Chemistry, Bachelor of Science

The B.S. specializations in Chemistry and Chemistry/Biochemistry have been approved by the Committee on Professional Training of the American Chemical Society (ACS) and consist of courses designed to offer training in the fundamentals of chemistry. Opportunities exist for the student to take courses to prepare for a wide variety of careers in chemistry and related fields. The B.S. program is recommended for students wishing to enter graduate programs in chemistry or to find employment as professional chemists.

Students interested in obtaining certification to teach this subject area in secondary education need to contact an advisor in this department to carefully plan the course work to satisfy degree and some teacher certification requirements. A degree in this major is required for participation in teacher education certification options.

Program Requirements

In addition to general University requirements, students seeking the B.S. in Chemistry must meet the requirements listed below.

Students should consult with their academic advisor for courses which may satisfy both the General Education requirements and common prerequisites.

A grade of “C-” or better is required in all common prerequisites. No grade below a “C-” in a major course may be applied toward graduation.

Chemistry B.S. and Chemistry/Biochemistry B.S. specialization majors must complete the following for ACS certification:

PHY 2048	Calculus-Based Physics I	3
PHY 2049	Calculus-Based Physics II	3
BCH 3033+L	Biochemistry I (+Lab)	4

Chemistry/Biochemistry, B.S. Specialization majors must also take the following for ACS certification:

One of the following:		4
PCB 3063+L	Genetics (+Lab)	
MCB 3020+L	Microbiology (+Lab)	
Plus one additional course in biochemistry		3

B.S. Chemistry Specialization

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 Gender and Diversity	
IDH 1041	Honors Core: Social Sciences	
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: Humanities	
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	Public Speaking	
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 3201	Art and Culture in The Global Middle Ages	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
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
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
HSC 2622	Introduction to Global Health Sciences	3
HIS 2050	Explore Gender and Diversity	3
HIS 4262	Rise and Fall of the Portuguese Empire	3
IDH 1040	Honors Core: Humanities	3
IDH 1041	Honors Core: Social Sciences	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
MMC 4601	Minorities and the Mass Media	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 an 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.

CHM 2045+L	General Chemistry I (+Lab) *	4
CHM 2046+L	General Chemistry II (+Lab) *	4
MAC 2311	Analytic Geometry and Calculus I *	4
MAC 2312	Analytic Geometry and Calculus II *	4
CHM 2210+L	Organic Chemistry I (+Lab)	4
CHM 2211+L	Organic Chemistry II (+Lab)	4
PHY 2048+L	Calculus-Based Physics I (+Lab) *	4
PHY 2049+L	Calculus-Based Physics II (+Lab) *	4
Total Hours		**32**

* Indicates common prerequisites which can be used to satisfy General Education requirements.

Lower Division Electives

Students must complete sufficient 1000/2000 level electives to satisfy at least 60 sh in the lower division. Current UWF students may use elective courses at any level (1000-4000) to meet this elective requirement.	5-7
Total Hours	**5-7**

Major

CHM 3120+L	Analytical Chemistry (+Lab) +	4
CHM 3230	Organic Chemistry III +	3
CHM 3410	Physical Chemistry I +	5
CHM 3411	Physical Chemistry II +	4
CHM 3740L	Advanced Laboratory Techniques +	2
CHM 3741L	Physical Chemistry Laboratory +	2
CHM 4130+L	Instrumental Analysis (+Lab) +	4
CHM 4610L	Inorganic Synthesis +	1
CHM 4611	Inorganic Chemistry +	4
CHM 4931	Seminars in Chemistry +	3
Choose 10-11 sh (with approval from departmental advisor):		10-11
BCH 3033+L	Biochemistry I (+Lab)	
CHM 4455+L	Introduction to Polymer Science (+Lab) +	
CHM 4912	Undergraduate Chemistry Research +	
CHM 3940	Chemistry Internship * +	
CHM 4930	Seminar: Special Topics in Advanced Chemistry * +	
Total Hours		**42-43**

* Courses offered for a variable number of semester hours.
\+ Courses included in the major GPA

Honors Research Track

CHM 2XXX	Research Experience	2
CHM 4931	Seminars in Chemistry +	3
CHM 3740L	Advanced Laboratory Techniques +	2
CHM 3410	Physical Chemistry I +	5
CHM 3230	Organic Chemistry III +	3
CHM 3411	Physical Chemistry II +	4
CHM 3741L	Physical Chemistry Laboratory +	2
CHM 3120+L	Analytical Chemistry (+Lab) +	4
CHM 4130+L	Instrumental Analysis (+Lab) +	4
Chemistry Elective		3-4
CHM 4611	Inorganic Chemistry +	4
CHM 4610L	Inorganic Synthesis +	1
CHM 4912	Undergraduate Chemistry Research +	8

This specialization is only for students in the Honors Program, and requires completion of an Honors thesis.

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.	17-18
Total Hours	**17-18**

B.S. Chemistry/Biochemistry Specialization

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 Gender and Diversity
IDH 1041	Honors Core: Social Sciences
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: Humanities
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	Public Speaking
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 3201	Art and Culture in The Global Middle Ages	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
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
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
HSC 2622	Introduction to Global Health Sciences	3
HIS 2050	Explore Gender and Diversity	3
HIS 4262	Rise and Fall of the Portuguese Empire	3
IDH 1040	Honors Core: Humanities	3
IDH 1041	Honors Core: Social Sciences	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
MMC 4601	Minorities and the Mass Media	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 an 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.

CHM 2045+L	General Chemistry I (+Lab) *	4
CHM 2046+L	General Chemistry II (+Lab) *	4
MAC 2311	Analytic Geometry and Calculus I *	4
MAC 2312	Analytic Geometry and Calculus II *	4
CHM 2210+L	Organic Chemistry I (+Lab)	4
CHM 2211+L	Organic Chemistry II (+Lab)	4
PHY 2048+L	Calculus-Based Physics I (+Lab) *	4
PHY 2049+L	Calculus-Based Physics II (+Lab) *	4
Total Hours		**32**

* Indicates common prerequisites which can be used to satisfy General Education requirements.

Lower Division Electives

Students must complete sufficient 1000/2000 level electives to satisfy at least 60 sh in the lower division. Current UWF students may use elective courses at any level (1000-4000) to meet this elective requirement. Majors should complete the Physics or Organic Chemistry sequence not completed in the Common Prerequisites.	0-5
Total Hours	**0-5**

Major

CHM 3120+L	Analytical Chemistry (+Lab) +	4
CHM 3230	Organic Chemistry III +	3
CHM 3410	Physical Chemistry I +	5
CHM 3411	Physical Chemistry II +	4
CHM 3740L	Advanced Laboratory Techniques +	2
CHM 3741L	Physical Chemistry Laboratory +	2
CHM 4931	Seminars in Chemistry +	3
CHM 4610L	Inorganic Synthesis +	1
CHM 4611	Inorganic Chemistry +	4
Choose two of the following (advisor approved):		8
BCH 3033+L	Biochemistry I (+Lab)	
BCH 3034	Biochemistry II	
MCB 3020+L	Microbiology (+Lab)	
PCB 3063+L	Genetics (+Lab)	
PCB 4524	Molecular Biology	
Choose 3-4 from the following (advisor approved):		6-8
CHM 4130+L	Instrumental Analysis (+Lab) +	
CHM 4455+L	Introduction to Polymer Science (+Lab) +	
CHM 3940	Chemistry Internship +	
CHM 4912	Undergraduate Chemistry Research +	
CHM 4930	Seminar: Special Topics in Advanced Chemistry +	
Total Hours		**42-44**

+ Courses included in the major GPA

Major Related

BSC 2010+L	Biology I (+Lab)	4
BSC 2011+L	Biology II (+Lab)	4
Total Hours		**8**

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.	15-17
Total Hours	**15-17**

Chemistry for Laboratory Health Sciences Certificate

This certificate program focuses on elements of introductory general chemistry courses and organic chemistry. In this certificate, students will develop knowledge and problem-solving skills to prepare them for advanced studies in Laboratory Health Sciences. Students must complete prerequisites in mathematics for the courses in this program.

CHM 2030	General Chemistry 1 for Laboratory Health Sciences	3
CHM 2031	General Chemistry 2 for Laboratory Health Sciences	3
CHM 2202	Organic Chemistry for Laboratory Health Sciences	3
Total Hours		**9**