

WORKSHEET FOR BIOLOGICAL SCIENCE MAJOR REQUIREMENTS (Fall 2007)

This document is subject to change at the discretion of the department. For questions, contact an advisor!

1. Complete a minimum of 38 semester hours of **biological science** courses, with grades of C- or better. At least 20 of the 38 hours must be taken at FSU.
2. Complete a minimum of 5 biological science lab or field courses (those with an "L" or "C" after the course number) with grades of C- or better.
3. Complete collateral courses in chemistry, physics, and mathematics as shown below, with grades of C- or better.
4. A minimum combined 2.0 GPA (no forgiveness) in all biology, chemistry, physics, math, and statistics courses, including prerequisites, that are applicable to the major.
5. A student who has earned more than 5 grades below a C- in courses required for the major (biological science, chemistry, physics, mathematics, and statistics), at FSU, or elsewhere, whether or not repeated, will not be permitted to graduate from FSU with a degree in biological science.
6. It is the student's responsibility to make certain that before registering for a course its prerequisites have been met satisfactorily. Prerequisites are listed in the FSU *Bulletin*.
7. Enrollment in upper division biology courses is restricted to students who have completed BSC 2010/L & 2011/L, CHM 1045/L & 1046/L.

PART I. BIOLOGICAL SCIENCE COURSES

Required: Introductory Biology Courses

BSC 2010	- Biological Science I	(3)	All	_____	BSC 4833C	- Radiation Biology	(3)	_____
BSC 2010L	- Biological Science I Lab	(1)	All	_____	BSC 4900r	- Directed Individual Study (1-4)	(See Note 1)	_____
BSC 2011	- Biological Science II	(3)	All	_____	BSC 4931r	- Senior Tutorial in Biological Science (1) Max. 2	(See Note 1)	_____
BSC 2011L	- Animal Diversity Lab	(2)	All	_____	BSC 4933r	- Research Methods (1-4)	(See Note 1)	_____

Required: Upper Division Biology Courses

PCB 3063	- General Genetics	(3)	All	_____	BSC 4934r	- Selected Topics in Biology (1-4)	(Max. 8)	_____
BSC 3402L	- Experimental Biology Lab	(2)	All	_____	BSC 4940	- Selected Topics in Applied Biology (1-4)	(Max. 4)	_____
BOT 3015	- Plant Biology	(2)	All	_____	BSC 4945	- Research Internship in Marine Biology (3-9)	(Max. 4)	_____
PCB 4674	- Evolution (<i>seniors</i> only)	(3)	All	_____	BSC 4970r	- Undergraduate Supervised Teaching (1)	(See Note 1)	_____

Required: At Least One Course from Two of Three Areas

Area I: Cell and Molecular Biology

MCB 4403/L	- Prokaryotic Biology/Lab	(3/2)	F, Su	_____	BSC 4XXX	- Seminar in Living Marine Resource Ecology	(1)	_____
PCB 3134	- Cell Structure and Function	(3)	F, Sp	_____	MCB 4603	- Environmental Microbiology	(3)	_____
PCB 4024	- Molecular Biology	(3)	F	_____	PCB 4024L	- Molecular Biology Laboratory	(1)	_____
PCB 4253	- Animal Development	(3)	Sp	_____	PCB 4042	- Perspectives in Ecol. & Evol. Biology	(3)	_____

Area II: Physiology

BOT 4503	- Plant Physiology	(3)	Sp	_____	PCB 4063Lr	- Experimental Genetics Laboratory (3)	(Max. 6)	_____
PCB 3743	- Vertebrate Physiology	(3)	F, Sp	_____	PCB 4233	- Immunology	(3)	_____
PCB 4723	- Gen. & Comp. Animal Physiology	(3)	Sp	_____	PCB 4233L	- Immunology Laboratory	(1)	_____

Area III: Ecology & Environmental Science

BSC 3052	- Conservation Biology	(3)	F	_____	PCB 4253L	- Animal Development Laboratory	(1)	_____
PCB 3043	- General Ecology	(3)	F	_____	PCB 4341C	- Advanced Field Biology	(3)	_____
ZOO 4513	- Animal Behavior	(4)	Sp	_____	PCB 4514	- Advanced Genetics and Molecular Biology	(3)	_____

Biology Elective Courses: Students must select additional Area courses (see above) or elective courses (listed below) to bring the total biology hours to 38.

BOT 3143C	- Field Botany	(4)	_____	_____	PCB 4731L	- Experimental Physiology Laboratory	(2)	_____
BOT 3015L	- Plant Biology Laboratory	(1)	_____	_____	PCB 4843	- Fundamentals of Neuroscience	(3)	_____
BOT 3800	- Plants and Man	(3)	_____	_____	ZOO 3203	- Advanced Invertebrate Zoology	(2)	_____
BOT 4373C	- Biology of Higher Plants	(4)	_____	_____	ZOO 3203L	- Advanced Invertebrate Zoology Laboratory	(2)	_____
BOT 4394	- Plant Molecular Biology	(3)	_____	_____	ZOO 3713C	- Comparative Vertebrate Anatomy	(4)	_____
BOT 4503L	- Plant Physiology Lab	(1)	_____	_____	ZOO 4204C	- Biology of Higher Marine Invertebrates	(5)	_____
BSC 3101	- History of Biology	(3)	_____	_____	ZOO 4232	- Parasitology	(3)	_____
BSC 3312	- Marine Biology	(3)	_____	_____	ZOO 4232L	- Parasitology Laboratory	(2)	_____
BSC 3930	- Seminar in Biological Frontiers	(1)	_____	_____	ZOO 4343C	- Biology of Lower Vertebrates	(4)	_____
BSC 3938	- Careers in Biological Science	(1)	_____	_____	ZOO 4353C	- Biology of Higher Vertebrates	(4)	_____
BSC 3949r	- Coop. Ed. Work Experience	(0)	_____	_____	ZOO 4753C	- Histology	(4)	_____
BSC 4514	- Aquatic Pollution Biology	(3)	_____	_____	ZOO 4823	- Insect Biology	(3)	_____
BSC 4613	- Systematics	(3)	_____	_____	ZOO 4823L	- Insects of North Florida	(2)	_____

Current Number of Completed and Registered Biology Hours Number of Biology Hours Transferred (see #1 above)

Note 1: A maximum of 6 semester hours of Honors Work in Biological Science (BSC 4970r), 6 semester hours of DIS (BSC 4900r) or Research Methods (BSC 4933r), 2 semester hours of Senior Tutorial (BSC 4931), and 1 semester hour of Undergraduate Supervised Teaching (BSC 4945) can be used to meet the 38 hour biological science coursework requirement.

Note 2: 5000-level courses (i.e., graduate level) may count as biology elective credit. Student must be a senior, have at least a 3.0 GPA in biology and collateral courses, and have approval of the instructor, Chair of the biology department, and Dean of Arts & Sciences.

r = Repeatable / A = All Semesters / Usually offered: F = Fall Sp = Spring Su = Summer

PART II. COLLATERAL COURSES

CHEMISTRY - all courses required

CHM 1045/L	- General Chemistry I + Lab	(3+1)	_____	_____
CHM 1046/L	- General Chemistry II + Lab	(3+1)	_____	_____
CHM 2210	- Organic Chemistry I	(3)	_____	_____
CHM 2211	- Organic Chemistry II	(3)	_____	_____

PHYSICS - choose one sequence

PHY 2053C	- College Physics A	(4)	_____	_____
PHY 2054C	- College Physics B	(4)	_____	_____
OR				
PHY 2048C	- General Physics A	(5)	_____	_____
PHY 2049C	- General Physics B	(5)	_____	_____

MATHEMATICS- complete Calculus I AND either Calculus II or the Statistics Option Prerequisites

MAC1105	_____	MAC1140	_____	MAC1114	_____
MAC 2311	- Calculus & Analytical Geometry I AND	(4)	_____	_____	_____
MAP 2480	- Biocalculus lab	(1)	_____	_____	_____
AND EITHER					
MAC 2312	- Calculus & Analytical Geometry II	(4)	_____	_____	_____
OR					
Statistics Option* (Calc I and Lab courses + 1 or 2 statistics courses)					
STA 2171	- Biostatistics	(4)	_____	_____	_____
OR					
STA 2122	- Introduction to Applied Statistics	(4)	_____	_____	_____
& STA XXXX	* See list below	(3)	_____	_____	_____

*Statistics Option: STA 2171 may be replaced by STA 2122 (Introduction to Applied Statistics) and either STA 3024 (recommended) or STA 4XXX.