

# ADVISING WORKSHEET: GENERAL SCIENCE

#### **GENERAL NOTES**

- A minimum of 123 credits are required for graduation.
- Credits earned for COM 100 and MAT 100 do not count toward the 123 credits required for graduation; however, COM 100 students may petition for elective credit.
- Where appropriate, courses required for the major can be used to satisfy General Education requirements. However, the credits earned for these courses are applied to either the Gen Ed requirements or the major, not both.
- Paths of Knowledge coursework may count towards major or minor requirements, but may not fulfill a second Mid-Level Liberal Arts Exploration requirement.
- Students are expected to follow the catalog requirements for General Education, the major, and additional requirements.
- A minor or second major within the areas listed under Paths of Knowledge automatically fulfills that area of the Gen Ed requirements.

#### **OPPORTUNITIES FOR MAJORS**

#### **Science Association**

The object of this club is to afford an opportunity for the students of science to become better acquainted, to secure the intellectual stimulation that arises from professional association, to obtain experiences in preparing and presenting technical material before chemical audiences, to foster a professional spirit among the members, to instill a professional pride in the sciences, and to build an awareness of the responsibilities and challenges facing the modern scientist. Membership of this association is open to students pursuing their study in the area of science and related fields.

#### **Pre-Health Club**

The Pre-Health Professions Club includes, but is not limited to, Pre-Medical, Pre-Dental, Physician Assisting, Occupational Therapy, Nursing, and Pre-Veterinary students. It provides a setting in which students who are working toward future careers in the health professions can get together, share information, learn more about the health professions in general, and develop friendships with students who share some of their interests. Members of this organization are composed of students pursuing study in several areas of science and related health fields.

#### **Environmental Club**

The purpose of this student organization is to maintain the temperate deciduous forest, riparian, and freshwater ecosystems about Alvernia University and the community it serves. The organization does this by recruiting new members, educating the public, and holding events that draw attention to the environment. Such events are Eco-Fun Day, trail clean-up days, and hosting public speaker seminars.

#### Beta Kappa Chi

Beta Kappa Chi is the National Science Honor Society composed of chapters which seek to encourage and advance scientific education through original education, the dissemination of scientific knowledge and the stimulation of high scholarship in pure and applied science.

#### Epsilon Gamma Chapter of the Delta Epsilon Sigma Honor Society

This is a National Scholastic Honor Society for students, faculty, and alumni of colleges and universities with a Catholic tradition.

#### **The Washington Center Experience**

Alvernia students have an opportunity to earn college credit by spending a semester or summer in Washington, D.C. where they serve as interns in a congressional office, government agency, major corporation, newspaper or news network, or agencies devoted to legal affairs, international relations, or business and economics. They also may intern with one of several non-profit groups dealing with the environment, women's issues, the arts, education, science, or labor relations among others. Participants are customarily juniors or seniors who have achieved grade point averages of 2.5 or better and who have the endorsement of the appropriate academic area. In addition to their internship, students select one seminar dealing with the arts and humanities, communication, public policy, the legal system, business, and government. Interested students should see their academic advisor.

# **General Education (54-56 credits)**

First Year Curriculum: Enduring Questions	Credits Required	Course	Term	Grade	Credits Earned
SEARCH Seminar-Enduring Questions or Honor Search-	3	SRH 101/			
Enduring Questions		HNR 160			
COM 101: Composition & Research	3	COM 101			
(Must earn a C or higher)					
THE 105: Foundations of Theology	3	THE 105			
PHI 105: Introduction to Philosophy	3	PHI 105			

Mid-Level Liberal Arts Exploration	Credits Required	Course	Term	Grade	Credits Earned
EXPLORING THE NATURAL WORLD (6-8 credits)		·			
Lab Science (Biology, Chemistry, Physics )	3-4	MET IN MAJOR			
Math (Other than MAT 100)	3-4	MET IN MAJOR			
INDIVIDUALS & COMMUNITIES (6 credits)					
History or Political Science	3				
PSY 101, HIS, POS, SOC, SSC, or ECON	3				
CULTURE & LANGUAGE (9 credits)					
Communication (Not COM 100 or 101)	3				
	3				
World Language – 2 courses in sequence	3				
CREATIVE EXPRESSIONS (6 credits)		·			
Literature (ENG)	3				
Art, Music, or Theatre	3				

Ethical Leaders and Followers	Credits Required	Course	Term	Grade	Credits Earned
Theology or Philosophy (200-400 level)	3				
Theology or Philosophy (Ethics/Morality @ 200 level)	3				

		nt towards minor or Related Requirements, Level Arts Exploration requirements.				
PATH 1:	PATH 2:		PATH			
Interdisciplinary Study (IS)	Multi-disciplinary Stud	y (MS)	In-depth Dis	ciplinary S	Study (DS)	
Three courses, at least two	Three courses, at least	two from	Three course	es at the 2	00-400 lev	/el in one
from Liberal Arts disciplines, not	Liberal Arts disciplines,	not the major,	Liberal Arts o	liscipline o	other than	i one's
the major, at the 200-400 level	at the 200-400 level em	ploying	major, guide	d by comr	non ideas	and
from the interdisciplinary	multiple disciplinary per	spectives to	methods of i	nquiry. Sti	udents ch	oose from
minors of Women & Gender	explore the Enduring Qu	uestions in	Art, Biology,	Chemistry	, Commu	nication,
Studies, Digital Media,	one of the following the	mes: Cultural	Computer Science, Economics, English,			
Community & Environmental	& Global Studies, Imagination &		History, Mathematics, Music, Philosophy,			
Sustainability, Community	Creativity, Peace & Cont	flict, Poverty	Political Science, Psychology, Sociology,			
Engagement, Cultural Studies,	& Wealth or Sustainabil	ity, Science &	Theology, Theatre or World Languages.			
Leadership Studies or Pre-Law.	Technology.		This path may be used to give students a			
			firm foundation in a discipline supporting			
			their chosen major, or to pursue an			
			interest in one of the Liberal Arts			
	disciplines.					
Course (See Catalog for lists of ap	proved courses for each	area.)	Area or	Term	Grade	Credits
			Discipline			Earned

### **BS GENERAL SCIENCE (51-55 credits)**

REQUIRED COURSES (41 credits)					
Course	Pre-Requisites	Co-Requisites	Term	Grade	Credits
BIO 103: Principles of Biology I					4
BIO 104: Principles of Biology II	BIO 103 or instructor permission				4
CHE 104: General Chemistry I		CHE 110			3
CHE 105: General Chemistry II	CHE 104, 110	CHE 111			3
CHE 107: Laboratory Safety					1
CHE 110: General Chemistry Lab I		CHE 104			1
CHE 111: General Chemistry Lab II	CHE 104, 110	CHE 105			1
PHY 103: Earth Science					4
PHY 110: General Physics I	High school algebra				4
PHY 111: General Physics II	PHY 110				4
MAT 131: Pre-calculus	Satisfactory score math placement				3
MAT 209: Probability & Statistics	Satisfactory score math placement				3
MAT 220: Math/Statistics Comp Lab					1
SCI 402: Seminar					2
SCI 406 Research I	Prescribed for seniors				3

## **REQUIRED SCIENCE ELECTIVES (10-14 credits)**

 Students must complete 10-14 credits in one of the following areas: Biology or Chemistry; 200-400 level courses with the exception of BIO 115/116.

 Course
 Term
 Grade
 Credits

Course	Term	Grade	Credits
	1	1	l

ELECTIVES or MINOR as required for the minimum 123 credits (not including MAT 100, COM 100)				
	Term	Grade	Credits	

#### **EIGHT SEMESTER PLAN**

<u>During the first 3 semesters</u>, it is important for students to make substantial progress toward completing those BIO and CHE courses that are pre-requisites for other required science courses (red).

Semester 1	Credits	Semester 2	Credits
SRH 101: Search Sem-Enduring Questions or	3	BIO 104: Principles of Biology II	4
HNR 160: Honor Search-Enduring Questions		CHE 105: General Chemistry II	3
BIO 103: Principles of Biology I	4	CHE 111: General Chemistry Lab II	1
CHE 104: General Chemistry I	3	MAT 131: Pre-Calculus	3
CHE 110: General Chemistry Lab I	1	THE 105 <b>or</b> PHI 105	3
CHE 107: Laboratory Safety	1		3
COM 101: Composition and Research	3		
	45		
TOTAL	15	TOTAL	14
Semester 3	Credits	Semester 4	Credits
MAT 209: Probability and Statistics	3	PHY 103: Earth Science Gen Ed SEARCH	3
MAT 220: Math/ Statistics Comp Lab CHE <b>or</b> BIO ELECTIVE	1 3-4	Gen Ed SEARCH	3 3
THE 105 or PHI 105	3-4	Gen Ed SEARCH	3
Gen Ed SEARCH	3	Gen Ed SEARCH	3
Gen Ed SEARCH	3	Gen eu Search	5
Gen eu Search	5		
TOTAL	16-17	TOTAL	15
Semester 5	Credits	Semester 6	Credits
PHY 110: General Physics I	4	PHY 111: General Physics II	4
CHE or BIO ELECTIVE	3-4	CHE or BIO ELECTIVE	3-4
Gen Ed SEARCH	3	Gen Ed SEARCH	3
Gen Ed SEARCH	3	Gen Ed SEARCH	3
Gen Ed SEARCH	3	ELECTIVE	3
TOTAL	16-17	TOTAL	16-17
Semester 7	Credits	Semester 8	Credits
SCI 402: Seminar	2	ELECTIVE	3
CHE or BIO ELECTIVE	3-4	ELECTIVE	
SCI 406: Research I	3	ELECTIVE	
Gen Ed SEARCH	3	ELECTIVE	3
ELECTIVE	3	Electives as needed (depends on req. 3	
ELECTIVE	3	taken science electives)	
TOTAL	17-18	TOTAL	15

ADDITIONAL GRADUATION REQUIREMENTS	RESIDENCY REQUIREMENTS	GRADUATION CREDITS EARNED
SRH 101/HNR 160: SEARCH SEMINAR	Minimum of 123 non-remedial credits earned	Liberal Arts Core credits earned
HUMAN DIVERSITY	45 of last 60 credits	Major and Related Area credits earned
COMMUNITY SERVICE HOURS	Minimum of 12 Alvernia credits in the major	Elective and/or Minor credits earned
OVERALL GPA = 2.0 or higher	Minimum of 9 Alvernia credits in the minor	SUBTOTAL
GPA IN MAJOR = 2.0 or higher	(if applicable)	SUBTRACT CREDITS EARNED FOR MAT
SENIOR CAPSTONE met with SCI 406/407		100, and if applicable COM 100
WRITING ENHANCED COURSE		TOTAL GRADUATION CREDITS

Academic Policy on Eligibility for Participation of May Commencement Ceremony

The <u>academic policy</u>, which the Registrar follows, is : A student who has 6 or less credits remaining to complete the degree may participate in the May Commencement Ceremony.

Application Deadlines: August Graduation - December 1; December Graduation - March 1; May Graduation - October 1. Any questions, please call the Registrar's Office.