# Transfer Guides

Northwest Florida State College | University of West Florida

# Hal Marcus College of Science and Engineering

2023-2024





#### ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF SCIENCE

## Biology, BS



## **NWFSC Course**

### **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
STA2023	Statistics	3	STA2023	Statistics	3
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
Natural Scie	ences General Education				
BSC1010C	Principles of Biology I	4	BSC2010+L	Biology I + Lab	4
CHM1045C	College Chemistry I	4	CHM2045+L	General Chemistry I + Lab	4
Social Scien	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	3		Social Science General Education (Group A or B)	3
General Edi	ucation Electives				
BSC1011C	Principles of Biology II	4	BSC2011L	Biology II + Lab	4
CHM1046C	College Chemistry II	4	CHM2046+L	General Chemistry II + Lab	4
Electives					
	Organic Chemistry I	4	CHM2210+L	. Organic Chemistry I + Lab	4
	General Physics w/o Calc I	4		Algebra-Based Physics I + Lab	4
or	General Physics w/o Calc II	4	or	_Algebra-Based Physics II + Lab	4
CHM2211C	Organic Chemistry II	4	CHM2211+L	Organic Chemistry II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Elective	0-1		Lower Division Elective	1
Total Colleg	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

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<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Biology Teaching, BA**



## **NWFSC Course**

### **SUWF** Equivalent UWF Course

Course #	Course Title	СС	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
STA2023 <i>or</i>	Statistics	3	STA2023 <i>or</i>	Statistics	3
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC1114	Trigonometry	3	MAC1114	Trigonometry	3
Natural Sci	ences General Education				
BSC1010C	Principles of Biology I	4		_Biology I + Lab	4
CHM1045C	College Chemistry I	4	CHM2045+L	General Chemistry I + Lab	4
Social Scien	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
BSC1011C	Principles of Biology II	4	BSC2011+L	Biology II + Lab	4
CHM2210C	College Chemistry II	4	CHM2046+L	General Chemistry II + Lab	4
Electives					
CHM2210C	Organic Chemistry I	4	CHM2210+L	. Organic Chemistry I + Lab	4
	General Physics w/o Calc I	4		. Algebra-Based Physics I + Lab	4
PHY1054C	General Physics w/o Calc II	4	PHY2054+L	. Algebra-Based Physics II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Elective	0-2		Lower Division Elective	2
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the course catalog.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Biomedical Sciences, BS**



### **NWFSC Course**

## **WF Equivalent UWF Course**

Course #	Course Title	СС	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
STA2023	Statistics	3	STA2023	Elements of Statistics	3
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
Natural Sci	ences General Education				
BSC1010C	Principles of Biology I	4	BSC2010+I	L Biology I + Lab	4
CHM1045C	College Chemistry I	4	CHM2045+	LGeneral Chemistry I + Lab	4
Social Scien	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	· 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
BSC1011C	Principles of Biology II	4	BSC2011+L	. Biology II + Lab	4
CHM2210C	College Chemistry II	4		L General Chemistry II + Lab	4
Electives					
CHM2210C	Organic Chemistry I	4	CHM2210+	LOrganic Chemistry I + Lab	4
	Organic Chemistry II	4		Organic Chemistry II + Lab	4
	General Physics w/o Calc I	4		_ Algebra-Based Physics I + Lab	4
PHY1054C	General Physics w/o Calc II	4	PHY2054+I	LAlgebra-Based Physics II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Chemistry, BA**



### **NWFSC Course**

## **SUWF** Equivalent UWF Course

Course #	Course Title	СС	Course #	Course Title	CC
Communica	ations General Education				
ENC1101 ENC1102	English Composition I English Composition II	3 3	ENC1101 ENC1102	English Composition I English Composition II	3 3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311 MAC2312	Calculus I Calculus II	4 4	MAC2311 MAC2312	Analytic Geometry and Calculus I Analytic Geometry and Calculus II	4 4
Natural Sci	ences General Education				
	General Education Biological Scien (Core or General)	ice 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry I	4	CHM2045+I	LGeneral Chemistry I + Lab	4
Social Scien	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	ce 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
CHM1046C	College Chemistry II Foreign Language I or Elective	4 3-4	CHM2046+l	General Chemistry II + Lab Foreign Language I or Elective	4 3
Electives					
CHM2211C	Organic Chemistry I Organic Chemistry II	4	CHM2211+L	Organic Chemistry I + Lab Organic Chemistry II + Lab	4
or	General Physics w/o Calc I	4	or	Algebra-Based Physics I + Lab	4
	General Physics with Calc I General Physics w/o Calc II	4		_ Calculus-Based Physics I + Lab _ Algebra-Based Physics II + Lab	4
PHY2049C	General Physics with Calc II	4	PHY2049+L	_ Calculus-Based Physics II + Lab	4
	Foreign Language II or Elective Elective	3-4 0-1		Foreign Language II or Elective Lower Division Elective	3 1
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

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<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Chemistry/Biochemistry, BA**



### **NWFSC Course**

### **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	ences General Education				
BSC1010C	Principles of Biology I	4	BSC2010+l	_ Biology I + Lab	4
CHM1045C	College Chemistry I	4		_ General Chemistry I + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives					
CHM2210C	Organic Chemistry I	4	CHM2210+L	Organic Chemistry I + Lab	4
	Organic Chemistry II	4		Organic Chemistry II + Lab	4
PHY1053C	General Physics w/o Calc I	4	PHY2053+l	_ Algebra-Based Physics I + Lab	4
<b>or</b>	General Physics with Calc I	4	0 <i>r</i>	_Calculus-Based Physics I + Lab	4
	General Physics w/o Calc II	4		LAlgebra-Based Physics II + Lab	4
or	Contract Hydrod W/O Care II	7	or	Linguista Basea i flysics ii i Eab	7
<b>-</b>	General Physics with Calc II	4		L Calculus-Based Physics II + Lab	4
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Chemistry Teaching, BA**



## **NWFSC Course**

## **SUWF Equivalent UWF Course**

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathemati	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	iences General Education				
	Natural Science Biological Education (Core or General)	on 3		Natural Science General Education (Group A or B)	3
CHM1045C	College Chemistry I	4	CHM2045+	LGeneral Chemistry I + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	ce 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
CHM1046C	College Chemistry II Foreign Language I or Elective	4 3-4	CHM2046+	LGeneral Chemistry II + Lab Foreign Language I or Elective	4 3
Electives					
	Organic Chemistry I Organic Chemistry II	4 4		LOrganic Chemistry I + Lab . Organic Chemistry II + Lab	4 4
	General Physics w/o Calc I	4		Algebra-Based Physics I + Lab	4
PHY2048C	General Physics + Calc I	4	PHY2048+L	_ Calculus-Based Physics I + Lab	4
PHY1054C <b>or</b>	General Physics w/o Calc II	4	PHY2054+I <b>or</b>	_ Algebra-Based Physics II + Lab	4
PHY2049C	General Physics with Calc II	4	PHY2049+	L Calculus-Based Physics II + Lab	4
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Elective	0-1		Lower Division Elective	1
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

#### ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF SCIENCE

## **Chemistry, BS**



### **NWFSC Course**

## **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311 MAC2312	Calculus I Calculus II	4	MAC2311 MAC2312	Analytic Geometry and Calculus I Analytic Geometry and Calculus II	4
Natural Sci	ences General Education				
	General Education Biological Science (Core or General)	e 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry I	4	CHM2045+I	LGeneral Chemistry I + Lab	4
Social Scien	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives					
CHM2210C	Organic Chemistry I	4	CHM2210+l	L Organic Chemistry I + Lab	4
	Organic Chemistry II	4		Organic Chemistry II + Lab	4
	General Physics with Calc I	4		L Calculus-Based Physics I + Lab	4
PHY2049C	General Physics with Calc II	4	PHY2049+I	L Calculus-Based Physics II + Lab	4
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Elective	0-1		Lower Division Elective	1
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Chemistry/Biochemistry, BS**



## **NWFSC Course**

### **WF** Equivalent UWF Course

Course # Course Title	CC	Course #	Course Title	CC
Communications General Education				
ENC1101 English Composition I	3	ENC1101	English Composition I	3
ENC1102 English Composition II	3	ENC1102	English Composition II	3
Humanities General Education				
General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematics General Education				
MAC2311 Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312 Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sciences General Education				
BSC1010C Principles of Biology I	4	BSC2010+	L Biology I + Lab	4
CHM1045C College Chemistry I	4	CHM2045+	L General Chemistry I + Lab	4
Social Sciences General Education*				
General Education Social Scier	nce 3		Social Science General Education (Group A)	3
History/Government Social Sci General Education**	ience 3		Social Science General Education (Group A or B)	3
General Education Electives				
CHM1046C College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives				
CHM2210C Organic Chemistry I	4	CHM2210+	L Organic Chemistry I + Lab	4
CHM2211C Organic Chemistry II	4	CHM2211+I	Organic Chemistry II + Lab	4
PHY2048C General Physics with Calc I	4		L Calculus-Based Physics I + Lab	4
PHY2049C General Physics with Calc II	4	PHY2049+	L Calculus-Based Physics II + Lab	4
Foreign Language II or Elective	e(s) 3-4		Foreign Language II or Elective	3
Total College Credit Hours	60	Total Colle	ege Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

## **Computer Engineering, BSCE**



## **NWFSC Course**

### **SOLUMN Equivalent UWF Course**

Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	ences General Education				
	General Education Biological Science	e 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry I	4	CHM2045+L	General Chemistry I + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
MAC2313	Calculus III	4	MAC2313	Analytics Geometry & Calculus III	4
MAP2302	Differential Equations	3	MAP2302	Differential Equations	3
Electives					
PHY2048C	General Physics with Calculus I	4	PHY2048+I	_Calculus-Based Physics I + Lab	4
PHY2049C	General Physics with Calculus II	4	PHY2049+I	Calculus-Based Physics II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Lower Division Electives	3
	Electives	8-9		Lower Division Electives	6
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Computer Science, BS**



## **NWFSC Course**

### **SOURT Equivalent UWF Course**

Course #	Course Title	СС	Course #	Course Title	СС
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
PHI2600	Ethics (recommended)	3	PHI2603	Ethics in Contemporary Society	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Scient	ences General Education*				
	General Education Biological Scient for Science majors	ce 3		Natural Science General Education (Group A)	3
	General Education Physical Science for Science majors	2		Natural Science General Education (Group A or B)	3
Social Scien	nces General Education				
ECO2013	Economics I	3	ECO2013	Principles of Economics Macro	3
	History/Government Social Science General Education**	ce 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
PHY2048C	General Physics with Calculus I	4	PHY2048+l	_Calculus-Based Physics I + Lab	4
	General Physics with Calculus II	4	PHY2049+L	Calculus-Based Physics II + Lab	4
Electives					
COPxxxx	Introductory Programming in C, C++, Java, Pascal, or equivalent	3	COPxxxx	Introductory Programming in C, C++, Java, Pascal, or equivalent	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Electives	4-6		Lower Division Electives	6
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the course catalog.

<sup>\*</sup> Includes: AST1002, BOT1010C, BSC1085C, BSC1086C, BSC1010C, BSC1011C, CHM1045, CHM1046C, ESC1000, EVR1001C, and GLY2010C.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Construction Management, BS**



### NWFSC Course

## **SUWF** Equivalent UWF Course

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Course #	Course Title	СС	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC1105	College Algebra	3	MAC1105	College Algebra	3
STA2023	Statistics	3	STA2023	Elements of Statistics	3
Natural Sci	ences General Education				
	General Education Biological Scier (Core or General)	nce 3		Natural Science General Education (Group A)	
PHY1053C	General Physics w/o Calculus I	4	PHY2053+L	. Algebra-Based Physics I + Lab	4
Social Scie	nces General Education				
ECO2013	Economics I History/Government Social Scient General Education*	3 ce 3	ECO2013	Principles of Economics Macro Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
MAC1140	Precalculus	3	MAC1140	Precalculus	3
MAC1114	Trigonometry	3	MAC1114	Trigonometry	3
Electives					
ECO2023	Economics II	3	ECO2023	Principles of Economics Micro	3
MAC2233 <b>or</b>	Business Calculus	3	MAC2233 <b>or</b>	Calculus + Business Applications	3
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	3
PHY1054C	General Physics w/o Calculus II	4	PHY2054 <b>and</b>	Algebra-Based Physics II  Algebra-Based Physics II Lab	1
ACG2021	Financial Accounting	3	ACG2021	Principles of Financial Accounting	3
ACG1001 and	Accounting I	3	ACG1001 <b>and</b>	Accounting I	3
ACG2011	Accounting II	3	ACG2011	Accounting II	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3-4
	Foreign Language II or Elective Elective	3-4 0-4		Foreign Language II or Elective Lower Division Elective(s)	3-4 3-4
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

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<sup>\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Cybersecurity, BS**



## **NWFSC Course**

### **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communic	cations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
<b>Humanitie</b> :	s General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
PHI2600	Ethics (recommended)	3	PHI2603	Ethics in Contemporary Society	3
Mathemati	ics General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sc.	iences General Education				
	General Education Biological Science (Core or General)	ce 3		Natural Science General Education (Group A)	3
PHY20480	C General Physics with Calculus I	4	PHY2048+L	Calculus-Based Physics I + Lab	4
Social Scie	ences General Education				
ECO2013	Economics I (recommended)	3	ECO2013	Principles of Economics Macro	3
	History/Government Social Scienc General Education*	e 3		Social Science General Education (Group A or B)	3
General Ec	ducation Electives				
STA2023	Statistics	3	STA2023	Elements of Statistics	3
	Science for Science majors**	3-4		Science for Science majors**	3
Electives					
COP1000	Introductory Programming Concepts Logic	3		Lower Division Electives	3
COP2224 <b>or</b>	Programming in C++	3	COP2334 <b>or</b>	Programming in C++	3
COP2800	Intro to Java Programming	3	COP2253	Programming Using Java	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3-4
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3-4
	Electives	7-9		Electives	9
Total Colle	ege Credit Hours	60	Total Colle	ge Credit Hours	60
			•		

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

<sup>\*\*</sup> Includes: AST1002, BOT1010C, BSC1085C, BSC1086C, BSC1010C, BSC1011C, CHM1045, CHM1046C, ESC1000, EVR1001C, and GLY2010C.

## Earth and Environmental Science Teaching, BA



### **NWFSC Course**

## **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	СС
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC1140	Precalculus	3	MAC1140	Precalculus Algebra	3
MAC1114	Trigonometry	3	MAC1114	Trigonometry	3
Natural Sci	ences General Education				
BSC1005	General Biology	3	BSC1005	General Biology for Non-Majors	3
CHM1045C	College Chemistry I	4	CHM2045+L	General Chemistry I + Lab	4
Social Scien	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
BOT1010C	Botany	4	BOT2010+L	. General Botany + Lab	4
CHM1046C	College Chemistry II	4	CHM2046+L	General Chemistry II + Lab	4
Electives					
STA2023	Statistics	3	STA2023	Elements of Statistics	3
BSC1005L	General Biology Lab	1	BSC1005L	General Biology for Non-Majors La	b 1
GLY2010C <i>or</i>	Principles of Geology I	4	GLY2010+L <i>or</i>	Physical Geology + Lab	4
ESC1000	Earth Science	3	ESC2000	Introduction to Earth Science	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Electives	5-8		Lower Division Electives	7-8
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

## **Electrical Engineering, BSEE**



## **NWFSC Course**

### **SOURT Equivalent UWF Course**

Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Scie	ences General Education				
	General Education Biological Science (Core or General)	e 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry I	4	CHM2045+I	LGeneral Chemistry + Lab	4
Social Scier	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
MAC2313	Calculus III	4	MAC2313	Analytic Geometry and Calculus III	4
MAP2302	Differential Equations	3	MAP2302	Differential Equations	3
Electives					
PHY2048C	General Physics with Calculus I	4	PHY2048+l	_Calculus-Based Physics + Lab	4
	General Physics with Calculus II	4		_Calculus-Based Physics II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language II or Elective	3-4
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3-4
	Electives	8-9		Lower Division Electives	9
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the course catalog.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Engineering Technology, BS**



## **NWFSC Course**

### **SUWF** Equivalent UWF Course

Course #	Course Title	СС	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	s General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathemati	ics General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC1114	Trigonometry	3	MAC1114	Trigonometry	3
Natural Sc.	iences General Education				
	General Education Biological Science (Core or General)	e 3		Natural Science General Education (Group A or B)	3
CHM1045C	College Chemistry I	4	CHM2045+I	LGeneral Chemistry I + Lab	4
Social Scie	ences General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
MAC1140	Precalculus I	3	MAC1140	Precalculus Algebra	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives					
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Electives	17-19		Lower Divsion Electives	19
Total Colle	ege Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

#### ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF SCIENCE

## **Environmental Science, BS**

**ENVIRONMENTAL MANAGEMENT SPECIALIZATION** 



#### **NWFSC Course**

## **WF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC1140	Precalculus	3	MAC1140	Precalculus Algebra	3
STA2023	Statistics	3	STA2023	Elements of Statistics	3
Natural Sci	iences General Education				
BSC1005	General Biology	3	BSC1005	General Biology for Non-Majors	3
CHM1045C	College Chemistry I	4	CHM2045+I	LGeneral Chemistry I + Lab	4
Social Scie	nces General Education				
ANT2000 or	Anthropology (recommended)	3	ANT2000 or	Intro to Anthropology	3
PSY2012	Psychology (recommended)	3	PSY2012	General Psychology	3
POS1041	American Government	3	POS2041	American Politics	3
General Ed	lucation Electives				
BOT1010C	Botany	4	BOT2010L	General Botany	4
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
Electives					
GLY2010C <i>or</i>	Principles of Geology I	4	GLY2010+L <b>or</b>	. Physical Geology + Lab	4
ESC1000	Earth Science	3	ESC2000	Introduction to Earth Science	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
BSC1005L	General Biology Lab	1	BSC1005L	General Biology for Non-Majors L	
	Electives	8-11		Lower Division Electives	10-11
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

#### ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF SCIENCE

## **Environmental Science, BS**

**NATURAL SCIENCE SPECIALIZATION** 



### **NWFSC Course**

## **WF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus	4	MAC2311	Analytic Geometry and Calculus I	4
STA2023	Statistics	3	STA2023	Elements of Statistics	3
Natural Sci	ences General Education				
BSC1010C	•	4		_General Botany + Lab	4
CHM1045C	College Chemistry I	4	CHM2045+	LGeneral Chemistry I + Lab	4
Social Scie	nces General Education				
ANT2000 <i>or</i>	Anthropology (recommended)	3	ANT2000 <i>or</i>	Introduction to Anthropology	3
PSY2012	Psychology (recommended)	3	PSY2012	General Psychology	3
POS1041	American Government	3	POS2041	American Politics	3
General Ed	lucation Electives				
PHY2048C <b>or</b>	General Physics with Calculus I	4	PHY2048+I <b>or</b>	L Calculus-Based Physics + Lab	4
	General Physics w/o Calculus I	4		_ Algebra-Based Physics 1 + Lab	4
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
Electives					
or	Principles of Geology I	4	or	Physical Geology I + Lab	4
ESC1000	Earth Science	3	ESC2000	Introduction to Earth Science	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective Electives	3-4 7-10		Foreign Language II or Elective Lower Division Electives	3 9-10
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

## Information Technology, BS



## **NWFSC Course**

### **SOLUMN Equivalent UWF Course**

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	s General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
PHI2600	Ethics	3	PHI2603	Ethics in Contemporary Society	3
Mathemati	ics General Education				
STA2023	Statistics	3	STA2023	Elements of Statistics	3
MAC2233	Business Calculus	3	MAC2233	Calculus + Business Applications	3
Natural Sc.	iences General Education*				
	General Education Biological Science	3		Natural Science General Education (Group A)	3
	General Education Physical Science	3		Natural Science General Education (Group A or B)	3
Social Scie	ences General Education				
ECO2013	Economics I	3	ECO2013	Principles of Economics Macro	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
PSY2012	Psychology	3	PSY2012	General Psychology	3
	General Education Elective	3		General Education Elective	3
Electives					
CGS1570	Computer Apps for Business	3	CGS2570	Personal Computer Apps	3
COP1000	Intro Programming Concepts Logic	3		Lower Division Elective	3
COP2224 <b>or</b>	Programming in C++	3	COP2334 <b>or</b>	Programming in C++	3
COP2800	Introduction to Java Programming		COP2253	Programming Using Java	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Electives	7-9		Lower Division Electives	9
Total Colle	ege Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If Biological or Physical Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Interdisciplinary Sciences, BS**

**BIOLOGY AND COMPUTER SCIENCE TRACK** 



#### **NWFSC Course**

### **WF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	s General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathemati	cs General Education				
STA2023 <b>or</b>	Statistics	3	STA2023	Elements of Statistics	3
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC1114	Trigonometry	3	MAC1114	Trigonometry	3
Natural Sci	iences General Education				
BSC1010C	Principles of Biology I	4	BSC2010+l	L Biology + Lab	4
	College Chemistry	4		LGeneral Chemistry + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	ce 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
BSC1011C	Principles of Biology II	4	BSC2011+L	Biology II + Lab	4
CHM1046C	College Chemistry II	4		LGeneral Chemistry + Lab	4
Electives					
PHY1053C <b>or</b>	General Physics w/o Calculus I	4	PHY2053+L <b>or</b>	Algebra-Based Physics I + Lab	4
PHY20480	General Physics w/o Calculus I	4	PHY2048+L	_ Calculus-Based Physics I + Lab	4
PHY1054C <b>or</b>	General Physics w/o Calculus II	4	PHY2054+L <b>or</b>	Algebra-Based Physics II + Lab	4
	General Physics with Calculus II	4	PHY2049+L	_ Calculus-Based Physics II + Lab	4
	Organic Chemistry I	4	CHM2210+L	Organic Chemistry I + Lab	4
	Introduction to Programming Concepts Logic	3		Lower Division Electives	3
COPxxxx	Programming Language in ADA, C, C++, Pascal, or equivalent	3		Programming Language in ADA, C, C++, Pascal, or equivalent	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
Total Colle	ge Credit Hours	60+	Total Colle	ge Credit Hours	60+

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Interdisciplinary Sciences, BS**

**BIOLOGY AND EARTH & ENVIRONMENTAL SCIENCES TRACK** 



#### **NWFSC Course**

### **SUMF** Equivalent UWF Course

Course #	Course Title	СС	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	s General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathemati	cs General Education				
STA2023 <b>or</b>	Statistics	3	STA2023	Elements of Statistics	3
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC1114	Trigonometry	3	MAC1114	Trigonometry	3
Natural Sci	iences General Education				
BSC1010C	Principles of Biology I	4	BSC2010+I	_Biology + Lab	4
CHM1045C	College Chemistry I	4	CHM2045+	LGeneral Chemistry I + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	ce 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
BSC1011C <b>or</b>	Principles of Biology II	4	BSC2011+L <b>or</b>	Biology II + Lab	4
BOT1010C	Botany	4	BOT1010+L	. General Botany + Lab	4
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
Electives					
PHY1053C <b>or</b>	General Physics w/o Calculus I	4	PHY2053+L <b>or</b>	. Algebra-Based Physics I + Lab	4
	General Physics w/o Calculus I	4		Calculus-Based Physics I + Lab	4
or	General Physics w/o Calculus II	4	or	_ Algebra-Based Physics II + Lab	4
	General Physics with Calculus II	4		Calculus-Based Physics II + Lab	4
GLY2010C	Principles of Geology I	4	GLY2010+L	Physical Geology + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective Elective	3-4 0-2		Foreign Language II or Elective Lower Division Elective	3 1-2
	Elective	0-2		Lower Division Elective	1-2
<b>Total Colle</b>	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

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<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

#### ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF SCIENCE

## **Interdisciplinary Sciences, BS**

**COMPUTER SCIENCE AND EARTH & ENVIRONMENTAL SCIENCE TRACK** 



#### **NWFSC Course**

## **WF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
STA2023	Statistics	3	STA2023	Elements of Statistics	3
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
Natural Sci	ences General Education				
BSC1010C	Principles of Biology I	4	BSC2010+I	_ Biology I + Lab	4
	College Chemistry I	4		LGeneral Chemistry I + Lab	4
Social Scien	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	ce 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
BSC1011C	Principles of Biology II	4	BSC2011+L	Biology II + Lab	4
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
Electives					
PHY1053C <b>or</b>	General Physics w/o Calculus I	4	PHY2053+L <b>or</b>	Algebra-Based Physics I + Lab	4
PHY2048C	General Physics w/o Calculus I	4	PHY2048+L	Calculus-Based Physics I + Lab	4
PHY1054C or	General Physics w/o Calculus II	4	or	_ Algebra-Based Physics II + Lab	4
	General Physics + Calculus II	4		_ Calculus-Based Physics II + Lab	4
	Principles of Geology I	4	GLY2010+L	Physical Geology + Lab	4
COP1000	Introduction to Programming Concepts Logic	3		Lower Division Elective	3
COPxxxx	Programming Language in ADA, C, C++, Pascal, or equivalent	3		Programming Language in ADA, C, C++, Pascal, or equivalent	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
Total Colle	ge Credit Hours	60+	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Marine Biology, BS**



### NWFSC Course

### **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
STA2023	Statistics	3	STA2023	Elements of Statistics	3
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
Natural Sci	ences General Education				
BSC1010C	Principles of Biology I	4	BSC2010+I	_Biology + Lab	4
CHM1045C	College Chemistry I	4	CHM2045+	LGeneral Chemistry I + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
BSC1011C	Principles of Biology II	4	BSC2011+L	Biology II + Lab	4
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
Electives					
PHY1053C <b>or</b>	General Physics w/o Calculus I	4	PHY2053+I <b>or</b>	LAlgebra-Based Physics I + Lab	4
CHM2210C	Organic Chemistry I	4	CHM2210+I	_Organic Chemistry I + Lab	4
PHY1054 <b>or</b>	General Physics w/o Calculus II	4	or	_Algebra-Based Physics II + Lab	4
CHM2211C	Organic Chemistry I	4	CHM2211+L	Organic Chemistry II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Electives	3-5		Lower Division Electives	5
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Mathematics, BS**



## **NWFSC Course**

### **SUMF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	s General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathemati	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	iences General Education				
	Lab-Based Science Course*	4		Lab-Based Science Course*	4
	General Education Natural Science	** 3-4		Natural Science General Education (Group A or B)	3
Social Scie	nces General Education***				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education****	ce 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
MAC2313	Calculus III	4	MAC2313	Analytic Geometry and Calculus III	4
MAP2302	Differential Equations	3	MAP2302	Differential Equations	3
Electives					
COP1000	Intro Programming Concepts Log	ic 3	COP1000	Intro Programming Concepts Logic	: 3
COPxxxx	Programming Language	3	COPxxxx	Programming Language	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Electives	4-8		Lower Division Electives	8
Total Colle	ge Credit Hours	60	Total Colle	ege Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> BSC1010C, BSC1085C, CHM1045C, PHY1053C, or PHY2048C will satisfy this requirement.

<sup>\*\*</sup> If Lab-Based Science course is Biological, this must be Physical; if Physical, this must be Biological.

<sup>\*\*\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## Mathematics Teaching, BS



### **NWFSC Course**

### **SOLUMN Equivalent UWF Course**

			_		
Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	ences General Education				
	Lab-Based Science Course*	4		Lab-Based Science Course*	4
	General Education Natural Science*	* 3-4		Natural Science General Education (Group A or B)	3
Social Scie	nces General Education***				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Scienc General Education****	e 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
MAC2313	Calculus III	4	MAC2313	Analytic Geometry and Calculus III	4
MAP2302	Differential Equations	3	MAP2302	Differential Equations	3
Electives					
COP1000	Intro Programming Concepts Logi	ic 3	COP1000	Intro Programming Concepts Logic	3
COPxxxx	Programming Language	3	COPxxxx	Programming Language	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Electives	4-8		Lower Division Electives	8
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the course catalog.

<sup>\*</sup> BSC1010C, BSC1085C, CHM1045C, PHY1053C, or PHY2048C will satisfy this requirement.

<sup>\*\*</sup> If Lab-Based Science course is Biological, this must be Physical; if Physical, this must be Biological.

<sup>\*\*\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

## **Mechanical Engineering, BSME**



### **NWFSC Course**

### **SUWF** Equivalent UWF Course

			_		
Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Scie	ences General Education				
	General Education Biological Scienc (Core or General)	e 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry	4	CHM2045+L	General Chemistry I + Lab	4
Social Scier	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
MAC2313	Calculus III	4	MAC2313	Analytic Geometry and Calculus III	4
MAP2302	Differential Equations	3	MAP2302	Differential Equations	3
Electives					
PHY2048C	General Physics with Calculus I	4	PHY2048+L	. Calculus-Based Physics I + Lab	4
	General Physics with Calculus II	4		. Calculus-Based Physics II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Electives	8-9		Lower Division Electives	8
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Engineering Physics, BS**



## **NWFSC Course**

## **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communica	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	Humanities General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	ences General Education				
	General Education Biological Scienc (Core or General)	e 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry I	4	CHM2045+I	General Chemistry I + Lab	4
Social Sciences General Education*					
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
CHM1046C	College Chemistry II	4	CHM2046+I	LGeneral Chemistry II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives					
PHY2048C	General Physics with Calculus I	4	PHY2048+L	Calculus-Based Physics I + Lab	4
PHY2049C	General Physics with Calculus II	4	PHY2049+L	Calculus-Based Physics II + Lab	4
MAC2313	Calculus III	4	MAC2313	Analytic Geometry and Calculus III	
MAP2302	Differential Equations	3	MAP2302	Differential Equations	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
	Elective	0-2		Lower Division Elective	2
Total Colle	ge Credit Hours	60	Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## Physics, BS



## **NWFSC Course**

### **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	ences General Education				
	General Education Biological Science (Core or General)	ce 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry I	4	CHM2045+	LGeneral Chemistry I + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Scienc General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives					
	General Physics with Calculus I	4		Calculus-Based Physics I + Lab	4
	General Physics with Calculus II	4		Calculus-Based Physics II + Lab	4
MAC2313	Calculus III	4	MAC2313	Analytic Geometry and Calculus III	
MAP2302	Differential Equations	3 3-4	MAP2302	Differential Equations	3 3
	Foreign Language II or Elective Elective	3-4 0-2		Foreign Language II or Elective Lower Division Elective	2
	Licetive	0-2		LOWER DIVISION LIECTIVE	
<b>Total Colle</b>	otal College Credit Hours 60		Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

#### ARTICULATED ASSOCIATE IN ARTS/BACHELOR OF ARTS

## Physics, BA



## **NWFSC Course**

### **SUWF** Equivalent UWF Course

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	ences General Education				
	General Education Biological Science (Core or General)	ce 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry I	4	CHM2045+	LGeneral Chemistry I + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Scienc General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	ucation Electives				
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives					
	General Physics with Calculus I	4		Calculus-Based Physics I + Lab	4
	General Physics with Calculus II	4		Calculus-Based Physics II + Lab	4
MAC2313	Calculus III	4	MAC2313	Analytic Geometry and Calculus III	
MAP2302	Differential Equations	3 3-4	MAP2302	Differential Equations	3 3
	Foreign Language II or Elective Elective	3-4 0-2		Foreign Language II or Elective Lower Division Elective	2
	Licetive	0-2		LOWER DIVISION LIECTIVE	
<b>Total Colle</b>	otal College Credit Hours 60		Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## **Physics Teaching, BA**



## NWFSC Course

### **SOURT Equivalent UWF Course**

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities	General Education				
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
	General Education Humanities (Core or General)	3		Humanities General Education (Group A or B)	3
Mathematic	cs General Education				
MAC2311	Calculus I	4	MAC2311	Analytic Geometry and Calculus I	4
MAC2312	Calculus II	4	MAC2312	Analytic Geometry and Calculus II	4
Natural Sci	ences General Education				
	General Education Biological Science (Core or General)	ce 3		Natural Science General Education (Group A)	3
CHM1045C	College Chemistry I	4	CHM2045+	LGeneral Chemistry I + Lab	4
Social Scie	nces General Education*				
	General Education Social Science	3		Social Science General Education (Group A)	3
	History/Government Social Science General Education**	e 3		Social Science General Education (Group A or B)	3
General Ed	lucation Electives				
CHM1046C	College Chemistry II	4	CHM2046+	LGeneral Chemistry II + Lab	4
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives					
PHY2048C	General Physics with Calculus I	4	PHY2048+L	_ Calculus-Based Physics I + Lab	4
	General Physics with Calculus II	4		Calculus-Based Physics II + Lab	4
MAC2313	Calculus III	4	MAC2313	Analytic Geometry and Calculus III	4
	Differential Equations	3	MAP2302	•	3
EDF1005	Intro to Teaching Profession	3 3-4		Foreign Language II or Elective Lower Division Elective	3 2
	Foreign Language II or Elective	5-4		Lower Division Elective	
<b>Total Colle</b>	otal College Credit Hours 60+			ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the course catalog.

<sup>\*</sup> If History/Government Social Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.

## Software Design & Development, BS



## **NWFSC Course**

## **WF Equivalent UWF Course**

Course #	Course Title	CC	Course #	Course Title	CC
Communic	ations General Education				
ENC1101	English Composition I	3	ENC1101	English Composition I	3
ENC1102	English Composition II	3	ENC1102	English Composition II	3
Humanities General Education					
	General Education Humanities (Core Course)	3		Humanities General Education (Group A)	3
PHI2600	Ethics (recommended)	3	PHI2603	Ethics in Contemporary Society	3
Mathemati	cs General Education				
STA2023	Statistics	3	STA2023	Elements of Statistics	3
MAC2233	Business Calculus	3	MAC2233	Calculus + Business Applications	3
Natural Sci	iences General Education*				
	General Education Biological Science	ce 3		Natural Science General Education (Group A)	3
	General Education Physical Science	3		Natural Science General Education (Group A or B)	3
Social Scie	nces General Education				
ECO2013	Economics	3	ECO2013	Principles of Economics Macro	3
	History/Government Social Science General Education**	ce 3		Social Science General Education (Group A or B)	3
General Education Electives					
	General Education Elective	3		General Education Elective	3
	Foreign Language I or Elective	3-4		Foreign Language I or Elective	3
Electives					
ECO2023	Economics II	3	ECO2023	Principles of Economics Micro	3
ACG2021	Financial Accounting	3	ACG2021	Principles of Financial Accounting	3
or	A	_			
ACG2001	Accounting I	3			
<b>and</b> ACG2001	Accounting II	3			
ACG2001	Managerial Accounting	3	ACG2071	Principles of Managerial Accountin	g 3
CGS1570	Computer Apps for Business	3	CGS2570	Personal Computer Apps	3
COP1000	Intro to Programming Concepts	3		Lower Division Elective	3
COP2224	Programming in C++	3		C++ Equivalent	3
COP2800	Intro to Java Programming	3		Java Equivalent	3
	Foreign Language II or Elective	3-4		Foreign Language II or Elective	3
Total Colle	Total College Credit Hours 60+		Total Colle	ge Credit Hours	60

Note: In addition to the University's general requirements, students seeking a UWF Hal Marcus College of Science and Engineering degree must meet additional requirements. Please refer to the **course catalog**.

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<sup>\*</sup> If Biological or Physical Science is General, then the other must be Core.

<sup>\*\*</sup> AMH2020 or POS2041 is required if Civic Literacy Competency is not met.