- CHEM 231 Analytical Chemistry I
- CHEM 234 Experimental Analytical Chemistry
- PHYS 110 General Physics For Biology
- PHYS 111 Practical Physics For Biology
- PUBH 200 International and Global Health