## 2019 - 2020 Major Map
### Medical Studies, BS

**School/College:** College of Health Solutions  
**Location:** Downtown Phoenix campus, West campus  

### Term 1 - 15 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO 181: General Biology I (SQ)</strong></td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>CHM 113: General Chemistry I (SQ)</strong></td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>CHS 101: The ASU Experience for Health Solutions Students</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENG 101 or ENG 102: First-Year Composition OR ENG 105 or ENG 107: First-Year Composition OR ENG 108: First-Year Composition</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>MAT 170: Precalculus (MA)</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Term hours subtotal: 15

### Term 2 - 15 - 32 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO 182: General Biology II (SG)</strong></td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>CHM 116: General Chemistry II (SQ)</strong></td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>CHS 100: Designing Your Well-Being (SB) OR CHS 300: The Science of Well-Being (SB)</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>HCD 210: Cultural Aspects of Health (C)</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

Complete ENG 101 OR ENG 105 OR ENG 107 course(s).  
Minimum 3.00 GPA ASU Cumulative.  
Term hours subtotal: 17

### Term 3 - 32 - 49 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHM 233: General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I</strong></td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>SOC 101: Introductory Sociology (SB) OR CDE 232: Human Development (SB) OR ECN 211: Macroeconomic Principles (SB) OR COM 100: Introduction to Human Communication (SB)</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>PSY 101: Introduction to Psychology (SB)</strong></td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Professional Track Courses</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td><strong>Elective</strong></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Complete Mathematics (MA) requirement.  
Minimum 3.00 GPA ASU Cumulative.  
Term hours subtotal: 17

### Term 4 - 49 - 63 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explore an internship.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
CHM 234: General Organic Chemistry II AND CHM 238: General Organic Chemistry Laboratory II

Professional Track Courses: 

Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)

Literacy and Critical Inquiry (L)

Minimum 3.00 GPA ASU Cumulative.

<table>
<thead>
<tr>
<th>Term 5</th>
<th>63 - 77 Credit Hours</th>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
</table>
| HCD 300: Biostatistics (CS) | 3 | C | • Create an updated resume.  
• Students must have a minimum ASU cumulative GPA of 3.00 or higher to apply for the MED 484 internship. |

BCH 361: Advanced Principles of Biochemistry AND BCH 367: Elementary Biochemistry Laboratory OR Upper Division Medical Studies Breadth Electives

HCD 320: Applied Medical/Health Care Ethics (HU) | 3 | C |

Professional Track Courses: 

Minimum 3.00 GPA ASU Cumulative.

<table>
<thead>
<tr>
<th>Term 6</th>
<th>77 - 90 Credit Hours</th>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
</table>
| HCD 310: Health Communication | 3 | C | • Use Handshake to research employment opportunities.  
• Complete an in person or virtual practice interview.  
• For the 2019-20 catalog, MED 484 or HCD 484 fill the college’s experiential translational research. |

MED 484: Internship OR HCD 484: Internship | 3 | C |

Complete 2 courses: 

Professional Track Courses

Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).

Minimum 3.00 GPA ASU Cumulative.

<table>
<thead>
<tr>
<th>Term 7</th>
<th>90 - 105 Credit Hours</th>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCD 303: Global Health Care Systems (G)</td>
<td>3</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HCD 402: OR Upper Division Medical Studies Breadth Elective | 3 | C |

MED 300: Historical and Contemporary Issues in Health (L) | 3 | C |

MED 484: Internship OR HCD 484: Internship OR Upper Division Medical Studies Breadth Elective | 3 | C |

Professional Track Course OR Elective | 3 | C |

Minimum 3.00 GPA ASU Cumulative.

<table>
<thead>
<tr>
<th>Term 8</th>
<th>105 - 120 Credit Hours</th>
<th>Necessary course signified by ⭐</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED 450: Leadership and Professionalism</td>
<td>3</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HCD 330: Health Care Systems in the U.S. | 3 | C |

Upper Division Humanities, Arts and Design (HU) AND Historical Awareness (H) | 3 | C |

Complete 2 courses: 

Upper Division Elective | 6 | |

Term hours subtotal: 14

Term hours subtotal: 13

Term hours subtotal: 15

Term hours subtotal: 15
- Students in the MD track who plan to apply to University of Arizona Medical School in Tucson must complete an upper division course in Cell Biology, Histology, Microbiology, Pathology, or Immunobiology as well as an upper division course in Molecular Biology. This means that at least one of the upper division electives should come from the courses in the Medical Breadth Electives.

**Minimum 3.00 GPA ASU Cumulative.**

| Term hours subtotal: 15 |

### Occupational Therapy Professional Track
- BIO 140: Greek and Latin Roots in Bioscientific Terminology
- BIO 201: Human Anatomy and Physiology I (SG)
- BIO 202: Human Anatomy and Physiology II (SG)
- CDE 232: Human Development (SB) or SOC 101: Introductory Sociology (SB)
- PHY 101: Introduction to Physics (SQ) or PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)
- PSY 341: Developmental Psychology (SB)
- PSY 366: Abnormal Psychology (SB)

### Pharmacy Professional Track
- BIO 201: Human Anatomy and Physiology I (SG)
- BIO 202: Human Anatomy and Physiology II (SG)
- COM 225: Public Speaking (L)
- ECN 211: Macroeconomic Principles (SB)
- MAT 251: Calculus for Life Sciences (MA)
- MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)
- PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)

### Physical Therapy Professional Track
- BIO 201: Human Anatomy and Physiology I (SG)
- BIO 202: Human Anatomy and Physiology II (SG)
- COM 100: Introduction to Human Communication (SB)
- EXW 315: Physiological Foundations of Movement
- PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)
- PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ)
- PSY 341: Developmental Psychology (SB)
- PSY 366: Abnormal Psychology (SB)

### Medicine (MD/DO) Professional Track
- BIO 201: Human Anatomy and Physiology I (SG)
- BIO 202: Human Anatomy and Physiology II (SG)
- BIO 340: General Genetics
- MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)
- PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)
- PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ)
- SOC 101: Introductory Sociology (SB) or COM 100: Introduction to Human Communication (SB)

### Optometry Professional Track
- BIO 201: Human Anatomy and Physiology I (SG)
- BIO 202: Human Anatomy and Physiology II (SG)
- COM 100: Introduction to Human Communication (SB)
- MAT 251: Calculus for Life Sciences (MA)
- MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)
- PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)
- PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ)

### Dentistry Professional Track
- BIO 201: Human Anatomy and Physiology I (SG)
- BIO 202: Human Anatomy and Physiology II (SG)
- MIC 205: Microbiology (SG)

### Physician Assistant (PA) Professional Track
- BIO 140: Greek and Latin Roots in Bioscientific Terminology

### Medical Studies Breadth Electives
- BIO 353: Cell Biology

*Hide Course List(s)/Track Group(s)*
BIO 201: Human Anatomy and Physiology I (SG)
BIO 202: Human Anatomy and Physiology II (SG)
BIO 340: General Genetics
MIC 205: Microbiology (SG)
MIC 206: Microbiology Laboratory (SG)
SOC 101: Introductory Sociology (SB)

---

BIO 355: Introduction to Computational Molecular Biology (CS)
BIO 360: Animal Physiology
BIO 420: Immunology: Molecular and Cellular Foundations

---

BIO 494: Advanced Study Practicum: Anatomy & Physiology
BMI 332: Team Dynamics for Healthcare IT Projects
BMI 404: Clinical Environments
EXW 342: Health Behavior Change
HCD 302: Health Care Management
HCD 332: Health Care Legislation
HCD 402: Health Economics
HCD 403: Process Engineering
HCD 404: Advanced Concepts in the Science of Health Care Delivery
HCD 410: Supporting the Health of Older Adults
HCD 412: Health Issues in Later Life
HSC 340: Changing Health Behaviors
IBC 420: Population Health Management
MED 294: Hospice and Palliative Care
MED 394: Healthcare and Humanities
MED 394: Intro Dementia & Alzheimers Disease
MED 417: Impact of Violence on Health
MED 445: Prevention and Management of Chronic Disease
MED 494: Palliative Care Managing Complex Serious Illness
PBH 422: Health Disparities and Access to Health
PSY 341: Developmental Psychology (SB)
PSY 366: Abnormal Psychology (SB)

---

Total Hours: 120
Upper Division Hours: 45 minimum
Major GPA: 2.00 minimum
Cumulative GPA: 2.00 minimum
Total hrs at ASU: 30 minimum

---

General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
Hrs Resident Credit for Academic Recognition: 56 minimum
Total Community College Hrs: 64 maximum

- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2019 - 2020 academic year.