

# B.S. Medical Sciences Four-Year Sample Curriculum 2025-2026

Requirements subject to change. See UI Catalog for complete degree requirements and additional information. Updated 3/10/25.

1 <sup>st</sup> Year – Fall Semester			1 <sup>st</sup> Year – Spring Semester		
<b>BIOL 1010</b> <i>(Fall only)</i>	<b>Opportunities in Biological Sciences</b>	1	<b>BIOL 1150/1150L</b>	<b>Cells &amp; the Evolution of Life &amp; Lab</b> <i>Prereq: CHEM 1101 or CHEM 1111 minimum 'C' required to graduate</i>	4
<b>BIOL 1510</b> <i>(Fall only)</i>	<b>Intro to the Health Professions</b>	1	<b>CHEM 1120/1120L</b>	<b>Principles of Chemistry II &amp; Lab</b> <i>Prereq: Chem 1111/1111L</i>	5
<b>CHEM 1111/1111L</b>	<b>Principles of Chemistry I &amp; Lab</b> <i>Prereq: math test or min 'C' in CHEM 1111, MATH 1143 or 1170</i>	4	<b>STAT 2510 or STAT 3010</b>	<b>Statistical Methods or Probability &amp; Statistics</b> <i>Prereq: MATH 1108, 1143, 1160, or 1170 ; MATH 1750 for STAT 3010</i>	3
<b>MATH 1170</b>	<b>Analytic Geometry and Calculus I</b> <i>Prereq: math test or min 'C' in MATH 1143 and MATH 1144 (co-req possible).</i>	4	<b>PSYC 1101</b>	<b>Introduction to Psychology</b>	3
<b>ENGL 1102</b>	<b>College Writing and Rhetoric</b> <i>Prereq: ENGL 1101 or test scores</i>	4			
	<b>General Education Course/Elective</b>	3			
	<b>Total Credits</b>	<b>17</b>		<b>Total Credits</b>	<b>15</b>
2 <sup>nd</sup> Year – Fall Semester			2 <sup>nd</sup> Year – Spring Semester		
<b>BIOL 2227</b> <i>(Fall only)</i>	<b>Anatomy &amp; Physiology I</b> <i>Prereq: BIOL 1150 or BIOL 102</i>	4	<b>BIOL 2228</b> <i>(Spring only)</i>	<b>Anatomy &amp; Physiology II</b> <i>Prereq: BIOL 2227</i>	4
<b>CHEM 277/278</b>	<b>Organic Chemistry I &amp; Lab</b> <i>Prereq: CHEM 1120/1120L</i>	4	<b>ENGL 2020 or 2080 or 3170 or 3180 or 3200</b>	<b>Written Communication</b> <i>Prereq: ENGL 1102; Soph stand. 3200; jr. stand 3170, 3180</i>	3
<b>BIOL 2500/2550</b> <i>(250 Fall only)</i>	<b>General Microbiology &amp; Lab</b> <i>Prereq: BIOL 1150/1150L and CHEM 1101/1101L or 1111/1111L</i>	5	(see below)	<b>Psychology Elective</b> <i>Prereq: PSYC 1101</i>	3
<b>SOC 1101</b>	<b>Introduction to Sociology</b>	3	<b>PHIL 1103</b>	<b>Ethics</b>	3
			(see below)	<b>General Education Course/Elective</b>	3
	<b>Total Credits</b>	<b>16</b>		<b>Total Credits</b>	<b>16</b>
3 <sup>rd</sup> Year – Fall Semester			3 <sup>rd</sup> Year – Spring Semester		
<b>BIOL 3800</b> <i>(Fall only)</i>	<b>Biochemistry I</b> <i>Prereq: CHEM 1120/1120L and CHEM 2770</i>	4	<b>BIOL 3120/3130</b> <i>(Spring only)</i>	<b>Molecular and Cellular Biology &amp; Lab</b> <i>Prereq: BIOL 1150/1150L and BIOL 3100/3150 or GENE 3140 or BIOL 2500</i>	4
<b>PHYS 1111/1111L</b> or <b>PHYS 2110/2110L</b>	<b>General Physics I &amp; Lab or Engineering Physics I &amp; Lab</b> <i>Prereq: MATH 1143 (GP); MATH 1170 (EP)</i>	4	<b>PHYS 112/112L</b> <i>(Spring only)</i> or <b>PHYS 212/212L*</b>	<b>General Physics II &amp; Lab or Eng. Physics II &amp; Lab</b> <i>Prereq: PHYS 1111/1111L (GP); PHYS 2110/2110L and MATH 1175 (EP)</i>	4
<b>BIOL 3100/3150</b> <i>(Fall only)</i>	<b>Genetics &amp; Lab</b> <i>Prereq: BIOL 1150/1150L or BIOL 2500</i>	4	(see below)	<b>Global and Cultural Competence Elective</b>	3
(see below)	<b>Critical Thinking Elective</b>	3	(see below)	<b>Leadership and Professional Elective</b>	2
	<b>Total Credits</b>	<b>15</b>		<b>Total Credits</b>	<b>13</b>
4 <sup>th</sup> Year – Fall Semester			4 <sup>th</sup> Year – Spring Semester		
(see below)	<b>Biomedical Sciences Elective</b>	3	<b>Capstone Experience</b>	<b>BIOL 4010 or BIOL 4070 or BIOL 4080</b> <i>(Fall and Spring)</i> or <b>BIOL 4110</b> <i>(Spring only)</i>	2
(see below)	<b>Biomedical Sciences Elective</b>	3	(see below)	<b>Biomedical Sciences Elective</b>	3
(see below)	<b>Analysis/Computer/Math Skills Elective</b>	3	(see below)	<b>Global and Cultural Competence Elective</b>	3
(see below)	<b>Psychology Elective</b> <i>Prereq: PSYC 101</i>	3		<b>General Education Course/Elective</b>	3
	<b>General Education Course/Elective</b>	3		<b>General Education Course/Elective</b>	3
	<b>Total Credits</b>	<b>15</b>		<b>Total Credits</b>	<b>14</b>

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### MedSci Electives

**Analysis/Computer/Math Skills:** Social Data Analysis; Computer Skills for Biologists; Phylogenetics; Mathematical Biology; R Programming; Statistical Analysis

**Biomedical Sciences:** Ecology and Population Biology, Pathophysiology, Advanced Evolution, Microscopic Anatomy, Immunology, Pathogenic Microbiology, Genomics, Virology, Biochemistry II, Neurobiology, Developmental Biology, Protein Structure and Function, Cellular and Molecular Basis of Disease, Organic Chemistry II, Medicinal Chemistry, Veterinary and Medical Entomology, Medical Parasitology, Advanced Nutrition, Critical Health Issues, Psychosocial Determinants of Health, Advanced Laboratory Techniques, Blood and Airborne Pathogens: HIV/STDs/Hepatitis/TB

**Global and Cultural Competence:** Belief Systems; Health, Illness, and Society; Intercultural Communications; Global Nutrition; Disease and Culture: History of Western Medicine; Media and Diversity; Political Psychology; Introduction to Inequity and Justice; Environmental Sociology and Globalization; Racial and Ethnic Relations

**Leadership & Professionalism Course:** Internship; College of Science Ambassadors; Pre-Health Peer Mentors; Introduction to Management; Professional Ethics; Traumatic Events: Preparation, Intervention, Evaluation

**Psychology:** Developmental Psychology; Abnormal Psychology; Cognitive Psychology; Physiological Psychology; Introduction to Chemical Addictions; Introduction to the Pharmacology of Psychoactive Drugs

Additional classes may be substituted with prior approval from advisor and chairperson