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## Program Overview

A strong background in science prepares students in the pre-professional health sciences specialization for entry into a variety of graduate and professional programs, including chiropractic, optometry, dentistry, medicine, occupational therapy, physician assistant, physical therapy, medical technology, and medical radiography. Working closely with their advisors, they will select the courses needed to fulfill the graduation requirements for the interdisciplinary sciences degree and to meet the entrance requirements for the professional schools in health science.

## Curriculum

The interdisciplinary sciences (IS) program provides students with the high-quality science education the School of Mines is known for, but with the added benefit of flexibility in a wide range of study. Individual degree design and the opportunity to study natural sciences, social sciences, humanities, and liberal arts from a broad perspective result in a well-rounded education. All IS students are required to take a 60-credit core of math, computer science, and natural sciences. These are complemented with program specialized courses and a senior capstone project that reflect each student's professional goals and integrate the course work leading to the attainment of the IS degree. For students interested in Medical Technology (MT) or Radiologic Technology (RT), the School of Mines has an articulation agreement with Rapid City Regional Hospital, which has fully certified MT and RT programs. Students take prerequisite course work at the School of Mines before applying to either program.

## Curriculum Listing

Course sequence may vary by student entry year, math/science placements, and career objectives. Students should consult with their advisors for a more personalized course of study based on career plans.

### Freshman Year

First Semester		
BIOL 121/121L	Human Anatomy & Lab	4
ENGL 101	Composition I	3
IS 110	Explorations	2
Math/CSC Elective <sup>1</sup>		3
Gen Ed Humanities/Social Science Elective		3
<b>TOTAL</b>		<b>15</b>

### Second Semester

BIOL 123/123L	Basic Physiology and Lab	4
CHEM 112/112L	Gen Chemistry I and Lab	4
Math/CSC Elective		3
PE	Physical Education	1
Gen Ed Humanities/Social Science Elective		3
<b>TOTAL</b>		<b>15</b>

### Sophomore Year

First Semester		
BIOL 151/151L	Gen Biology I and Lab	4
CHEM 114/114L	Gen Chemistry II and Lab	4
ENGL 279	Technical Comm I	3
IS 201	Introduction to Science, Technology, and Society	3
Gen Ed Humanities/Social Science Elective		3
<b>TOTAL</b>		<b>17</b>

Second Semester		
BIOL 153/153L	Gen Biology II and Lab	4
ENGL 289	Technical Comm II	3
Math/CSC Elective		3
Gen Ed Humanities/Social Science Elective		3
Electives		4
<b>TOTAL</b>		<b>17</b>

### Junior Year

First Semester		
Math/CSC Elective		3
Upper Division Science Elective		3
Upper Division HU/SS Elective		3
Electives		7
<b>TOTAL</b>		<b>16</b>

Second Semester		
Science Electives		4
Upper Division HU/SS elective		3
Upper Division Science Elective		3
Electives		7
<b>TOTAL</b>		<b>17</b>

### Senior Year

First Semester		
IS 401	Writing and Research in the Interdisciplinary Sciences	3
Science Elective		4
Upper Division HU/SS Elective		3
Upper Division Science Elective		3
PE	Physical Education	1
Electives		1
<b>TOTAL</b>		<b>15</b>

Second Semester		
IS 498	Undergrad Res/Scholarship	3
Science Electives		4
Upper Division HU/SS Elective		3
Upper Division Science Elective		3
Electives		3
<b>TOTAL</b>		<b>16</b>

### 128 credits required for graduation

All IS specializations require Math 123 or a math course requiring Math 123 as its prerequisite. Math 102 and Math 120 may be used towards graduation requirements. Students should consult with their advisors on the most appropriate math/computer science courses for their career paths.

Elective credits may include additional course work at the 100 level or above in math, computer science, natural and physical sciences, humanities, social sciences, business, military science, or engineering as needed to meet the required minimums or to meet admissions requirements for professional programs in health science. Students should consult with their advisors on the most appropriate courses for their career goals.