Interdisciplinary Sciences

Interdisciplinary Science

Building	Phone	Website	Email
Building 4, Room 237	(850) 474-3018	https://uwf.edu/hmcse/	pmoorer@uwf.edu

Zoo Science

Building	Phone	Website	Email
Building 58C, Room 104A	(850) 474-2748	https://uwf.edu/hmcse/departments/biology/	biology@uwf.edu

The Interdisciplinary Science program is designed for students who want a broadly based education in Science, Technology, Engineering, and Math rather than an in-depth study of one field. The program covers two specializations: Zoo Science (BS) and Interdisciplinary Sciences (BS). Because some professional and graduate schools prefer their applicants to demonstrate excellence in a specific discipline, the interdisciplinary science major considering graduate or professional (dentistry, medicine, optometry or veterinary medicine) studies should consult a faculty advisor.

Interdisciplinary Sciences Specialization

The BS in Interdisciplinary Sciences is a multidisciplinary program that provides a strong foundation in one area of the sciences and flexibility to add content and skills from other HMCSE STEM programs. The academic goal of this program is to afford students the opportunity to make connections between ideas and concepts across disciplinary boundaries and to be capable of defining and examining scientific problems from an interdisciplinary perspective.

The BS in Interdisciplinary Sciences is built upon a foundation within the UWF HMCSE STEM disciplines (Biology, Earth & Environmental Sciences, and Computer Science) and allows for additional coursework from Chemistry, Electrical & Computer Engineering, Information Technology, Mathematics, Mechanical Engineering, and Physics.

Program Requirements

In addition to the university's general requirements, students seeking the B.S. in Interdisciplinary Sciences must meet the requirements listed below.

A grade of "C-" or better is required in all courses applied to this academic program. Consult with your academic advisor for courses that may satisfy both the General Education requirements and program course prerequisites.

General Education

Interdisciplinary Science majors should satisfy the mathematics (6 sh) and science (7 sh) components of General Education with course work taken from the recommendations shown below.

In addition to the General Education requirements listed on this page, students must satisfy all additional University requirements, including the Gordon Rule, multicultural, and foreign language requirements. With appropriate planning and coordination with an academic advisor, students may satisfy some of the general University requirements through the General Education curriculum. For a complete listing of general degree requirements, refer to the "University Requirements" section of this catalog.

General Education Curriculum:

Communication

ENC 1101	English Composition I	3
ENC 1102	English Composition II	3

Mathematics

Choose one course from Group A and one Additional course from either Group A or Group B		6
Group A		
MAC 1105	College Algebra	
MAC 1105C	College Algebra with Lab	
MAC 2311	Analytic Geometry and Calculus I	
MGF 1106	Mathematics for Liberal Arts I	
MGF 1107	Mathematics for Liberal Arts II	
STA 2023	Elements of Statistics	
Group B		
MAC 1114	Trigonometry	
MAC 1140	Precalculus Algebra	
MAC 1147	Precalculus with Trigonometry	
MAC 2233	Calculus with Business Applications	
MAC 2312	Analytic Geometry and Calculus II	
STA 2360	Introduction to Data Science	

Social Sciences

Choose one course from Group A and one additional course from either Group A or Group B		6
Group A		
AMH 2020	United States since 1877	
ANT 2000	Introduction to Anthropology	
ECO 2013	Principles of Economics Macro	
POS 2041	American Politics	
PSY 2012	General Psychology	
SYG 2000	Introduction to Sociology	
Group B		
AMH 2010	United States to 1877	
ANT 2100	Introduction to Archaeology	
ANT 2400	Current Cultural Issues	
CCJ 2002	Survey of Crime and Justice	
COM 2023	Death and Communication	
CPO 2002	Comparative Politics	
DEP 2004	Human Development Across the Lifespan	
EUH 1000	Western Perspectives I	
EUH 1001	Western Perspectives II	
FIN 2104	Personal Financial Planning	
GEA 2000	Nations and Regions of the World	
GEB 1011	Introduction to Business	
HIS 2050	Explore! History	
IDH 1041	Honors Core 2	
INR 2002	International Politics	
MMC 2000	Principles of Mass Communication	
PLA 2013	Survey of American Law	
SOW 2192	Understanding Relationships in the 21st Century	

SPM 2010	Sport in Global Society
SYG 2010	Current Social Problems

Humanities

Choose one course from Group A and one additional course from either Group A or Group B		6
Group A		
ARH 1000	Art Appreciation	
LIT 2000	Introduction to Literature	
MUL 2010	Music Appreciation	
PHI 2010	Introduction to Philosophy	
THE 2000	Theatre Appreciation	
Group B		
AML 2010	American Literature I	
AML 2020	American Literature II	
AML 2072	Sex, Money, and Power in American Literature	
ARH 2050	Western Survey I: Prehistory to the Medieval Period	
ARH 2051	Western Survey II: Renaissance to Contemporary	
ART 1015C	Exploring Artistic Vision	
ART 2821	The Self, Creativity, Your Career and Visual Culture	
CRW 2001	Introduction to Creative Writing	
ENL 2010	History of English Literature I	
ENL 2020	History of English Literature II	
IDH 1040	Honors Core 1	
LIT 2030	Introduction to Poetry	
MUH 2930	The Music Experience: Special Topics	
PHI 2103	Critical Thinking	
PHI 2603	Ethics in Contemporary Society	
REL 1300	World Religions	
SPC 2608	Basic Communication Skills	
THE 2300	Survey of Dramatic Literature	

Natural Sciences

Choose one course from Group A and one additional course from either Group A or Group B		6
Group A		
AST 1002	Descriptive Astronomy	
BSC 1005	General Biology for Non-Majors	
BSC 1085	Anatomy and Physiology I	
BSC 2010	Biology I	
CHM 1020	Concepts in Chemistry *	
CHM 2045	General Chemistry I *	
ESC 2000	Introduction to Earth Science	
EVR 2001	Introduction to Environmental Science	
PHY 1020	Conceptual Physics	
PHY 2048	Calculus-Based Physics I **	
PHY 2048C	Calculus-Based Physics I Studio ***	
PHY 2053	Algebra-Based Physics I **	
Group B		
ANT 2511	Biological Anthropology	
AST 2037	Life in the Universe	
BOT 2010	General Botany	
BSC 1050	Fundamentals of Ecology	
BSC 1086	Anatomy and Physiology II *	
BSC 2011	Biology II	
BSC 2311	Introduction to Oceanography and Marine Biology *	
CGS 2020	Introduction to Machine Learning	
CHM 2046	General Chemistry II *	
CIS 2530	Introduction to Cybersecurity	
GLY 2010	Physical Geology *	
MCB 1000	Fundamentals of Microbiology *	
PHC 2082	Informatics and Your Health	
PHY 2049	Calculus-Based Physics II **	
PHY 2054	Algebra-Based Physics II *	

* May be taken with or without lab.

** Algebra-Based Physics is usually recommended for non-science majors, while Calculus-Based Physics is recommended for science majors

*** Although students receive 5 semester hours credit for PHY 2048C, an additional 3 semester science course will be needed to meet General Education requirements.

General Education Electives

Choose an additional course from two of the three areas of Humanities, Social Sciences and Natural Sciences

Multicultural Requirement

Multicultural Courses

An important component of a liberal education is the study of cultures other than one's own. As such, multiculturalism encompasses the appreciation of the values, expressions, and modes of organization of diverse cultural communities. To further such study, the University of West Florida requires all students pursuing a bachelor's degree to complete at least one course that explores one or more of the dimensions of another culture (language, religion, socio-economic structures, etc.). Students are exempt from this requirement if they have completed an A.A. degree, the general education program at a Florida public institution, or a baccalaureate degree.

The requirement is satisfied by the successful completion of a multicultural course designated on the following list. Several of the selections are General Education courses, and students may enroll in these to meet both the General Education and the multicultural requirements.

***Passed by UWF Faculty Senate on 11/08/2002*

This list is continually updated and students are encouraged to check with their advisors for alternative options.

AML 2010	American Literature I	3
AML 2020	American Literature II	3
AML 3604	African American Literature	3
AML 3624	Black Women Writers	3
AML 4015	Topics in Nineteenth-Century American Literature	3
AML 4640	Topics in Native American Literature	3
ANT 1001	Anthropology as a Profession	1

ANT 2000	Introduction to Anthropology	3
ANT 2301	Human Sexuality and Culture	3
ANT 3212	Peoples and Cultures of the World	3
ANT 3312	North American Indians	3
ANT 3363	Japanese Culture	3
ANT 3403	Cultural Ecology	3
ANT 4006	Anthropology of Human Rights	3
ANT 4025	Ritual Use of Human Remains	3
ANT 4516	Modern Human Physical Variation	3
ARH 1000	Art Appreciation	3
ARH 2050	Western Survey I: Prehistory to the Medieval Period	3
ARH 2051	Western Survey II: Renaissance to Contemporary	3
ARH 3590	Non-Western Art	3
ARH 3607	Native American Art	3
ARH 4302	Late Renaissance Art in Italy	3
ARH 4412	The Age of Revolution to Romanticism in Europe: 1750-1850	3
ARH 4450	Modern Art: 1850-1980	3
ARH 4470	Contemporary Art	3
ARH 4563	Art of Japan	3
CCJ 3678	Race, Gender, Ethnicity, and Crime	3
COM 3014	Gender Communication	3
COM 3461	Intercultural Communication	3
COM 4242	Communication and Christianity	3
CPO 2002	Comparative Politics	3
CPO 4792	Geopolitics	3
CRW 2001	Introduction to Creative Writing	3
EDF 2085	Teaching Diverse Populations	3
ENG 4013	Introduction to Literary Theory	3
ENL 2020	History of English Literature II	3
EUH 1000	Western Perspectives I	3
EUH 1001	Western Perspectives II	3
EUH 3203	Modern Europe	3
EUH 3334	Emperors, Sultans, Dictators, and Democrats: The Balkans	3
EUH 3411	Rome and the Mediterranean World	3
EUH 3576	Soviet Union since 1917	3
EUH 4563	The Other Germany: The Lands of the Austrian Monarchy, 1526-1918	3
FRE 4955	Supervised Foreign Language Field Experience Abroad	1-3
GEA 2000	Nations and Regions of the World	3
GEB 4361	International Business	3
GEO 3421	Cultural Geography	3
GEO 3471	Geography of World Affairs	3
HIS 2050	Explore! History	3
HIS 4262	Rise and Fall of the Portuguese Empire	3
IDH 1040	Honors Core 1	3
IDH 1041	Honors Core 2	3
INR 2002	International Politics	3
LAH 4135	Spanish Conquest of the Americas	3
LAH 4131	'Atlantic Indians': How Indigenous and African Peoples Shaped Europe & the Americas	3
LAH 4451	Greater Mexico: Central America from Conquest to the 20th Century	3
LAH 4728	Gender and Sexuality in Latin America from Colonization to Today	3
LIT 2000	Introduction to Literature	3
LIT 2030	Introduction to Poetry	3
LIT 3233	Postcolonial Literature	3
LIT 4036	Topics in Poetry and Poetics	3
LIT 4385	Feminist Theory	3
MAN 4102	Management of Diversity	3
MAR 4156	Seminar in International Marketing	3
MMC 3743	Communicating Fear: Horror Films and Popular Culture	3
MMC 3745	Communicating Fear Abroad: International Horror Films & Popular Culture	3
MUH 2930	The Music Experience: Special Topics	3
MUL 2010	Music Appreciation	3
NUR 4615	Community and Public Health Nursing	3
NUR 4636	Population-based Public Health Nursing	3
PHI 3790	African Philosophy	3
PUR 3404	International Public Relations	3
PSY 3860	Positive Psychology	3
SOP 3730	Psychology, Culture, and Society	3
SOW 4233	Human Diversity and Social Justice	3
SPN 3400	Advanced Stylistics	3
SPN 4520	Latin American Culture and Civilization	3
SYO 4421	Sociology of Health, Illness and Health Care	3
SYO 4530	Inequality in America	3

Civic Literacy Requirement

The 2017 Florida Legislature amended Section 1007.25, Florida Statutes, to require students ***initially entering*** **a State University System (SUS) and/or Florida College System (FCS) institution in 2018-2019** and thereafter to demonstrate competency in civic literacy.

The 2021 Legislature further amended Florida Statutes, requiring students to complete both a civic literacy course and exam. As a result, there are three cohorts of students currently matriculating at Florida public institutions subject to varying requirements. As demonstrated in the table below, the exact civic literacy requirements are based on the academic term in which a student first enrolled in a Florida public institution.

Students Included in Cohort	**Civic Literacy Competency Requirement**
Cohort 1: Students first entering the SUS or FCS prior to fall 2018	None
Cohort 2: Students first entering the SUS or FCS in fall 2018 – summer A 2021	Complete a course **or** exam
Cohort 3: Students first entering the SUS or FCS in summer B 2021 (on or after July 1, 2021) and thereafter	Complete both a course **and** exam

Additionally, the 2021 Legislature made two additional exceptions: approving the use of accelerated mechanisms for meeting the course competency requirement and exempting high school students who pass the Florida Civic Literacy Exam in high school from the postsecondary exam requirement. These two changes are in effect for Cohort 3.

There are multiple ways to satisfy this requirement. Students should work with their academic advisor to determine which option is best for their degree requirements/degree plan.

Additional information can be found on our Civic Literacy website.

*BOG 8.006; s.1007.25(4,a-b)

Common Prerequisites

State-mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. See the Common Prerequisite Manual for course substitutions from Florida colleges and universities.

Biology and Computer Science Track Common Prerequisites

Biology and Computer Science Common Prerequisites		23
BSC 2010+L	Biology I (+Lab)	
BSC 2011+L	Biology II (+Lab)	
CHM 2045+L	General Chemistry I (+Lab)	
CHM 2046+L	General Chemistry II (+Lab)	
CHM 2210+L	Organic Chemistry I (+Lab)	
COP XXXX	Intro to Programming in ADA, C, C++, Pascal or equivalent language	
Choose one:		3-4
MAC 2311	Analytic Geometry and Calculus I	
or STA 2023	Elements of Statistics	
Choose one of the following groups:		8
PHY 2053+L	Algebra-Based Physics I (+Lab)	
PHY 2054+L	Algebra-Based Physics II (+Lab)	
or		
PHY 2048+L	Calculus-Based Physics I (+Lab)	
PHY 2049+L	Calculus-Based Physics II (+Lab)	
Total Hours		**34-35**

Biology and Earth & Environmental Sciences Track Common Prerequisites

Biology and Earth & Environmental Sciences Common Prerequisites		19-20
BSC 2010+L	Biology I (+Lab)	
CHM 2045+L	General Chemistry I (+Lab)	
CHM 2046+L	General Chemistry II (+Lab)	
MAC 2311	Analytic Geometry and Calculus I	
or STA 2023	Elements of Statistics	
GLY 2010+L	Physical Geology (+Lab)	
Choose one:		4
BSC 2011+L	Biology II (+Lab)	
or		
BOT 2010+L	General Botany (+Lab)	
Choose one of the following groups:		8
PHY 2053+L	Algebra-Based Physics I (+Lab)	
PHY 2054+L	Algebra-Based Physics II (+Lab)	
or		
PHY 2048+L	Calculus-Based Physics I (+Lab)	
PHY 2049+L	Calculus-Based Physics II (+Lab)	
Total Hours		**31-32**

Computer Science and Earth & Environmental Sciences Track Common Prerequisites

Computer Science and Earth & Environmental Sciences Common Prerequisites		30
BSC 2010+L	Biology I (+Lab)	
BSC 2011+L	Biology II (+Lab)	
CHM 2045+L	General Chemistry I (+Lab)	
CHM 2046+L	General Chemistry II (+Lab)	
MAC 2311	Analytic Geometry and Calculus I	
STA 2023	Elements of Statistics	
COP XXXX	Intro to Programming in ADA, C, C++, Pascal or equivalent language	
GLY 2010+L	Physical Geology (+Lab)	
Choose one group:		8
PHY 2053+L	Algebra-Based Physics I (+Lab)	
PHY 2054+L	Algebra-Based Physics II (+Lab)	
or		
PHY 2048+L	Calculus-Based Physics I (+Lab)	
PHY 2049+L	Calculus-Based Physics II (+Lab)	
Total Hours		**38**

Lower Division Electives

Students must complete sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4000) to meet this elective requirement. *	8-12
Total Hours	**8-12**

* The number of electives needed will depend on the track selected. Students are encouraged to check with their Academic Advisors when selecting electives.

† PHI 3400 Philosophy of Science and ENC 3455 Writing for Science, Technology, Engineering and Math Majors are offered through the College of Arts, Social Sciences & Humanities as advisor-approved electives.

Tier 1 Major Courses

Students must complete a minimum of 24 sh of Tier 1 courses for their chosen track. At least six (6) sh must be completed from each discipline in the chosen track.

Biology and Computer Science Track

Biology Course Options		
PCB 3103+L	Cell Biology (+Lab)	4
PCB 3063	Genetics	3
MCB 3020+L	Microbiology (+Lab)	4
BCH 3033+L	Biochemistry I (+Lab)	4
PCB 4233+L	Immunology (+Lab)	4
PCB 4524+L	Molecular Biology (+Lab)	4
PCB 4673	Principles of Evolution	3

PCB 4922	Biology Seminar	1
PCB 4098+L	Concepts in Human Physiology (+Lab)	4
PCB 4723+L	Comparative Animal Physiology (+Lab)	4
Computer Science Options		
CEN 3031	Software Engineering I	3
COP 3014	Algorithm and Program Design	3
COP 3022	Intermediate Computer Programming	3
COP 3530	Data Structures and Algorithms I	3
COP 4710	Database Systems	3
COT 3100	Discrete Structures	3
Total Hours		24

Biology and Earth & Environmental Sciences Track

Biology Course Options		
PCB 3103+L	Cell Biology (+Lab)	4
PCB 3063+L	Genetics (+Lab)	4
MCB 3020+L	Microbiology (+Lab)	4
BCH 3033+L	Biochemistry I (+Lab)	4
PCB 3097L	Introduction to Human Anatomy Laboratory	3
PCB 4233+L	Immunology (+Lab)	4
PCB 4524+L	Molecular Biology (+Lab)	4
PCB 4673	Principles of Evolution	3
PCB 4922	Biology Seminar	1
PCB 4098+L	Concepts in Human Physiology (+Lab)	4
PCB 4723+L	Comparative Animal Physiology (+Lab)	4
Earth & Environmental Sciences Options		
GEO 3210	Geomorphology	3
GEO 4221+L	Coastal Morphology and Processes (+Lab)	4
GEO 4250+L	Weather and Climate (+Lab)	4
GEO 4260+L	Geography of Soils (+Lab)	4
GEO 4280+L	Basic Hydrology (+Lab)	4
GEO 4357	Environment and Economy	3
GIS 4043+L	Geographic Information Systems (+Lab)	4
Total Hours		24

Computer Science and Earth & Environmental Sciences Track

Computer Science Options		
CEN 3031	Software Engineering I	3
COP 3014	Algorithm and Program Design	3
COP 3022	Intermediate Computer Programming	3
COP 3530	Data Structures and Algorithms I	3
COP 4710	Database Systems	3
COT 3100	Discrete Structures	3
Earth & Environmental Sciences Options		
GEO 3210	Geomorphology	3
GEO 4221+L	Coastal Morphology and Processes (+Lab)	4
GEO 4250+L	Weather and Climate (+Lab)	4
GEO 4260+L	Geography of Soils (+Lab)	4
GEO 4280+L	Basic Hydrology (+Lab)	4
GEO 4357	Environment and Economy	3
GIS 4043+L	Geographic Information Systems (+Lab)	4
Total Hours		24

Tier 2 Courses

Students are required to complete a minimum total of 24 sh of which at least 18 sh must be earned at the 3000- or 4000-level within one contributing HMCSE department (Biology, Computer Sciences, or Earth & Environmental Sciences). The additional six sh of Tier 2 credit must be earned at the 3000- or 4000-level from a contributing HMCSE department (Biology, Chemistry, Mathematics, Physics or Earth & Environmental Sciences); these hours may be earned in a different department than those in which the 18 sh above were earned.

All Tier 2 courses must have as a prerequisite one of the Tier 1 courses listed below; i.e., the Tier 2 courses must be accomplished at a higher level than the Tier 1 courses.

Upper-division hours in one HMCSE program	18
Upper-division hours in HMCSE programs other than above	6
Total Hours	**24**

Minor

Students are strongly encouraged to consider the pursuit of a Minor as part of their academic program. The Minor should improve their career readiness by providing additional marketable skills and content knowledge. With advisor approval, the Minor may be earned outside of HMCSE.

Advisor-approved Minor courses	15-18

Zoo Science Specialization

The Zoo Science Specialization is designed for and limited to students who have completed an A.S. in Zoo Animal Technology from Santa Fe College (Gainesville, FL). It provides further study of the field with an emphasis on the biological sciences. The specialization has been designed to prepare students for a wide variety of careers in the animal industry, in such fields as zookeeper, curator, or director or operating one's own animal industry business. It is not designed as a pre-veterinary medicine program and does not include all of the courses normally required for admission to a college of veterinary medicine.

A minimum grade of "C-" or better required in all courses. Biology Program minimum GPA of 2.0 is required for graduation.

General Education

In addition to the General Education requirements listed on this page, students must satisfy all additional University requirements, including the Gordon Rule, multicultural, and foreign language requirements. With appropriate planning and coordination with an academic advisor, students may satisfy some of the general University requirements through the General Education curriculum. For a complete listing of general degree requirements, refer to the "University Requirements" section of this catalog.

General Education Curriculum

Communication

ENC 1101	English Composition I	3
ENC 1102	English Composition II	3

Mathematics

Choose one course from Group A and one Additional course from either Group A or Group B	6

Group A	
MAC 1105	College Algebra
MAC 1105C	College Algebra with Lab
MAC 2311	Analytic Geometry and Calculus I
MGF 1106	Mathematics for Liberal Arts I
MGF 1107	Mathematics for Liberal Arts II
STA 2023	Elements of Statistics
Group B	
MAC 1114	Trigonometry
MAC 1140	Precalculus Algebra
MAC 1147	Precalculus with Trigonometry
MAC 2233	Calculus with Business Applications
MAC 2312	Analytic Geometry and Calculus II
STA 2360	Introduction to Data Science

Social Sciences

Choose one course from Group A and one additional course from either Group A or Group B	6
Group A	
AMH 2020	United States since 1877
ANT 2000	Introduction to Anthropology
ECO 2013	Principles of Economics Macro
POS 2041	American Politics
PSY 2012	General Psychology
SYG 2000	Introduction to Sociology
Group B	
AMH 2010	United States to 1877
ANT 2100	Introduction to Archaeology
ANT 2400	Current Cultural Issues
CCJ 2002	Survey of Crime and Justice
COM 2023	Death and Communication
CPO 2002	Comparative Politics
DEP 2004	Human Development Across the Lifespan
EUH 1000	Western Perspectives I
EUH 1001	Western Perspectives II
FIN 2104	Personal Financial Planning
GEA 2000	Nations and Regions of the World
GEB 1011	Introduction to Business
HIS 2050	Explore! History
IDH 1041	Honors Core 2
INR 2002	International Politics
MMC 2000	Principles of Mass Communication
PLA 2013	Survey of American Law
SOW 2192	Understanding Relationships in the 21st Century
SPM 2010	Sport in Global Society
SYG 2010	Current Social Problems

Humanities

Choose one course from Group A and one additional course from either Group A or Group B	6
Group A	
ARH 1000	Art Appreciation
LIT 2000	Introduction to Literature
MUL 2010	Music Appreciation
PHI 2010	Introduction to Philosophy
THE 2000	Theatre Appreciation
Group B	
AML 2010	American Literature I
AML 2020	American Literature II
AML 2072	Sex, Money, and Power in American Literature
ARH 2050	Western Survey I: Prehistory to the Medieval Period
ARH 2051	Western Survey II: Renaissance to Contemporary
ART 1015C	Exploring Artistic Vision
ART 2821	The Self, Creativity, Your Career and Visual Culture
CRW 2001	Introduction to Creative Writing
ENL 2010	History of English Literature I
ENL 2020	History of English Literature II
IDH 1040	Honors Core 1
LIT 2030	Introduction to Poetry
MUH 2930	The Music Experience: Special Topics
PHI 2103	Critical Thinking
PHI 2603	Ethics in Contemporary Society
REL 1300	World Religions
SPC 2608	Basic Communication Skills
THE 2300	Survey of Dramatic Literature

Natural Sciences

Choose one course from Group A and one additional course from either Group A or Group B	6
Group A	
AST 1002	Descriptive Astronomy
BSC 1005	General Biology for Non-Majors
BSC 1085	Anatomy and Physiology I
BSC 2010	Biology I
CHM 1020	Concepts in Chemistry *
CHM 2045	General Chemistry I *
ESC 2000	Introduction to Earth Science
EVR 2001	Introduction to Environmental Science
PHY 1020	Conceptual Physics
PHY 2048	Calculus-Based Physics I **
PHY 2048C	Calculus-Based Physics I Studio ***
PHY 2053	Algebra-Based Physics I **
Group B	
ANT 2511	Biological Anthropology
AST 2037	Life in the Universe
BOT 2010	General Botany
BSC 1050	Fundamentals of Ecology
BSC 1086	Anatomy and Physiology II *
BSC 2011	Biology II
BSC 2311	Introduction to Oceanography and Marine Biology *
CGS 2020	Introduction to Machine Learning
CHM 2046	General Chemistry II *

CIS 2530	Introduction to Cybersecurity	
GLY 2010	Physical Geology *	
MCB 1000	Fundamentals of Microbiology *	
PHC 2082	Informatics and Your Health	
PHY 2049	Calculus-Based Physics II **	
PHY 2054	Algebra-Based Physics II *	

* May be taken with or without lab.

** Algebra-Based Physics is usually recommended for non-science majors, while Calculus-Based Physics is recommended for science majors

*** Although students receive 5 semester hours credit for PHY 2048C, an additional 3 semester science course will be needed to meet General Education requirements.

General Education Electives

Choose an additional course from two of the three areas of Humanities, Social Sciences and Natural Sciences

Students transferring from Florida Community Colleges with an A.S. should consult with an advisor in the department before determining which other courses will need to be taken to complete UWF's General Education Program.

Multicultural Requirement

Multicultural Courses

An important component of a liberal education is the study of cultures other than one's own. As such, multiculturalism encompasses the appreciation of the values, expressions, and modes of organization of diverse cultural communities. To further such study, the University of West Florida requires all students pursuing a bachelor's degree to complete at least one course that explores one or more of the dimensions of another culture (language, religion, socio-economic structures, etc.). Students are exempt from this requirement if they have completed an A.A. degree, the general education program at a Florida public institution, or a baccalaureate degree.

The requirement is satisfied by the successful completion of a multicultural course designated on the following list. Several of the selections are General Education courses, and students may enroll in these to meet both the General Education and the multicultural requirements.

***Passed by UWF Faculty Senate on 11/08/2002*

This list is continually updated and students are encouraged to check with their advisors for alternative options.

AML 2010	American Literature I	3
AML 2020	American Literature II	3
AML 3604	African American Literature	3
AML 3624	Black Women Writers	3
AML 4015	Topics in Nineteenth-Century American Literature	3
AML 4640	Topics in Native American Literature	3
ANT 1001	Anthropology as a Profession	1
ANT 2000	Introduction to Anthropology	3
ANT 2301	Human Sexuality and Culture	3
ANT 3212	Peoples and Cultures of the World	3
ANT 3312	North American Indians	3
ANT 3363	Japanese Culture	3
ANT 3403	Cultural Ecology	3
ANT 4006	Anthropology of Human Rights	3
ANT 4025	Ritual Use of Human Remains	3
ANT 4516	Modern Human Physical Variation	3
ARH 1000	Art Appreciation	3
ARH 2050	Western Survey I: Prehistory to the Medieval Period	3
ARH 2051	Western Survey II: Renaissance to Contemporary	3
ARH 3590	Non-Western Art	3
ARH 3607	Native American Art	3
ARH 4302	Late Renaissance Art in Italy	3
ARH 4412	The Age of Revolution to Romanticism in Europe: 1750-1850	3
ARH 4450	Modern Art: 1850-1980	3
ARH 4470	Contemporary Art	3
ARH 4563	Art of Japan	3
CCJ 3678	Race, Gender, Ethnicity, and Crime	3
COM 3014	Gender Communication	3
COM 3461	Intercultural Communication	3
COM 4242	Communication and Christianity	3
CPO 2002	Comparative Politics	3
CPO 4792	Geopolitics	3
CRW 2001	Introduction to Creative Writing	3
EDF 2085	Teaching Diverse Populations	3
ENG 4013	Introduction to Literary Theory	3
ENL 2020	History of English Literature II	3
EUH 1000	Western Perspectives I	3
EUH 1001	Western Perspectives II	3
EUH 3203	Modern Europe	3
EUH 3334	Emperors, Sultans, Dictators, and Democrats: The Balkans	3
EUH 3411	Rome and the Mediterranean World	3
EUH 3576	Soviet Union since 1917	3
EUH 4563	The Other Germany: The Lands of the Austrian Monarchy, 1526-1918	3
FRE 4955	Supervised Foreign Language Field Experience Abroad	1-3
GEA 2000	Nations and Regions of the World	3
GEB 4361	International Business	3
GEO 3421	Cultural Geography	3
GEO 3471	Geography of World Affairs	3
HIS 2050	Explore! History	3
HIS 4262	Rise and Fall of the Portuguese Empire	3
IDH 1040	Honors Core 1	3
IDH 1041	Honors Core 2	3
INR 2002	International Politics	3
LAH 4135	Spanish Conquest of the Americas	3
LAH 4131	'Atlantic Indians': How Indigenous and African Peoples Shaped Europe & the Americas	3
LAH 4451	Greater Mexico: Central America from Conquest to the 20th Century	3

LAH 4728	Gender and Sexuality in Latin America from Colonization to Today	3
LIT 2000	Introduction to Literature	3
LIT 2030	Introduction to Poetry	3
LIT 3233	Postcolonial Literature	3
LIT 4036	Topics in Poetry and Poetics	3
LIT 4385	Feminist Theory	3
MAN 4102	Management of Diversity	3
MAR 4156	Seminar in International Marketing	3
MMC 3743	Communicating Fear: Horror Films and Popular Culture	3
MMC 3745	Communicating Fear Abroad: International Horror Films & Popular Culture	3
MUH 2930	The Music Experience: Special Topics	3
MUL 2010	Music Appreciation	3
NUR 4615	Community and Public Health Nursing	3
NUR 4636	Population-based Public Health Nursing	3
PHI 3790	African Philosophy	3
PUR 3404	International Public Relations	3
PSY 3860	Positive Psychology	3
SOP 3730	Psychology, Culture, and Society	3
SOW 4233	Human Diversity and Social Justice	3
SPN 3400	Advanced Stylistics	3
SPN 4520	Latin American Culture and Civilization	3
SYO 4421	Sociology of Health, Illness and Health Care	3
SYO 4530	Inequality in America	3

Civic Literacy Requirement

The 2017 Florida Legislature amended Section 1007.25, Florida Statutes, to require students ***initially entering*** **a State University System (SUS) and/or Florida College System (FCS) institution in 2018-2019** and thereafter to demonstrate competency in civic literacy. The 2021 Legislature further amended Florida Statutes, requiring students to complete both a civic literacy course and exam. As a result, there are three cohorts of students currently matriculating at Florida public institutions subject to varying requirements. As demonstrated in the table below, the exact civic literacy requirements are based on the academic term in which a student first enrolled in a Florida public institution.

Students Included in Cohort	Civic Literacy Competency Requirement
Cohort 1: Students first entering the SUS or FCS prior to fall 2018	None
Cohort 2: Students first entering the SUS or FCS in fall 2018 – summer A 2021	Complete a course **or** exam
Cohort 3: Students first entering the SUS or FCS in summer B 2021 (on or after July 1, 2021) and thereafter	Complete both a course **and** exam

Additionally, the 2021 Legislature made two additional exceptions: approving the use of accelerated mechanisms for meeting the course competency requirement and exempting high school students who pass the Florida Civic Literacy Exam in high school from the postsecondary exam requirement. These two changes are in effect for Cohort 3.

There are multiple ways to satisfy this requirement. Students should work with their academic advisor to determine which option is best for their degree requirements/degree plan.

Additional information can be found on our Civic Literacy website.

*BOG 8.006; s.1007.25(4,a-b)

Common Prerequisites:

State-mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. See the Common Prerequisite Manual for course substitutions from Florida colleges and universities.

There are no specified common prerequisites for this major. All Florida College System students are encouraged to complete the Associate degree. Students should consult with an academic advisor in their major degree area at the intended transfer institution.

Major Required Courses

CHM 2045+L	General Chemistry I (+Lab)	4
CHM 2046+L	General Chemistry II (+Lab)	4
BSC 2844	Biology Skills (recommended in first year at UWF)	1
BSC 2011+L	Biology II (+Lab)	4
BSC 4303	Biogeography	3
PCB 3063+L	Genetics (+Lab)	4
PCB 3043+L	Ecology (+Lab)	4
BSC 4860	Conservation Biology	3
PCB 4723	Comparative Animal Physiology	3
ZOO 4513	Animal Behavior	3
MAN 3025	Management Fundamentals	3
MAR 3023	Marketing Fundamentals	3
Total Hours		**39**

Major-Related Courses

Choose three of the following courses:		9-11
PCB 4673	Principles of Evolution	
ZOO 4254C	Marine Invertebrate Zoology	
ZOO 4304C	Marine Vertebrate Zoology	
ZOO 4457	Ichthyology	
ZOO 4472	Avian Science	
ZOO 4485	Marine Mammalogy	
Choose two of the following courses:		4-6
ACG 3082	Accounting for Non-Majors *	
CGS 2570	Personal Computer Applications	
ECO 3003	Principles of Economic Theory and Public Policy *	
STA 4173	Biostatistics	
PCB 4905	Biology Directed Study	
3000/4000 level Business Elective *		
Total Hours		**13-17**

*, choosing these 2 business courses affords students the opportunity to earn a Business minor. Business minors must also include a computer literacy course. See advisor for details.

Upper-Division Electives

Student must complete sufficient 3000/4000 level electives to meet UWF's requirement of 48 semester hours in the upper-division or complete all departmental requirements at the 3000/4000 level, whichever is greater. Animal Science PAZ may be able to count towards these elective hours.	5-9

Major GPA Calculation:

The upper-division courses (3000-4000 level) with the following prefixes will be used in calculating the major grade point average: BCH, BOT, BSC, HSA, HSC, MLS, PCB, and ZOO.

Interdisciplinary Sciences Minor

A 12 sh Minor in Interdisciplinary Sciences (ISC) is available for students in a wide variety of Hal Marcus College of Science and Engineering (HMCSE) and Usha Kundu, MD College of Health (UKMDCOH) majors. The ISC minor provides the opportunity to add value to the major degree and select courses that focus on a particular educational goal or expand their employment opportunities. The ISC minor is especially appropriate for students who require professional school prerequisite courses not included in their current major, for example, Physical Therapy, Occupational Therapy, and Physician Assistant professional schools.

Students should assess the prerequisites for upper-division courses they wish to take to complete the minor.

Choice of prerequisites as required by chosen professional school:		0-60
BSC 1085+L	Anatomy and Physiology I (+Lab)	
BSC 1086+L	Anatomy and Physiology II (+Lab)	
BSC 2010+L	Biology I (+Lab)	
BSC 2011+L	Biology II (+Lab)	
CHM 2045+L	General Chemistry I (+Lab)	
CHM 2046+L	General Chemistry II (+Lab)	
CHM 2210+L	Organic Chemistry I (+Lab)	
CHM 2211+L	Organic Chemistry II (+Lab)	
PHY 2048+L	Calculus-Based Physics I (+Lab)	
PHY 2049+L	Calculus-Based Physics II (+Lab)	
PHY 2053+L	Algebra-Based Physics I (+Lab)	
PHY 2054+L	Algebra-Based Physics II (+Lab)	
SPC 2608	Public Speaking	
SYG 2000	Introduction to Sociology	
PSY 2012	General Psychology	
Students must complete 12 sh of advisor-approved 3000/4000 level electives in a field related to the student's career objectives from UKMDCOH AND/OR HMCSE		12
Total Hours		**12-72**