

INTERDISCIPLINARY SCIENCES DEGREE PROGRAM WORKSHEET

Student Name: _____ **Advisor:** _____
Target Graduation Date: _____ **Specialization:** Pre-Professional Health Sciences
Pre-Medicine

Copies of this degree program worksheet are to be maintained by both the student and the advisor. It is to be submitted with the student's Letter of Intent no later than one year before intended graduation. See deadlines for submission of Letter of Intent listed on page 5.

All IS specializations require a minimum of **60 semester hours** of math, computer science, and the natural sciences, which includes a minimum of 12 hours math/computer science and a minimum of 30 hours natural sciences, 12 of which must be at the upper division.

I. MATH/COMPUTER SCIENCE (minimum of 12 sem. hrs., min. of 3 in Math and min. of 3 in CSC.) *Check General Ed. list of courses.*
 No duplicate credit is given for MATH 115 and MATH 120.

A. Mathematics (minimum of 3 sem. hrs.) MATH 102 & MATH 120 are not required but may need to be taken based on placement scores. MATH 123 is required for all IS specializations.

Course	Title	Credits	Semester Completed	Transfer/Comments	Use X for courses taken for Gen Ed
MATH 102	College Algebra (3)				
MATH 120	Trigonometry (3)				
<i>MATH 123</i>	<i>Calculus I (4)</i>				
Lower-division Math Total		0	(3 sem. hrs. minimum)		

Course	Title	Credits	Semester Completed	Transfer/Comments	Use X for courses taken for Gen Ed
Upper-division Math Total		0			
Math Subtotal		0	(3 sem. hrs. minimum)		

B. Computer Science (minimum of 3 sem. hrs. required for all IS specializations)

Course	Title	Credits	Semester Completed	Transfer/Comments	Use X for courses taken for Gen Ed
Comp. Sci. Subtotal		0	(3 sem. hrs. minimum)		
Math/Comp. Sci. Total		0	(12 sem. hrs. minimum)		

II. NATURAL SCIENCES (minimum of 30 sem. hrs., 12 of which must be upper division)

Any courses with ATM/Meteorology, Biology, Chemistry, Geology, Paleontology, or Physics prefix apply. There must be at least 3 sem. hrs. in Biology, 3 sem. hrs. in Chemistry (CHEM 112 or higher), and a 6-sem. hrs. sequence in one of the sciences including at least 1 sem. hr. of laboratory. NOTE: CHEM 106 and PHYS 111 may be used only for elective credit when CHEM 112 and PHYS 211 are taken to fulfill the Science requirement. Check for 6 sem hrs. of General Education approved courses.

Lower-division Sciences (Courses numbered 100-299)

Course	Title	Credits	Semester Completed	Transfer/Comments	Use X for courses taken for Gen Ed
<i>BIOL 121/121L</i>	<i>Basic Anatomy and Lab (3/1)</i>				
<i>BIOL 123/123L</i>	<i>Basic Physiology and Lab (3/1)</i>				
<i>BIOL 151/151L</i>	<i>General Biology I and Lab (3/1)</i>				
<i>BIOL 153/153L</i>	<i>General Biology II and Lab (3/1)</i>				
<i>BIOL 231/231L</i>	<i>General Microbiology and Lab (3/1)</i>				
<i>CHEM 112/112L</i>	<i>General Chemistry I and Lab (3/1)</i>				
<i>CHEM 114/114L</i>	<i>General Chemistry II and Lab (3/1)</i>				
<i>PHYS 111/111L</i>	<i>Intro to Physics I and Lab(3/1) and</i>			<i>OR PHYS 211 University Physics I and</i>	
<i>PHYS 113/113L</i>	<i>Intro to Physics II and Lab(3/1)</i>			<i>PHYS 213/213L Univ. Physics II and Lab</i>	
Lower-division Sciences Total		0			

Upper-division Sciences (minimum of 12 sem. hrs.)

(Courses numbered 300 and above)

Course	Title	Credits	Semester Completed	Transfer/Comments
<i>CHEM 326/326L</i>	<i>Organic Chemistry I and Lab (3/2)</i>			
<i>CHEM 328/328L</i>	<i>Organic Chemistry II and Lab (3/2)</i>			
Upper-division Sciences Total		0		(12 sem. hrs. minimum)

Natural Sciences Total 0 (30 sem. hrs. minimum)

III. IS CORE COURSES (Required for graduation)

Course	Title	Credits	Semester Completed	Transfer/Comments
<i>IS 110</i>	<i>Explorations (2)</i>			
<i>IS 201</i>	<i>Intro to Science, Tech, & Society (3)</i>			
<i>IS 401</i>	<i>Writing & Research in the Inter. Sci. (3)</i>			
<i>IS 498</i>	<i>Undergraduate Research/Scholarship(3)</i>			
IS Core Courses Total		0		(11 sem. hrs. required)

IV. PHYSICAL EDUCATION For students starting Summer 2012 or later, PE credits are no longer required. Students may, however, use PE and MUEN coursework as elective credit.

Course	Title	Credits	Semester Completed	Transfer/Comments
MUEN 101	Choral Ensembles (1 to 2)			
MUEN 122	Concert Band (1)			
PE 100				
PE 103	Nutrition for Everyday Living			
PE 105	Wellness and Physical Fitness			
PE 113	Varsity Sport			
PE 118	Beginning & Intermediate Swimming			
Physical Education Total		0		(2 sem. hrs. minimum)

V. WRITING & COMMUNICATION (All three required, 9 sem. hrs.)

Course	Title	Credits	Semester Completed	Transfer/Comments
<i>ENGL 101</i>	<i>Composition I (3)</i>			
<i>ENGL 279</i>	<i>Technical Communications I (3)</i>			
<i>ENGL 289</i>	<i>Technical Communications II (3)</i>			
Writing & Communication Total		0	(9 sem. hrs. required)	

VI. HUMANITIES & SOCIAL SCIENCES (24 sem. hrs. required)

A. Humanities (minimum 12 sem. hrs.) ARTH, ENGL,FREN,GER,HUM,MUS,MUEN,MUAP,PHIL,SPAN

NOTE: There must be 6 sem. hrs. from approved General Ed list, and at least 6 sem. hrs. of Upper Division. Not all courses taught by Humanities faculty count for Humanities credit--check catalog. Beginning Fall 1999, HIST 121 & 122 will count only as Humanities credits.

Lower-division Humanities (minimum of 6 sem. hrs.)

Course	Title	Credits	Semester Completed	Transfer/Comments	Use X for courses taken for Gen Ed
Lower-division Humanities Subtotal		0	(6 sem. hrs. minimum)		

Upper-division Humanities (minimum of 6 sem. hrs.)

Course	Title	Credits	Semester Completed	Transfer/Comments
Upper-division Humanities Subtotal		0	(6 sem. hrs. minimum)	
Humanities Total		0	(12 sem. hrs. minimum)	

B. Social Sciences (minimum 12 sem. hrs.) ANTH, ECON, GEOG, HIST, LAW, POLS, PSYC, SOC

NOTE: There must be 6 sem. hrs. from approved General Ed list, and at least 6 sem. hrs. of Upper Division. Not all courses taught by Social Sciences faculty count for Social Sciences credit--check catalog. Beginning Fall 1999, HIST 121 & 122 will count only as Humanities credits.

Lower-division Social Sciences (minimum of 6 sem. hrs.)

Course	Title	Credits	Semester Completed	Transfer/Comments	Use X for courses taken for Gen Ed
Lower-division Social Sciences Subtotal		0	(6 sem. hrs. minimum)		

Upper-division Social Sciences (minimum of 6 sem. hrs.)

Course	Title	Credits	Semester Completed	Transfer/Comments
Upper-division Social Sciences Subtotal		0	(6 sem. hrs. minimum)	

Social Sciences Total **0** (12 sem. hrs. minimum)

Humanities and Social Sciences Total **0** (24 sem. hrs. minimum)

VII. PROGRAM-APPROVED ELECTIVES >>>Students are encouraged to consult the admissions requirements of medical school programs to determine which elective courses will be most useful.

A. 100-299 Elective courses

Course	Title	Credits	Semester Completed	Transfer/Comments
Lower-division Electives Subtotal		0		

B. 300 and above Elective courses

Course	Title	Credits	Semester Completed	Transfer/Comments
Upper-division Electives Subtotal		0		

Program-approved Electives Total **0**

VIII. UPPER-DIVISION COURSE TOTAL

300-499 Sciences	0	(12 sem. hrs. min.)
IS 401	0	(3 sem. hrs.)
IS 498	0	(3 sem. hrs.)
300-499 Humanities	0	(6 sem. hrs. min.)
300-499 Social Sciences	0	(6 sem. hrs. min.)
300-499 Electives	0	
Total Upper-division Credits	0	(36 sem. hrs. minimum)

IX. GENERAL EDUCATION REQUIREMENTS CHECK LIST

Check the approved list of general education courses. These are the only courses which count. These are to be completed in the first 2 years. **ENTER ONLY THE MINIMUM NUMBER OF CREDITS REQUIRED.**

Goal 1 and 2	ENGL 101	0	<i>List specific courses on lines below. Use * to indicate cultural diversity course (minimum six hours required).</i>
	ENGL 279	0	
	ENGL 289	0	
Goal 3 Social Sciences -- 6 sem. hrs. in 2 disciplines			
Goal 4 Humanities -- 6 sem. hrs. in 2 disciplines			
Goal 5 Mathematics -- 3 sem. hrs.			
Goal 6 Sciences -- 6 sem. hrs. including 1 laboratory			
Goal 7 Cultural Diversity -- 6 sem. hrs.		***	***Do not include in total.
(May include courses taken for Goals 3 & 4. Check General Ed. approved courses.)			
General Ed. Total		0	(30 sem. hrs. minimum)

X. DEGREE CHECK SUMMARY FOR Pre-Professional Health Science--Pre-Medicine

A. Math/Computer Science			
1. Lower-division Math (3 sem. hrs. minimum)	<input type="text" value="0"/>		
2. Upper-division Math	<input type="text" value="0"/>		
3. Computer Science (3 sem. hrs. minimum)	<input type="text" value="0"/>		
Math/Comp. Sci. (12 sem. hrs. minimum)	<input type="text" value="0"/>		
B. Natural Sciences (check for 6 hr. sequence)			
1. Lower-division sciences	<input type="text" value="0"/>		
2. Upper-division sciences (12 sem. hrs. min.)	<input type="text" value="0"/>		
Natural Sciences (30 sem. hrs. minimum)	<input type="text" value="0"/>		
Math/Comp. Sci. & Natural Sciences (60 sem. hrs. min.)	<input type="text" value="0"/>		
C. IS Core Courses			
1. IS 110 (2)	<input type="text" value="0"/>		
2. IS 201 (3)	<input type="text" value="0"/>		
3. IS 401 (3)	<input type="text" value="0"/>		
4. IS 498 (3)	<input type="text" value="0"/>		
IS Core Courses (11 sem. hrs. minimum)	<input type="text" value="0"/>		
D. Writing and Communication (9 sem. hrs. minimum)	<input type="text" value="0"/>		
E. Humanities and Social Sciences			
1. Humanities (12 sem. hrs. min. including 6 U.D.)	<input type="text" value="0"/>		
2. Social Sciences (12 sem. hrs. min. incl. 6 U.D.)	<input type="text" value="0"/>		
Humanities & Social Sciences (24 sem. hrs. min.)	<input type="text" value="0"/>		
F. Program-approved Electives	<input type="text" value="0"/>		
Total Credits Required for Graduation	<input type="text" value="0"/>	120 minimum	

Use X to indicate minimum requirement met.

<i>Biology (3 cr.)</i>	<input type="text"/>
<i>Chemistry (3 cr.)</i>	<input type="text"/>
<i>Science (6 cr. hr. sequence)</i>	<input type="text"/>
<i>Lab (1 cr.)</i>	<input type="text"/>

XI. ADDITIONAL REQUIREMENTS

The completed IS Degree Program Worksheet and the Letter of Intent must be submitted to the IS Office no later than one year before intended date of graduation. This plan of study consists of the reasons for pursuing the IS degree, the specialization chosen, and the reasons for selecting that specialization. This must be done in consultation with assigned IS advisor. Advisor's signature is required.

Deadlines for submission of IS Degree Program Worksheet and Letter of Intent:

- May graduation--April 30 of preceding year;
- August graduation--July 30 of preceding year;
- December graduation--November 30 of preceding year

Recommended Additional Science Courses	
BIOL 371/371L	Genetics and Lab
BIOL 423/423L	Pathogenesis and Lab
BIOL 431/431L	Industrial Microbiology and Lab
CHEM 332/332L	Analytical Chemistry and Lab
CHEM 340	Fundamentals of Physical Chemistry
CHEM 460	Biochemistry (Highly recommended by USD)
CHEM 480	Toxicology
⇒ Other upper division biology/chemistry courses as appropriate. Upper division biology and other science courses from BHSU, USD, SDSU, or OLC may also be acceptable.	
Recommended Support Courses	
PSYC 101	General Psychology
PSYC 323	Human Development Throughout the Lifespan
PSYC 451	Psychology of Abnormal Behavior

This form may be found at <http://is.sdsmt.edu/AreasofSpecialization/PreprofessionalHealthSciences/>