FLORIDA ATLANTIC UNIVERSITY

All courses are three (3) credits unless otherwise indicated. Course selections should be made in consultation with an academic advisor.

BIOLOGY MAJOR
(2011 – 2012)

The Charles E. Schmidt College of Science
Bachelor of Arts (BA) and Bachelor of Science (BS)

FOUNDATIONS OF WRITTEN COMMUNICATION
(Gordon Rule Writing (GRW), 6 credits required)
(A grade of "C" or higher is required in each course)

___ **ENC 1101** ..... **College Writing I (REQUIRED)**
___ ENC 1102+ ..... College Writing II

THE FOLLOWING COURSES CAN BE SUBSTITUTED FOR ENC 1102:

___ ANT 1471+ ..... Cultural Difference in a Globalized Society
___ ENC 1930+ ..... University Honors Seminar in Writing **(Permit Only)**
___ ENC 1939+ ..... Special Topic: College Writing II
___ ENC 2452+◊ ..... Advanced Composition for Science
___ NSP 1195+ ..... Being Cared For: Reflections from Other Side of Bed

After completing this section, two additional (GRW) classes are required from two different departments. Choices are available in: Foundations in Global Citizenship and/or Foundations of Creative Expression.

FOUNDATIONS OF SOCIETY & HUMAN BEHAVIOR
(6 credits required, select 2 courses from 2 different departments)

Anthropology Department
___ ANT 2000 **& D**..... Introduction to Anthropology

Economics Department
___ ECO 2013# ..... Macroeconomic Principles
___ ECO 2023# ..... Microeconomic Principles
___ ECP 2002 ..... Contemporary Economic Issues

Exceptional Student Education Department
___ EEX 2091..... Disability and Society

Political Science Department
___ POS 2041 ..... Government of the United States

Psychology Department
___ **PSY 1012**..... **General Psychology (REQUIRED)**

Public Administration Department
___ PAD 2258 ..... Changing Env. of Soc., Bus., & Government

Sociology Department
___ SYG 1000 ..... Sociological Perspectives
___ SYG 2010 ..... Social Problems

Geosciences Department
___ EVR 2017 ..... Environment and Society

Urban & Regional Planning Department
___ URP 2051 ..... Designing the City

FOUNDATIONS OF SCIENCE & THE NATURAL WORLD
(8 credits req., select 2 courses from 2 different departments)
(All labs and discussions are required)
A grade of "C" or better is required in each class.

Biology Department
___ BSC 1011 **& L & D**..... Biodiversity (4 cr. incl. Lab and Discussion)

Chemistry Department
___ CHM 2045 **& L‡**..... General Chemistry I (4 credits. Incl. Lab)

Additional Biology and Chemistry classes are needed.
Refer to the B.A. and B.S. sections of this curriculum sheet.

FOUNDATIONS OF MATHEMATICS & QUANTITATIVE REASONING
(Grade of "C" or higher required. 6 credits required)
PRETEST IS REQUIRED BEFORE TAKING YOUR FIRST MATH CLASS
NOTE: Students must take at least one course with the prefix MAC or MGF from the list below

___ MAC 1105 ..... College Algebra
___ MAC 2233 ..... Methods of Calculus (or higher)
___ MAC 2311 ..... Calculus with Analytic Geometry I (4 cr)

Calculus with Analytic Geometry 1 requires a solid background in Algebra and Trigonometry. If you are not ready to take this course the following courses will provide the necessary background:

___ MAC 1114 ..... Trigonometry
___ MAC 1140 ..... Precalculus Algebra
___ MAC 1147 ..... Precalculus Algebra & Trigonometry (5 cr)

FOUNDATIONS IN GLOBAL CITIZENSHIP
(Select 2 courses from 2 different departments)
(6 credits required. At least 1 course from Global Perspectives)

---------- **WESTERN IDENTITIES:** ----------

Sociology Department
___ SYD 2790..... Race, Class, Gender, and Sexuality

Philosophy Department
___ PHI 2010++..... Introduction to Philosophy **(GRW)**

History Department
___ AMH 2010 **(P/F)** ..... United States History to 1877
___ AMH 2020 **(P/F)** ..... United States History Since 1877

Languages, Linguistics, & Comparative Literature Department
___ LAS 2000 ..... Intro to Caribbean & Latin American Studies

---------- **GLOBAL PERSPECTIVES (1 course required):** ----------

Anthropology Department
___ ANT 2410..... Culture and Society

Geography Department
___ GEA 2000 **& D** ..... World Geography

History Department
___ WOH 2012 & **D++** ..... History of Civilization I **(GRW)**
___ WOH 2022 ..... History of Civilization II

Sociology Department
___ SYP 2450..... Global Society

Political Science Department
___ INR 2002..... Introduction to World Politics

Languages, Linguistics, & Comparative Literature Department
___ LIN 2607 ..... Global Perspectives on Language

Curriculum, Culture, & Educational Inquiry Department
___ EDF 2854..... Educated Citizen in Global Context

Social Work Department
___ SOW 1005 ..... Global Perspectives on Social Services

FOUNDATIONS OF CREATIVE EXPRESSION
(6 credits req., select 2 courses from 2 different departments)

Architecture Department
___ ARC 2208 ..... Culture & Architecture

Visual Art & Art History Department
___ ARH 2000 **(P/F)**..... Art Appreciation

School of Communication & Multimedia Studies
___ FIL 2000 **& D**..... Film Appreciation

English Department
___ LIT 2010++..... Interpretation of Fiction **(GRW)**
___ LIT 2030++..... Interpretation of Poetry **(GRW)**
___ LIT 2040++..... Interpretation of Drama **(GRW)**

Languages, Linguistics, & Comparative Literature Department
___ LIT 2100 **& D**..... Global Great Books

Music Department
___ MUL 2010 ..... History & Appreciation of Music

Theatre & Dance Department
___ DAN 2100 ..... Appreciation of Dance
___ THE 2000..... Appreciation of Theatre

STUDENTS ASSUME RESPONSIBILITY FOR MEETING ALL GRADUATION REQUIREMENTS
Course selections should be made in consultation with an advisor

Legend

+	-	ENC 1101 is a prerequisite.
++	-	Two Foundations of Written Communications classes are required before taking this class.
#	-	Sophomore standing (30 credits earned) is required.
******	-	MAC 2281 or MAC 2311 is a prerequisite for this class. If a lab is needed take General Physics 1 Lab (PHY 2048 Lab).
*******	-	MAC 1105 and MAC 1114 are prerequisites for this class. If a lab is needed take General Physics 1 Lab (PHY 2048 Lab).
‡	-	A corequisite of College Algebra (MAC 1105) or a prerequisite of Introductory Chemistry (CHM 1025).
◊	-	A "B" in CHM 2045 and a grade of "C" or better in ENC 1101 in addition to a co-requisite of CHM 2051C is needed.
GRW	-	(WAC) Writing across the curriculum class.
D	-	A discussion is linked to the lecture. Students must register for the discussion in addition to the lecture.
L	-	A lab is linked to the lecture. Students must register for the lab in addition to the lecture.
P/F	-	Course may be taken pass (P) or fail (F) or for a letter grade. Indicate your preferred grading option during registration.

FOREIGN LANGUAGE (4 - 8 credits, 1 or more courses in the same language) - **REQUIRED FOR MAJOR**
Students with more than one year of a foreign language in high school should enroll in the second half of the beginners foreign language class (FOL/FRE/GER/GRE/GRK/HBR/ITA/JPN/LAT/SPN 1121) or a higher level course. Proficiency for a first-level course can be earned by successfully completing a second-level course. For questions related to this requirement, consult an academic advisor. CLEP exam credits meet this requirement: see the catalog.

∠ ***NOTE:*** *Native Speakers of a foreign language must consult the Languages, Linguistics, and Comparative Literature Department regarding this requirement.*

CLAS: College Level Academic Skills (CLAS) requirements need to be met prior to graduation. See the university catalog for additional information.

∠ ***NOTE***: *Honors Seminars SHALL BE ACCEPTED AS MEETING THE GORDON RULE WRITING REQUIREMENT. See the Freshman Academic Advising Services Office for details.*

∠ ***HONORS NOTE***: *Students can apply for the PSYCHOLOGY HONORS PROGRAM after completion of 60 credits, and before completion of 105 credits. Students must have a 3.2 overall & Psychology GPA to be admitted and retained in the Honors track.*

NOTE: See catalog for specific requirements, course descriptions, and additional information. The requirements for some Intellectual Foundations Program (I.F.P.) courses & other courses may be satisfied by passing the appropriate AP or CLEP exam. Check with your advisor and college.

The College of Science has the following requirements:
(1) A student must maintain a "C"- average or better in all biology AND cognate courses taken as part of the requirements for an undergraduate degree in Biological Sciences. However, students must maintain a "C" average in chemistry courses.

(2) Any course work in the major field transferred from another institution must be approved by the major dept.

(3) No major course may be taken pass/fail.

(4) The maximum amount of credit which may be earned through co-op is 10 credits; some departments allow some of these credits to substitute for major courses, check with department for specifics.

MAJOR COURSES, COLLEGE REQUIREMENTS and ELECTIVES

B.A. DEGREE

Environmental science or Secondary school teaching

Chemistry (12 credits required – **must earn a "C" or better**)

CHM 2046 & L	General Chemistry II and Lab	4 credits
CHM 2210 & D	Organic Chemistry I	3 credits
CHM 2211	Organic Chemistry II	3 credits
CHM 2211L	Organic Chemistry II Lab	2 credits

Physics (3 - 4 credits – must earn a "C-" or better)

PSC 2121	Physical Science	3 credits
OR		
PHY 2053	College Physics I	4 credits

B.A. **without** Environmental Emphasis

32 I.F.P. (w/out science or required math)
50-53 B.A. Biology Core and Required Math
35-38 General Electives*
120 Credits (45 credits at upper division)

*(16 cr. upper division)

Mathematics (Gordon Rule - **must earn a "C" or better**) (9-10 credits)
MUST TAKE A PLACEMENT TEST BEFORE REGISTERING FOR MATH COURSES

	MAC1105	College Algebra	3 credits
OR {	MAC 2233	Methods of Calculus	3 credits
	MAC 2311	Calculus with Analytic Geometry	4 credits
	PSY 3234	Exp. Design & Stat. Inference	3 credits

(PSY 3234 will not count for CLAST exemption.)

Biological Sciences (18 - 19 credits – **must earn a "C-" or better**)

BSC 1010 & L	Biological Principles and Lab	4 credits
(BSC 1010 also requires a discussion)		
BOT 4503	Principles of Plant Physiology	2 credits
BOT 4503L	Principles of Plant Physiology Lab	2 credits
OR		
PCB 4723	Comparative Animal Physiology	3 credits
PCB 4723L	Comparative Animal Phys. Lab	1 credits
PCB 3063	Genetics	4 credits
PCB 4043	Principles of Ecology	3 credits
PCB 4023	Molecular and Cell Biology***	3 credits
OR		
MCB 3020	General Microbiology	3 credits
MCB 3020L	General Microbiology Lab	1 credit

*** BCH 3033 (Biochemistry I) is a prerequisite and can serve as an elective.

Biology electives (12 - 13 credits upper division)

Environmental Science Emphasis (required courses):

ECO 2023	Microeconomic Principles	3 credits
ECO 2013	Macroeconomic Principles	3 credits
ECP 4302	Environmental Economics	3 credits
PHI 3640	Environmental Ethics	3 credits
PCB 3352	Issues in Human Ecology	3 credits
OR		
ENV 2017	Environment and Society	3 credits

B.A. **with** Environmental Emphasis

32 I.F.P. (w/out science or required math)
50-53 B.A. Biology Core and Required Math
15 Environmental Science
20-23 General Electives*
120 Credits (45 credits at upper division)

NOTE: Students are responsible for completing 45 credits of upper division coursework
(The BA consists of 29 – 31 upper division credits. Therefore you need 14 – 16 credits of upper division general electives.)

B.S. DEGREE
(80 credits total, 38 – 43 credits of Upper Division Coursework)

TIER 1 – Required Courses (Biology Core) - 53 credits

BSC 1010 & L	Biological Principles and Lab (BSC 1010 also requires a discussion)	4 credits
PCB 4023	Molecular and Cell Biology	3 credits
PCB 3063	Genetics	4 credits
PCB 4043	Principles of Ecology	3 credits
CHM 2046 & L	General Chemistry II and Lab	4 credits
CHM 2210 & D	Organic Chemistry I[1]	3 credits
CHM 2211	Organic Chemistry II[1]	3 credits
CHM 2211L	Organic Chemistry II Lab[1]	2 credits
BCH 3033	Biochemistry I	3 credits
PHY 2053	College Physics I[2]	4 credits
PHY 2048L	General Physics I Lab	1 credit
OR		
PHY 2048	General Physics I[3]	4 credits
PHY 2048L	General Physics I Lab	1 credit
PHY 2054	College Physics II	4 credits
PHY 2049L	General Physics II Lab	1 credit
OR		
PHY 2049	General Physics II	4 credits
PHY 2049L	General Physics II Lab	1 credit

Students must select a total of 27 credits from Tier 2 and Tier 3
(Please see department for a list of courses)

TIER 2
A minimum of 12 credits is required from this Tier level.

TIER 3
Optional Electives (or other courses approved by your academic advisor).

B.S. Biology

32 I.F.P. (w/out science or required math)
80 B.S. Biology and Required Math
8 General Electives*
120 Credits (45 credits at upper division)

*(2 cr. upper division)

Mathematics (Gordon Rule - **must earn a "C" or better** – 9-10 credits)
MUST TAKE A PLACEMENT TEST BEFORE REGISTERING FOR MATH COURSES

	MAC1105	College Algebra	3 credits
OR {	MAC 2233	Methods of Calculus	3 credits
	MAC 2311	Calculus with Analytic Geometry	4 credits
	PSY 3234	Exp. Design & Stat. Inference	3 credits

1. **Chemistry courses require a "C" or better**
2. **Prerequisite of a "C" in one these math courses: MAC 1114 / 1147 / 2233 / 2253 / 2241 / 2311**
3. **Prerequisite of a "C" in MAC 2311 or MAC 2253**

NOTE: A maximum of 5 credits in Directed Independent Study may be applied for degree credit.
Students are responsible for completing 45 credits of upper division coursework