

Appendix III

Bachelor of Science Degree Program in Radiologic Sciences

Undergraduate Courses (Four Years – 120 Credits)

Core Liberal Art Courses - 42 Credits

Course Code	Course Name	Credit Number
UNI 101	First-Year University Experience	3
ENL 101	Expository Writing	3
BIO 101	Introductory Biology	3
PHI 101	Introduction to Ethics	3
CSC 101	Introduction to Computer Science	3
MAT 102	Pre-calculus	3
PHY 100	Conceptual Physics	3
HIS 201	Iraqi Studies	3
HIS 101	Civilizations and History I	3
ENL 210	Academic Writing	3
ENL 201	Introduction to Public Speaking	3
MIS 101	Introduction to Management Information Systems	3
SOC 101	Introduction to Sociology	3
PSY 101	Introduction to Psychology	3

College Requirements – 24 Credits

HCT 101	Fundamentals of Healthcare Professions	3
PHY 241	Medical Physics and Dosimetry	3
BIO 217	Human Anatomy and Physiology	3

BIO 217L	Human Anatomy and Physiology Laboratory	1
BIO 218	Pathophysiology	3
BIO 210	Biostatistics and Epidemiology	3
HCT 209	First aid and Basic Life Support	1
HCT 4XX	Technical Elective	3
HCT 331	Critical Appraisal Course	1
HCT 4XX	Technical Elective	3

Core Requirements – 54 Credits

RAD 101	Introduction to Radiologic Sciences	3
HCT 207	Introduction to Radiation Protection	1
RAD 201	Medical Imaging Systems I	3
RAD 210	Contrast Agents and Radiopharmaceuticals	3
RAD 301	Medical Imaging Systems II	3
RAD 305	Imaging Procedures I	3
RAD 305L	Imaging Procedures I Lab	1
RAD 310	Radiographic Anatomy and Pathology I	3
RAD 315	Legal and Ethical Issues in Radiologic Sciences	1
RAD 355	Imaging Procedures II	3
RAD 355L	Imaging Procedures II Lab	1
RAD 362	Clinical Best Practice	1
RAD 365	Introduction to Radiation Therapy	3
RAD 370	Computer Applications in Medical Imaging	3
RAD 370L	Computer Applications in Medical Imaging Lab	1

RAD 405	Imaging Procedures III	3
RAD 405L	Imaging Procedures III Lab	1
RAD 410	Special Topics in Radiological Sciences	1
RAD 420	Radiology Quality Assurance Laboratory	1
RAD 450	Practicum II: Internship in Clinical Imaging	3
RAD 390	Practicum I: Internship in Clinical Imaging	2
RAD 450	Radiographic Anatomy and Pathology II	3
RAD 480	Radiology information systems	1
RAD 490	Practicum III: Internship in Clinical Imaging	3
RAD 460	Nuclear Medicine Imaging	3

Recommended sequence of courses:

YEAR I – Freshman Courses (30 Credit Hours)

Spring Pre-1 Semester:

First-Year University Experience (3 Credits)

Expository Writing (3 Credits)

Introductory Biology (3 Credits)

Introduction to Ethics (3 Credits)

Fundamentals of Healthcare Professions (3 Credits)

Total: 15 Credits

Fall Pre-1 Semester:

Introduction to Computer Science (3 Credits)

Pre-calculus (3 Credits)

Conceptual Physics (3 Credits)

Introduction to Sociology (3 Credits)

Introduction to Radiologic Sciences (3 Credits)

Total: 15 Credits

YEAR II – Sophomore Courses (29 Credit Hours)

Spring– Pre2 Semester:

Civilizations and History I (3 Credits)

Academic Writing (3 Credits)

Introduction to Radiation Protection (1 Credit)

Medical Physics and Dosimetry (3 Credits)

Human Anatomy and Physiology (3 Credits)

Human Anatomy and Physiology Laboratory (1 Credit)

Total: 14 Credits

Fall Pre-2 Semester:

Introduction to Public Speaking (3 Credits)
Pathophysiology (3 Credits)
Biostatistics and Epidemiology (3 Credits)
Medical Imaging Systems I (3 Credits)
Contrast Agents and Radiopharmaceuticals (3 Credits)

Total: 15 Credits

YEAR III – Junior Courses (30 Credit Hours)**Spring P1- Semester:**

Introduction to Sociology, (3 Credits) Medical Imaging Systems II (3 Credits)
Imaging Procedures I (3 Credits)
Imaging Procedures I Lab (1 Credit)
Radiographic Anatomy and Pathology I (3 Credits)
Legal and Ethical Issues in Radiologic Sciences (1 Credit)
First aid and Basic Life Support (1 Credit)

Total: 15 Credits

Fall P1- Semester:

Introduction to Management Information Systems (3 Credits)
Imaging Procedures II (3 Credits)
Imaging Procedures II Lab (1 Credit)
Clinical Best Practice (1 Credit)
Introduction to Radiation Therapy (3 Credits)
Computer Applications in Medical Imaging (3 Credits)
Computer Applications in Medical Imaging Lab (1 Credit)

Total: 15 Credits

Summer Semester Year III:

Practicum I: Internship in Clinical Imaging (3 Credits)

Total: 3 Credits

YEAR IV – Senior Courses (30 Credit Hours)**Spring P2- Semester:**

Technical Elective (3 Credits)
Imaging Procedures III (3 Credits)
Imaging Procedures III Lab (1 Credit)
Special Topics in Radiological Sciences (1 Credit)
Radiology Quality Assurance Laboratory (1 Credit)
Practicum II: Internship in Clinical Imaging (3 Credits)
Critical Appraisal (1 Credit)

Total: 13 Credits

Fall P2- Semester:

Introduction to Psychology (3 Credits)
Technical Elective (3 Credits)
Radiographic Anatomy and Pathology II (3 Credits)

Radiology Information Systems (1 Credit)
Practicum III: Internship in Clinical Imaging (3 Credits)
Nuclear Medicine Imaging (3 Credits)

Total: 16 Credits

Technical Electives:

Leadership in Healthcare (3 Credits)
Health Informatics (3 Credits)
Marketing in the Healthcare sector (3 Credits)
Introduction to Clinical Research (3 Credits)