

Major Academic Plan

Catalog Year: 2021-22

Degree	B.S.
Major:	Biology (Microbiology)

Major Academic Plans (MAP) show a general recommended pathway to graduation. Meet with your major advisor each semester to discuss your progress and degree plan for future semesters. Consult the HSU catalog for complete list of major program courses. See the current schedule of classes for courses offered in General Education, American Institutions, and Diversity & Common Ground requirements.

The online registration tutorial during orientation will help you:

- determine your CSU designated math "[placement category](#)" (1, 2, 3 or 4)
- choose your English class(es) through a similar self-directed process
- choose your Math class(es) based on your major and category information as described in the online registration tutorial

Total units required **120**

First Year Fall (Semester 1)		
Requirements Met:	Course	Units
GE Area B: Mathematics [2]	MATH 101 or (MATH 101i & MATH 1*) or MATH 102	3-4
GE Area E: Lifelong Learning	SCI 100	3
GE Area F: Ethnic Studies & DCG Domestic	NAS 104	3
Major (Core) & GE Area B	CHEM 109** <u>or</u> BOT 105	4
Semester Total:		13-14

**Credit earned for math support course does not count toward unit requirements for graduation, GE or major.*

***Prerequisite of math placement category I, II or III.*

First Year Spring (Semester 2)		
Requirements Met:	Course	Units
GE Area A: Written Communication	ENGL 102 or ENGL 104 (+ optional ENGL 110)	3-4
Major Prerequisite or Major (Core) [2]	MATH 101T or MATH 105*	3
Major (Core) & GE Area B	CHEM 109 <u>or</u> BOT 105	5
GE Area A: Oral Communication	COMM 100	3
GE Area D: Social Science		3
Semester Total:		17-18

**See footnote 2. If already completed MATH 105, adjust plan in consultation with advisor.*

Second Year Fall (Semester 3)		
Requirements Met:	Course	Units
GE Area A: Written Communication	ENGL 103 (+ optional ENGL 110)*	3-4
Major (Core)	BIOL 105	4
Major (Core) [2]	MATH 105**	5
GE Area C: Arts or Major (Core)	GE area C or CHEM 110	3-5
Semester Total:		15-18

**If ENGL 104 was taken the previous semester take an elective, other GE or a major course in place of ENGL 103.*

***See footnote 2. If already completed MATH 105, adjust plan in consultation with advisor.*

Second Year Spring (Semester 4)		
Requirements Met:	Course	Units
GE Area A: Critical Thinking		3
Major (Core)	STAT 109	4
Major (Core)	ZOO 110	4
American Institutions/GE Area D: Social Science		3
GE Area C: Arts or Major (Core)	GE area C or CHEM 110	3-5
Semester Total:		17-19

To Do: Register for the GWPE

Third Year Fall (Semester 5)		
Requirements Met:	Course	Units
Major (Core)	BIOL 340	4
Major (Concentration) [3]	CHEM 228 OR (CHEM 324+324L)	4-5
Major (Core)	PHYX 106	4
GE Area C: Humanities		3
GE Area C: Arts or Humanities		3

Semester Total: 18-19

Third Year Spring (Semester 6)		
Requirements Met:	Course	Units
Major (Concentration)	PHYX 107 OR (PHYX 118 + 3 units of elective)	4
Major (Concentration)	CHEM 325+325L*	3-5
Co-requisite to CHEM 325 & 325L	CHEM 323*	1
American Institutions		3
Major (Concentration)	BIOL 412	4

Semester Total: 15-17

* If CHEM 228 was taken in the previous semester, choose a different major or GE class instead of CHEM 325 & 325L. If enrolling in CHEM 325 & 325L, note that CHEM 323 (1 unit) is a co-requisite.

Fourth Year Fall (Semester 7)		
Requirements Met:	Course	Units
Major (Core) & UD GE Area B	BIOL 307	4
Major (Concentration)	BIOL 418 or BIOL 433+433D	4
Major (Concentration)	UD RESTRICTED ELECTIVE	2-4
Major (Concentration)	UD RESTRICTED ELECTIVE	1-4
UD GE Area C [1]		3

Semester Total: 14-19

Fourth Year Spring (Semester 8)		
Requirements Met:	Course	Units
Major (Concentration)	UD RESTRICTED ELECTIVE	3-4
Major (Concentration)	UD RESTRICTED ELECTIVE	3-4
Major (Concentration)	UD RESTRICTED ELECTIVE	1-2
Major (Concentration)	BIOL 330	4
UD GE Area D [1]		3

Semester Total: 14-17

Notes

[1] Complete 2 DCG courses, (one must be domestic) with courses that also meet GE.

[2] Major & GE Area B dependent on Math Placement Category - review details about [math placement categories](#). MATH 105 is required for the major. If MATH 105 is taken earlier than shown here, adjust plans accordingly in consultation with an advisor.

[3] If CHEM 228 was taken in the previous semester, choose a different major or GE class instead of CHEM 325 & 325L. If enrolling in CHEM 325 & 325L, note that CHEM 323 (1 unit) is a co-requisite.