



Degree Plan for Bachelor of Science Degree in Biology, General Biology Option

Highly Recommended Courses:

BIO	1023	General Biology for Majors
BIO	1021	Introduction to Biology Laboratory
CHM	1034/1044	General Chemistry for Non-Majors/General Organic and Biochemistry

Required Courses:

BIO	2104	General Botany
BIO	2114	General Zoology

Biology majors are required to enroll in and successfully complete botany (BIO2104) and zoology (BIO2114) within their first four semesters at HSU. Students must meet with their departmental advisor to determine the schedule appropriate for them.

BIO	2094	Microbiology
BIO	3054	Genetics
BIO	3524	General Ecology
BIO	4214	Cell Biology

Choose ONE (1) from the following courses:

BIO	3304	Plant Physiology
BIO	3314	Animal Physiology

Choose ONE (1) from the following courses:

BIO	3084	Comparative Anatomy and Evolution of Vertebrates
BIO	3244	Comparative Morphology and Evolution of Plants

A minimum of TWO (2) additional upper-level courses in biology must be selected. These may be from the courses listed above or others listed in the Henderson catalog. Two semesters of Human Anatomy and Physiology will satisfy one of these requirements. BIO 4251, BIO 4373, and BIO 4823 may not be used for this requirement.

Additional requirements:

CHM 1014, 1024 University Chemistry
CHM 3063, 3073 Organic Chemistry I and II
CHM 3051, 3131 Organic Chemistry I and II Lab
MTH 1243, STA 2054 or STA 2323 College Algebra and Applied Biostatistics or Statistical Methods or more advanced courses, with approval.
PHY 2034, 2044 General Physics I and II

Total hours required for a major in biology, general biology and pre-professional option:.....68-71

Biology Courses: 38-40 hours

Physical Science and Mathematics Courses: 30-31 hours

Students must have a “C” grade or better in all courses in the major field and also in the courses listed as “additional requirements.”

The biology department highly recommends that students achieve competence in the use of computers for word processing, graph and spreadsheet construction, and PowerPoint presentations before enrolling in upper-level courses. Students should consider enrolling in Introduction to Computers (CSC 2003) if their background in computer use is weak.

DEGREE PLAN
Bachelor of Science in Biology, General Biology and Pre-professional Option, 2019/2020 version

Degree Completion Plan Beginning in Fall Semester							
Freshman				Sophomore			
Fall	Hrs.	Spring	Hrs.	Fall	Hrs.	Spring	Hrs.
Gen. Bio. Maj./lab	3 or 4	Botany or Zoology	4	Zoology or Botany	4	Biology Core	4
Gen Chem. I/Soc. Sci.	3 or 4	College Algebra	3	University Chem. I	4	University Chem. II	4
Hender. Seminar	1	Gen Chem. II/Elective	3 or 4	Stud. Lit./World Lit.	3	US His./Am.Nat.Gov.	3
English A	3	English B	3	Social Sci./Elective	3	Oral Comm.	3
World Civ.	3			Stat. Methd./Appl. Biost.	3 or 4	Core Elective	3
Life Fitness or PE	1						
Total Hours	14 to 16	Total Hours	13 or 14	Total Hours	17 or 18	Total Hours	17
Junior				Senior			
Fall	Hrs.	Spring	Hrs.	Fall	Hrs.	Spring	Hrs.
Biology Core	4	Biology Core	4	Biology Core	4	Biology Core	4
Physics I	4	Biology Core	4	Biology Elective	3 or 4	Biology Elective	3 or 4
Humanities	3	Physics II	4	Non-West. Culture	3	Core Elective	3 or 4
Organic Chem. I	4	Organic Chem. II	4	Writing Course	3		
				Core Elective	3		
Total Hours	15	Total Hours	16	Total Hours	16 or 17	Total Hours	10 to 12

120 hours are required for graduation.

Note: Two writing (WI) intensive courses are required.

42 upper-level (junior/senior) hours are required.

At least one WI course must be in biology.

Degree plan includes some optional, but highly recommended courses. Please consult with your departmental advisor for additional details or if you have questions.

Students interested in particular graduate programs should consult closely with their advisors, as requirements may be different.

If students plan on minoring in chemistry, one additional semester of chemistry will be required. See catalog.

Note: Courses may be taken in semesters other than those shown above. Consult with your advisor for alternative scheduling. See information on reverse side of this sheet for a full list of core courses.

- It is the responsibility of the student to be familiar with all degree requirements as listed in the University Catalog.
- Students shall verify that they have completed all the appropriate prerequisites before enrolling in classes.
- Students shall complete an application for graduation no later than the semester preceding their anticipated graduation date.
- **Recommended Chemistry Course Sequence for Pre-health Sciences (Pre-Dental, Pre-Medical, Pre-Optometry, Pre-Osteopathy, Pre-Pharmacy, Pre-Physical Therapy, Pre-Physician Assistant, and Pre-Veterinary) Biology Majors:** The vast majority of our majors benefit from taking CHM 1034 General Chemistry I during their freshman year, prior to enrolling in CHM 1014 University Chemistry I. The general chemistry to university chemistry course sequence recommended for pre-health sciences biology majors, based on a long-proven track record, provides the greatest likelihood of success in this portion of the curriculum. Pre-health sciences students are encouraged to work

closely with the advisor in their particular focus area to help ensure timely and successful progression of coursework to graduation. The Department of Chemistry and Biochemistry recommends a score of 22 or higher on the Mathematics component of the ACT and/or prior completion of MTH 1243 college Algebra to enroll directly in CHM 1014. Medical school admissions committees generally place considerable emphasis on the GPA achieved in the chemistry curriculum and this carries a great deal of weight in evaluating the potential for applicants' prospects of success. Depending on the previous school attended and courses completed, transfer students may have additional considerations, and should seek advice from their departmental advisor as soon as possible.

Note: pre-medical biology majors are not required to take CHM 1034 to earn the biology degree; however, it is highly recommended as a preparation for CHM 1014 (see previous paragraph for additional details). If the student chooses to take it, he/she will be better prepared for success in subsequent chemistry courses and the MCAT. If CHM 1034 is taken, it may require at least one summer class to be prepared to take the MCAT during the junior year.

Student signature _____ Date _____

Advisor signature _____ Date _____

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