

# **General Science Broadfield**

## Suggested Curriculum by Semester

2023-2024

All classes must be completed with a C or better and a 3.0 GPA in all teaching majors and minors.

#### **Freshman Year**

Fall	Spring			
Course Cr		Course Cr		
EDU 101US – Teaching and Learning	3	EDU 223IS or EDU 222IS – Educ. Psych and Adolescent Dev./ Child Development 3		
HDFS 101IS – Indiv. & Fam. Dev.: Lifespan	3	CHMY 141 & 142 – College Chemistry I & Lab 4		
BIOB 170IN – Principles of Biological Diversity	4	PHSX 205 – College Physics I 4		
M 161Q – Survey of Calculus	4	IA/RA Core 3		
WRIT 101W – College Writing I	3	Elective 3		

#### Sophomore Year

Fall		Spring		
Course Cr		Course	Cr	
EDU 370 – Integrating Tech. into Educ.	3	EDU 211D – Multicultural Education	3	
BIOB 160 – Principles of Living Systems	4	BIOE 370 – General Ecology	3	
CHMY 143 & 144 – College Chemistry II & Lab	4	CHMY 211 & 212 – Elements of Organic Chemistry & Lab	5	
PHSX 207 – College Physics II	4	ERTH 101IN – Earth System Sciences	4	
		Elective	3	

#### Junior Year

Fall	
Course	Cr
EDSP 306 – Exceptional Learners	3
BIOB 375 – General Genetics	3
BIOO 412 – Animal Physiology (F) <i>or</i>	2
BIOO 433 – Plant Physiology (S)	Э
Earth Science Elective – ERTH 212RN, ERTH 303, GEO 211, or	3-4
GEO 315	
Elective	

Spring			
Course	Cr		
EDU 347 – Managing the Learning Environment	2		
EDU 382 – Assessment, Curriculum & Instruction	3		
BIOM 103IN – Unseen Universe: Microbes or	3-5		
BIOM 360 – General Microbiology (S)			
BIOB 420 – Evolution (S)			
ERTH 303 – Weather & Climate (F) <i>or</i>	3		
GEO 211 – Earth History & Evolution (S)	5		
IH/RH Core	3-4		
Submit Application to Teacher Education Program			
Attend Student Teaching Meeting			

#### **Senior Year**

Fall		Spring	
Course	Cr	Course	Cr
EDP 304 – Practicum: K-12/5-12 (F)	2	EDU 495R – Student Teaching	12
EDP 305 – Practicum Lab: K-12/5-12 (F)	1		
EDM 403 – Methods: 5-12 Science (F)	3		
EDU 494 – Seminar: Lab Safety (F)	1		
ASTR 371 – Solar System Astronomy (F)	4		
History of Science Elective - See list on back	3		
Elective	3	Total Credits:	128+
Submit Application for Student Teaching & G	raduation		

## **MAJOR REQUIREMENTS (Content)**

### **BIOLOGY REQUIREMENTS**

Rubric/#	Title	Cr	Gr
BIOB 160	Principles of Living Systems	4	
BIOB 170IN	Principles of Biological Diversity	4	
BIOB 375	General Genetics	3	
BIOB 420	Evolution	3	
BIOE 370	General Ecology	3	
BIOO 412 <i>or</i> BIOO 433	Animal Physiology <b>or</b> Plant Physiology	3	
BIOM 103IN OR BIOM 360	Unseen Universe: Microbes <b>or</b> General Microbiology	3-5	
	<b>T</b> ( )		

Total 23-25

### EARTH SCIENCE REQUIREMENTS

Rubric/#	Title	Cr	Gr
ERTH 101IN	Earth System Sciences	4	
ERTH/GEO	ERTH 212RN, ERTH 303, GEO 103CS, GEO 211, or GEO 315	3-4	
ERTH 303 <b>OR</b> GEO 211	Weather and Climate <b>or</b> Earth History and Evolution	3	
	Tatal	10 11	

Total 10-11

### CHEMISTRY REQUIREMENTS

Rubric/#	Title	Cr	Gr
CHMY 141	General Chemistry I	4	
CHMY 143	General Chemistry II	4	
CHMY 211	Elements of Organic Chemistry	5	
	Total	13	

## PHYSICS REQUIREMENTS

Rubric/#	Title	Cr	Gr
PHSX 205	College Physics I	4	
PHSX 207	College Physics II	4	
ASTR 371	Solar System Astronomy	4	
	<b>T</b>	4.2	

Total 12

## HISTORY OF SCIENCE REQUIREMENTS

Choose <u>ONE (1)</u> of the following:

Rubric/#	Title	Cr	Gr
HSTA 412IH	American Thought and Culture		
HSTA 470	American Environmental History		
HSTR 205CS	The World Environment		
HSTR 207CS	Science & Technology in World History		
HSTR 208RH	Science, Environment, Technology, Society: Common Experience	3	
HSTR 282CS	Darwinian Revolution		
HSTR 417	Early Modern Science		
HSTR 419	Modern Science		
HSTR 484	World Environmental History		
RLST 217IH	Religion, Science & Environment		
	Total	3	

## **ELECTIVE REQUIREMENTS**

### Varies – Must meet 128 credit requirement

Title	Cr	Gr
	Title	Title Cr

The coursework on this page represents the content area. These courses must combine to equal a 3.0 GPA prior to student teaching placement. Students pursuing this major are encouraged to pursue a Teaching Minor.

A minimum of 128 credits is required for graduation. Forty-two (42) of these credits must be in courses numbered 300 and above.

If adding a Teaching Minor, you should expect to take more than 128 credits to complete the program.

Prior to student teaching placement, students must meet all requirements listed above, have a "C" or better in all professional and content courses, and have a 3.0 GPA in all areas listed above.