



# General Science Broadfield

## Suggested Curriculum by Semester

### 2024-2025

*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	HDFS 101IS – Individ. & Fam. Dev.: Lifespan	3
EDU 223IS or EDU 222IS – Educ. Psych and Adolescent Dev./ Child Development	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	WRIT 101W – College Writing I	3
IA/RA Core	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		Spring	
Course	Cr	Course	Cr
EDSP 306 – Exceptional Learners	3	EDU 347 – Managing the Learning Environment	2
BIOB 375 – General Genetics	3	EDU 382 – Assessment, Curriculum & Instruction	3
BIOO 412 – Animal Physiology (F) <i>or</i> BIOO 433 – Plant Physiology (S)	3	BIOM 103IN – Unseen Universe: Microbes <i>or</i> BIOM 360 – General Microbiology (S)	3-5
Earth Science Elective – EARTH 212RN, EARTH 303, GEO 211, or GEO 315	3-4	BIOB 420 – Evolution (S)	3
Elective	3-4	ERTH 303 – Weather & Climate (F) <i>or</i> GEO 211 – Earth History & Evolution (S)	3
		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 & Graduation**

## 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 <i>or</i> Plant Physiology	3	
BIOM 103IN <i>or</i> BIOM 360	Unseen Universe: Microbes <i>or</i> General Microbiology	3-5	

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 <i>OR</i> GEO 211	Weather and Climate <i>or</i> Earth History and Evolution	3	

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	

Total 12

### HISTORY OF SCIENCE REQUIREMENTS

*Choose ONE (1) 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*

Rubric/#	Title	Cr	Gr

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.