




















## 2022 - 2023 Major Map






### Medical Studies, **BS**

School/College: College of Health Solutions  
NHMEDBS



Term 1 0 - 15 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 BIO 181: General Biology I (SQ)	4	C	<ul style="list-style-type: none"> <li>ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students. College of Health Solutions students take CHS 101 to fulfill this requirement.</li> <li>Explore <a href="#">pre-health resources</a>.</li> <li>Visit the <a href="#">CHS Student Site</a> for resources, appointment scheduling, internship information, etc.</li> </ul>
 CHM 113: General Chemistry I (SQ)	4	C	
 CHS 101: The ASU Experience for Health Solutions Students	1		
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
MAT 170: Precalculus (MA)	3	C	
Term hours subtotal:	15		
Term 2 15 - 32 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 BIO 182: General Biology II (SG)	4	C	<ul style="list-style-type: none"> <li>Students who enter the major as first-year students must complete CHS 100; students who enter the major with more than 45 hours should complete CHS 300.</li> <li>Meet with a <a href="#">pre-health advisor</a> to discuss coursework and extracurricular activities.</li> <li>Join a <a href="#">student club</a> or professional organization.</li> <li>Research <a href="#">career pathways</a> and decide on a professional track prior to registering for the next term.</li> </ul>
 CHM 116: General Chemistry II (SQ)	4	C	
CHS 100: Optimizing Your Health and Performance (SB) OR CHS 300: An Exploration of Well-Being (SB)	3	C	
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
HSC 210: Cultural Aspects of Health (C)	3	C	
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Minimum 3.00 GPA ASU Cumulative.			
Term hours subtotal:	17		
Term 3 32 - 46 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 CHM 233: General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I	4	C	<ul style="list-style-type: none"> <li>The course chosen from the list in this term (CDE 232, COM 100, ECN 211, SOC 101) should be selected from the Professional Track list in the Degree Audit (DARS). If the track list in DARS does not specify one of the courses, SOC 101 is recommended.</li> <li>Research professional schools and their admission requirements, including required courses.</li> <li>Start volunteering for health organizations and shadowing health professionals to learn more about opportunities in the field.</li> <li>Develop your <a href="#">skills</a>.</li> </ul>
CDE 232: Human Development (SB) OR COM 100: Introduction to Human Communication (SB) OR ECN 211: Macroeconomic Principles (SB) OR SOC 101: Introductory Sociology (SB)	3	C	
PSY 101: Introduction to Psychology (SB)	3	C	
Professional Track Course	4	C	
 Complete Mathematics (MA) requirement.			
 Minimum 3.00 GPA ASU Cumulative.			
Term hours subtotal:	14		
		Minimum	

Term 4 46 - 60 Credit Hours <b>Critical course signified by</b> 	Hours	Grade	Notes
 CHM 234: General Organic Chemistry II AND CHM 238: General Organic Chemistry Laboratory II	4	C	<ul style="list-style-type: none"> <li>Review scholarship renewal criteria to ensure adequate enrollment.</li> <li>Begin thinking about preparation for professional school entrance exams.</li> <li>Learn about the <a href="#">Pre-Health Internship Program</a>.</li> <li>Continue volunteering and shadowing in health organizations.</li> </ul>
Professional Track Course	4	C	
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Literacy and Critical Inquiry (L)	3		
 Minimum 3.00 GPA ASU Cumulative.			
Term hours subtotal:	14		

Term 5 60 - 74 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 BIO 201: Human Anatomy and Physiology I (SG)	4	C	<ul style="list-style-type: none"> <li>Study for the professional school entrance exam and register to take it in the spring or summer of your junior year.</li> <li>Update your <a href="#">resume</a>.</li> <li>Visit the <a href="#">CHS student website</a> to explore experiential learning opportunities, including research and internships, specific to your major.</li> <li>Students must have a minimum ASU cumulative GPA of 3.00 or higher to apply for the MED 484 internship.</li> </ul>
 HCD 300: Biostatistics (CS)	3	C	
MED 320: Applied Medical/Health Care Ethics (HU)	3	C	
Upper Division Medical Studies Breadth Elective	3	C	
Elective	1		
 Minimum 3.00 GPA ASU Cumulative.			
Term hours subtotal:	14		

Term 6 74 - 90 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 BIO 202: Human Anatomy and Physiology II (SG)	4	C	<ul style="list-style-type: none"> <li>Any of the courses from the list in this term (CHS 484, CHS 493, CHS 494, HSC 484, MED 484, or MED 494) will fulfill the college's experiential learning requirement. Visit the <a href="#">CHS student website</a> to learn more.</li> <li>Take the professional school entrance exam.</li> <li>Meet with a <a href="#">pre-health advisor</a> to review your professional school application.</li> <li>Apply early!</li> </ul>
 Professional Track Course	3	C	
CHS 484: Translational Research OR CHS 493: Honors Thesis (L) OR CHS 494: Undergraduate Research OR HSC 484: Internship OR MED 484: Internship OR MED 494: Introduction To Clinical Healthcare	3	C	
HSC 310: Health Communication	3	C	
Upper Division Elective	3		
 Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
 Minimum 3.00 GPA ASU Cumulative.			
Term hours subtotal:	16		

Term 7 90 - 105 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 HCD 303: Global Health Care Systems (G)	3	C	<ul style="list-style-type: none"> <li>If your track requires more than three courses, additional track courses should be completed in place of the elective.</li> <li>Complete an in person or virtual <a href="#">practice interview</a>.</li> <li>Continue gaining hands on experience.</li> </ul>
MED 300: Historical and Contemporary Issues in Health (L)	3	C	
Complete 2 courses:			
Upper Division Medical Studies Breadth Elective	6	C	
Elective	3		
 Minimum 3.00 GPA ASU Cumulative.			
Term hours subtotal:	15		

Term 8 105 - 120 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 HCD 330: Health Care Systems in the U.S.	3	C	
MED 450: Leadership and Professionalism	3	C	
Upper Division Humanities, Arts and Design (HU)	3		
Complete 2 courses:			

Minimum 3.00 GPA ASU Cumulative.

Term hours subtotal: 15

- A course in biochemistry with lab is strongly recommended for competitive application to most professional schools.
- Students in the MD track who plan to apply to the University of Arizona Medical School in Tucson must complete upper-division coursework 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 Medical Studies Breadth Electives list.

## Hide Course List(s)/Track Group(s)

Dentistry Professional Track	Integrative Health (ND/NMD/DC) Professional Track	Medicine (MD/DO) Professional Track
PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)	BIO 340: General Genetics or LSC 347: Fundamentals of Genetics AND LSC 348: Fundamentals of Genetics Laboratory	BIO 340: General Genetics or LSC 347: Fundamentals of Genetics AND LSC 348: Fundamentals of Genetics Laboratory
PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ)	HSC 300: Complementary Health Care	MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)
MIC 205: Microbiology (SG)	MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)	PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)
	PSY 341: Developmental Psychology (SB)	PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ)
Occupational Therapy Professional Track	Optometry Professional Track	Pharmacy Professional Track
CHS 260: Health Professions Terminology	MAT 251: Calculus for Life Sciences (MA)	COM 225: Public Speaking (L)
PSY 341: Developmental Psychology (SB)	MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)	MAT 251: Calculus for Life Sciences (MA)
PSY 366: Abnormal Psychology (SB)	PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)	MIC 205: Microbiology (SG) AND MIC 206: Microbiology Laboratory (SG)
SOC 400: Perspectives on Aging (SB) or SOC 410: Race, Medicine, and the Body (L) or SOC 418: Aging and the Life Course (SB & H) or SOC 424: Women and Health (SB) or SOC 426: Social Inequalities (SB) or SOC 427: Sociology of Health and Illness (SB)	PHY 112: General Physics (SQ) AND PHY 114: General Physics Laboratory (SQ)	PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)
Physician Assistant (PA) Professional Track	Medical Studies Breadth Electives	
BIO 340: General Genetics or LSC 347: Fundamentals of Genetics AND LSC 348: Fundamentals of Genetics Laboratory	BCH 361: Advanced Principles of Biochemistry AND BCH 367: Elementary Biochemistry Laboratory	
CHS 260: Health Professions Terminology	BCH 371: Modern Concepts in Biochemistry AND BCH 372: Modern Concepts in Biochemistry Laboratory	
MIC 205: Microbiology (SG)	BIO 353: Cell Biology	
MIC 206: Microbiology Laboratory (SG)	BIO 355: Introduction to Computational Molecular Biology (CS)	
	BIO 360: Animal Physiology	
	BIO 420: Immunology: Molecular and Cellular Foundations	

BIO 475: Advanced Human Anatomy

CHS 340: Health Theory

HCD 302: Health Care Management

HCD 304: Health Care Finance

HCD 332: Population Health Policy and  
Legislation

HCD 420: Population Health Management

HSC 410: Supporting the Health of Older  
Adults

HSC 412: Health Issues in Later Life

LSC 4\*\* Elective

MED 325: Elements of Hospice and  
Palliative Care

MED 375: Alzheimer's and Other Dementias  
(SB)

MED 394: Healthcare and Humanities

MED 417: Impact of Violence on Health

MED 445: Prevention and Management of  
Chronic Disease

MED 475: Palliative Care: Managing  
Complex Serious Illness

MED 484: Internship

PBH 410: Public Mental Health

PBH 422: Health Disparities and Access to  
Health

**Notes:**

- First-Year Composition: All students are placed in ENG 101 unless submission of SAT, ACT, Accuplacer, IELTS, or TOEFL score, or college-level transfer credit or test credit equivalent to ASU's first-year composition course(s), determine otherwise. Students on Polytechnic, Downtown Phoenix and West Campuses are encouraged to complete the Directed Self-Placement survey to choose the first-year composition option they believe best suits their needs. Visit: <https://cisa.asu.edu/DSP>
- Mathematics Placement Assessment score determines placement in first mathematics course.
- Students interested in applying to Physical Therapy graduate programs should major in Kinesiology.
- Due to the high volume of overlap in curriculum, students enrolled in this degree are not permitted to declare a concurrent degree combination with the Biological Sciences BS, including the following concentrations: Biomedical Sciences; Genetics, Cell and Developmental Biology; and Neurobiology, Physiology and Behavior. Students should speak with their academic advisor for any further questions.

**Total Hours:** 120

**Upper Division Hours:** 45 minimum

**Major GPA:** 2.00 minimum

**Cumulative GPA:** 2.00 minimum

**Total hrs at ASU:** 30 minimum

**Hrs Resident Credit for**

**Academic Recognition:** 56 minimum

**Total Community College Hrs:** 64 maximum

## **General University Requirements Legend**

### General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- 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 next to courses on the major map were valid for the 2022 - 2023 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.