Appendix VII Program description for Anesthesia Technology

Anesthesia Technology

An anesthesia technologist is**a healthcare worker who supports the administration of anesthesia and the monitoring of patients who are under anesthesia.** These technologists require a broad knowledge of the use and maintenance of anesthesia instruments, as well as the technology and techniques of the field of anesthesiology. They typically work under the supervision of a professional anesthesiologist or anesthetist.

The anesthesia technology program at AUIB requires 123 semester credits (hours) in a range of courses that start with a liberal arts offering but rapidly move into the science and technology required for a professional education. The required courses are listed below along a suggested course sequence.

Bachelor of Science Degree in Anesthesia Technology

Four academic years – 123 credit hours

|  |
| --- |
| Core Liberal Art Courses - 42 Credits  |
| Course Code | Course Name | Credit Number |
| BIO 101 | Introductory Biology | 3 |
| CHE 105 |  Chemistry for Healthcare Professions | 3 |
| CSC 101 | Introduction to Computer Science | 3 |
| ENL 101 | Expository Writing | 3 |
| ENL 201 | Academic Writing | 3 |
| ENL 210 | Introduction to Public Speaking | 3 |
| HIS 101 | Civilizations and History I | 3 |
| HIS 102 |  Civilizations and History II | 3 |
| HUM 101 | Introduction to Humanities | 3 |
| MAT 101 | College Algebra | 3 |
| PHI 101  | Introduction to Ethics | 3 |
| PSY 101 | Introduction to Psychology | 3 |
| SOC 101 | Introduction to Sociology | 3 |
| UNI 101 | First-Year University experience | 3 |
|  |  |  |
| **College Requirements – 22 Credits** |
| **Course Code** | **Course Name** | **Credit Number** |
| BIO 217 | Human Anatomy and Physiology | 3 |
| BIO 217L | Human Anatomy and Physiology Lab | 1 |
| BIO 218 | Pathophysiology | 3 |
| BIO 2XX | Biostatistics and Epidemiology | 3 |
| HCT 101 | Fundamentals of Healthcare Professions | 3 |
| HCT 4XX | Technical Elective | 3 |
| HCT 4XX | Technical Elective | 3 |
|  |  |  |
| **Core Requirements – 59 Credits** |
| **Course Code** | **Course Name** | **Credit Number** |
| ANT 101 | Introduction to Anesthesia Technology | 3 |
| CHE 215 | Biochemistry for Health Care Professions | 3 |
| ANT 240 | Anesthesia Technology Instrumentation | 3 |
| ANT 240L | Anesthesia Technology Instrumentation Lab | 1 |
| ANT 245 | Pharmacology in Anesthesia Practice | 3 |
| ANT 295 | Practicum I | 3 |
| ANT 320 | Anesthesia Clinical Applications I | 3 |
| ANT 320L | Anesthesia Clinical Applications I Lab | 1 |
| ANT 340 | Anesthesia Agents and Methods | 3 |
| ANT 340L | Anesthesia Agents and Methods Lab | 1 |
| ANT 330 | Patient Monitoring Technology | 3 |
| ANT 343L | Operating Room Simulation Lab | 1 |
| ANT 350 | Anesthesia Clinical Applications II | 3 |
| ANT 360 | Perioperative Patient Care | 3 |
| ANT 370 | Workroom Management | 1 |
| ANT 390 | Postanesthetic and Pain Management | 3 |
| ANT 399 | Practicum II | 3 |
| ANT 410 | Special Topics in Anesthesia Technology | 1 |
| ANT 420 | Anesthesia Clinical Applications III | 3 |
| ANT 430 | Anesthesia Quality Assurance Lab | 1 |
| ANT 450 | Anesthesia Clinical Applications III | 3 |
| ANT 455 | Anesthetic Procedural Blocks | 3 |
| ANT 460 | Anesthetic Emergencies | 3 |
| ANT 460L | Anesthetic Emergencies Lab | 1 |
| ANT 490 | Practicum III | 3 |
| ANT 495 | Practicum IV | 3 |
| ANT 496 | Practicum V | 3 |

**YEAR I – 31 Credits**

**Spring Semester**

UNI 101 First-Year University experience\* 3cr

ENL 101 Expository Writing 3cr

BIO 101 Introductory Biology 3cr

CHE 105 Chemistry for Healthcare Professions 3cr

HCT 101 Fundamentals of Healthcare Professions 3cr

 **Total 15cr**

*\* Student may choose to take another Core Liberal Art (CLA) course if this course schedule conflicts with a College Requirement course or Core course.*

**Fall Semester**

CSC 101 Introduction to Computer Science 3cr

MAT 101 College Algebra 3cr

PHI 101 Introduction to Ethics 3cr

BIO 217 Human Anatomy and Physiology 3cr

BIO 217L Human Anatomy and Physiology Lab 1cr

ANT 101 Introduction to Anesthesia Technology 3cr

 **Total 16cr**

**YEAR II – 28 Credits**

**Spring Semester**

HIS 101 Civilizations and History\* 3cr

ENL 201 Academic Writing 3cr

CHE 215 Biochemistry for Health Care Professionals 3cr

ANT 240 Anesthesia Technology Instrumentation 3cr

ANT 240L Anesthesia Technology Instrumentation Lab 1cr

 **Total 13cr**

*\* Student may choose to take another Core Liberal Art (CLA) course if this course schedule conflicts with a College Requirement course or Core course.*

**Fall Semester**

HIS 102 Civilizations and History II\* 3cr

ENL 210 Introduction to Public Speaking 3cr

BIO 218 Pathophysiology 3cr

BIO 2XX Biostatistics and Epidemiology 3cr

ANT 245 Pharmacology in Anesthesia Practice 3cr

 **Total 15cr**

*\* Student may choose to take another Core Liberal Art (CLA) course if this course schedule conflicts with a College Requirement course or Core course.*

**Summer Semester**

ANT 295 Practicum I 3cr

**YEAR III – 31 Credits**

**Spring Semester**

HUM 101 Introduction to Humanities\* 3cr

ANT 320 Anesthesia Clinical Applications I 3cr

ANT 320L Anesthesia Clinical Applications I Lab 1cr

ANT 340 Anesthesia Agents and Methods 3cr

ANT 340L Anesthesia Agents and Methods Lab 1cr

ANT 330 Patient Monitoring Technology 3cr

 **Total 14cr**

*\* Student may choose to take another Core Liberal Art (CLA) course if this course schedule conflicts with a College Requirement course or Core course.*

**Fall Semester**

ANT 343L Operating Room Simulation Lab 1cr

ANT 350 Anesthesia Clinical Applications II 3cr

ANT 360 Perioperative Patient Care 3cr

ANT 370 Workroom Management 1cr

HCT 4XX Technical Elective 3cr

ANT 390 Postanesthetic and Pain Management 3cr

 **Total 14cr**

**Summer I Semester**

ANT 399 Practicum I 3cr

**YEAR IV – 30 Credits**

**Spring Semester**

SOC 101 Introduction to Sociology\* 3cr

ANT 420 Anesthesia Clinical Applications III 3cr

ANT 460 Anesthetic Emergencies 3cr

ANT 460L Anesthetic Emergencies Lab 1cr

ANT 410 Special Topics in Anesthesia Technology 1cr

ANT 430L Anesthesia Quality Assurance Lab 1cr

ANT 490 Practicum II 3cr

 **Total 15cr**

*\* Student may choose to take another Core Liberal Art (CLA) course if this course schedule conflicts with a College Requirement course or Core course.*

**Fall Semester**

PSY 101 Introduction to Psychology\* 3cr

HCT 4XX Technical Elective 3cr
ANT 455 Anesthetic Procedural Blocks 3cr

ANT 495 Practicum IV 3cr

ANT 496 Practicum V 3cr

 **Total 15cr**

*\* Student may choose to take another Core Liberal Art (CLA) course if this course schedule conflicts with a College Requirement course or Core course.*

**Technical Electives:**

HCT 480 Marketing in the Healthcare sector 3cr

HCT 481 Health Informatics 3cr

HCT 482 Leadership in Healthcare 3cr

HCT 483 Introduction to Clinical Research 3cr