

Advisor: _____

Name: _____
 Date admitted into Major: _____
 Transfer credits: _____

BACHELOR OF SCIENCE - CHEMISTRY
ADOLESCENCE EDUCATION CONCENTRATION (Grades 7-12)
 Total Credit Hours for Degree 128
 2018

Liberal A&S: Adolescence Ed Teacher Transfer AS
 (Chemistry Concentration)

General Education Core exempt with completed AS
Education Program Requirement (43 credits)**

Foreign Language Requirement (6 credits)*	FL _____
Beginning Foreign Language I (101 level) @ MVCC*	FL _____
Beginning Foreign Language I (102 level)	_____
EDU 111 Introduction to Teaching	1 _____
EDU 201 Applied Educational Psychology	3 _____
EDU 215 Diversity/Disabilities & Success	ED211 _____
EDU 301 Foundations of Literacy	ED206 _____
EDU 303 Literacy/Comprehension: Mid-Adolesc	3 _____
EDU 312 Practical Teaching Methodologies	3 _____
EDU 321 Foundations of American Education	ED150 _____
PSY 322 Adolescent Psychology	PY212 _____
Methods class (select 1 course)	3 _____

EDU333 Adolescent English/Lang Arts Methods	0 _____
EDU334 Adolescent Social Studies Methods	6 _____
EDU335 Adolescent Mathematics Methods	6 _____
EDU337 Adolescent Science Methods	_____
EDU343 Adolescent Foreign Language Methods	_____
EDU 471 Student Teaching Seminar	_____
EDU 475 Student Teaching I	_____
EDU 476 Student Teaching II	_____
Or	_____
EDU 477 Mentored Internship I	6 _____
EDU 478 Mentored Internship II	6 _____

Total Education Program Hours: 43

Elective Transfer Credits

ENG 101 Written Communication	EN101 _____
ENG 135 Introduction to Literature	EN102 _____
ENG Literature elective (EN248, 249, 255, 256, 271 or 272)	3 _____
FIA Fine Arts Elective: HU187, 204, 205 or GC244	3 _____
HIS 126 American History (choose 1 class)	HI111 _____
127	HI112 _____
HIS 145 The Pacific World	HI101 _____
PSY 101 General Psychology	PY101 _____
FEL 1FE First Year Seminar	CF100 _____
PED 001 Physical Education	PE _____

*maximum of 3 credits eligible for transfer

CHEMISTRY MAJOR

Chemistry Major Requirements (43 credits)

Major Course Requirements	
CHE 211 General Chemistry I	CH141 _____
CHE 212 General Chemistry II	CH142 _____
CHE 213 Research Methods in Biology I	3 _____
CHE 323 Research Methods in Biology II	5 _____
CHE 331 Organic Chemistry I	CH247 _____
CHE 332 Organic Chemistry II	CH248 _____
CHE 345 Physical Chemistry I:	3 _____
CHE 495 Thermodynamics	2 _____
Senior Seminar	_____

Major Related Course Requirements (One Physics sequence and 2 calculus courses)

PHY 261/2 Physics I & II	PH261/2 _____
MAT 201 Calculus I	MA151 _____
MAT 202 Calculus II	MA152 _____

Concentration (select one of four concentration sequences)

General Concentration (23 credits)	
CHE 423 Instrumental Methods	5 _____
CHE 473 Inorganic Chemistry	4 _____
CHE 211/2 Chemistry elective 300 level or higher	6 _____
BIO 211/2 General Biology I & II	BI101/102 _____

GOL 225/6 Physical & Historical Geology	GL101/102 _____
---	-----------------

Biochemistry Concentration (30 credits)

CHE 363 Biochemistry with lab	4 _____
CHE 433 Advanced Organic Chemistry	3 _____
CHE Chemistry elective 300 level or higher	3 _____
BIO 211/2 General Biology I & II	BI141/142 _____
BIO 321 Genetics	4 _____
BIO 327 Cell Biology	4 _____
BIO 453 Molecular Biology	4 _____

Environmental Concentration (34 credits)

CHE 405 Environmental Chemistry	3 _____
CHE 423 Instrumental Methods	5 _____
CHE Chemistry elective 300 level or higher	3 _____
BIO 211/2 General Biology I & II	BI141/142 _____
BIO 323 Principles of Ecology	4 _____
GOL 225/6 Physical & Historical Geology	GL101/102 _____
MAT 112 Statistics	MA110 _____

Professional Concentration (22 credits)

CHE 346 Physical Chemistry II with lab	4 _____
CHE 363 Biochemistry with lab	4 _____
CHE 423 Instrumental Methods	5 _____
CHE 473 Inorganic Chemistry	4 _____
CHE Chemistry elective 300 level or higher	5 _____

Total Chemistry Major Hours: 77-89

Total Education Program Hours: 43

Total Hours Required in Major: 77

Total Hours: 128

A maximum of 60 credits will transfer towards the BS degree.

* American Sign Language may be taken to fulfill the Foreign Language Requirement for Education, but is not considered liberal arts credit.

**Education classes are not considered liberal arts credit.