

RECOMMENDED ACADEMIC PLAN – SCIENCE

Life Science Option

Semester I		Semester II	
BIOL 110 Biology: Basic Concepts and Biodiversity GN	4	*BIOL 220W Biology: Populations and Communities, 230W Biology: Molecules and Cells, or 240W Biology: Function and Development of Organisms GN	4
CHEM 110 Chemical Principles GN and 111 Experimental Chemistry GN	4	CAS 100 Effective Speech GWS	3
ENGL 015 Rhetoric and Composition GWS	3	<i>CHEM 112 Chemical Principles II/113 Experimental Chemistry II GN</i>	4
MATH 140 Calculus With Analytic Geometry I GQ	4	<i>MATH 141 Calculus with Analytic Geometry II GQ</i>	4
First-Year Seminar	1	GHA	1.5
	16		16.5
Semester III		Semester IV	
*BIOL 220W Biology: Populations and Communities, 230W Biology: Molecules and Cells, or 240W Biology: Function and Development of Organisms GN	4	*BIOL 220W Biology: Populations and Communities, 230W Biology: Molecules and Cells, or 240W Biology: Function and Development of Organisms GN	4
CHEM 202 Fundamentals of Organic Chemistry I or CHEM 210 Organic Chemistry I	3	CHEM 203 Fundamentals of Organic Chemistry II or CHEM 212 Organic Chemistry II, 213 Laboratory in Organic Chemistry	3-5
*Foreign Language I or Supporting course	4	^BMB 211 Elementary Biochemistry, 251 Molecular and Cell Biology I or MICRB 201 Introductory Microbiology	3
SELECT FROM CMPS 121 Introduction to Programming Techniques, MATH 230(4) Calculus and Vector Analysis, MATH 250(3) Ordinary Differential Equations, OR STAT 200 Elementary Statistics GQ	4	*Foreign Language II or Supporting course	4
GHA	1.5		14-16
	16.5		
Semester V		Semester VI	
<i>ENGL 202C Effective Writing: Technical Writing GWS</i>	3	*PHYS 251 Introductory Physics I or 212 General Physics: Electricity and Magnetism GN	4
*PHYS 250 Introductory Physics I OR 211 General Physics: Mechanics GN	4	Select 3 credits from 400 level Science courses from: BMB, BIOL, BIOTC, MICRB	3
Supporting Course	3	Arts GA	3
Arts GA	3	Social and Behavioral Sciences GS	3
Humanities GH	3	Supporting Course	3
	16		16
Semester VII		Semester VIII	
400-level course selection	3	400-level course selection	3
Select 3 credits from 400 level Science courses from: BMB, BIOL, BIOTC, MICRB	3	Select 3 credits from 400 level Science courses from: BMB, BIOL, BIOTC, MICRB	3
*PHYS 213 General Physics: Fluids and Thermal Physics /214 General Physics: Wave Motion and Quantum Physics GN or Supporting course	4	Supporting course	3-6
Supporting course	3	Social and Behavioral Sciences GS	3
Humanities GH	3		12-15
	16		

Advising Notes

- **Bold type** require a grade of C or better.
- *Italics* indicates courses that satisfy both major and General Education requirements.
- **Bold Italics** indicates courses requiring a quality grade of C or better and that satisfy both major and General Education requirements.
- GWS, GHA, GQ, GN, GA, GH, and GS are codes used to identify General Education requirements.
- US, IL, and US:IL are codes used to designate courses that satisfy University United States/International Cultures requirements.
- Y, IL, and US is the code used to designate courses that satisfy University Writing Across the Curriculum requirements.

Students must complete a 3-credit course in "United States Cultures (US)" and a 3-credit course in "International Cultures (IL)." c

*Academic Advising Notes:

For Biol 220W, Biol 230W or Biol 240W to count as a Writing Across the Curriculum requirement, they must all be completed.

Major requires foreign language proficiency to the 8th credit level. Proficiency can be met with course work to the level of the second semester or by 4 years of consecutive high school foreign language. Please discuss with academic adviser.

Select from either PHYS 250 and 251 or PHYS 211, 212, 213 and 214.

^ Students are strongly recommended to schedule MICRB 202 with MICRB 201.

See program list for courses which may not be used in supporting course category.
<http://www.science.psu.edu/sciencebs/programlist.html>

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