

SCIENCE-BS-SECONDARY EDUCATION(W_{ITH} E_{DUCATION} M_{AJOR})THIS IS A **GENERAL** CURRICULUM GUIDE AND IS NOT APPLICABLE TO EVERY STUDENT. IT IS IMPORTANT TO MEET WITH YOUR ADVISOR.

Year One			
BIO 120 General Biology I w/lab Prerequisites: High school chemistry, CHM 109, or CHM 115 strongly recommended (CHM 109 or 115 may be taken concurrently)	4	BIO 121 General Biology II w/lab Prerequisite: MTH 110 (may be taken concurrently)	4
GEO 111 Exploring the Earth	4	STA 215 Introductory Applied Statistics Prerequisite: MTH 109 or MTH 109 or equivalent.	3
MTH 122 College Algebra Prerequisite: MTH 108 and MTH 109 (or MTH 110) or assignment through Grand Valley math placement.	3	GEO 112 Earth History Prerequisite: GEO 111 (preferred) or GEO 100 or GEO 103, or GEO 105	4
WRT 150 Strategies in Writing ² (or WRT 130)	3	EDF 115 Introduction to Education	3
<i>Total</i>	14	<i>Total</i>	14
Spring/Summer			
CHM 115 Principles of Chemistry I w/lab	4		
PSY 101 Introductory Psychology	3		
Gen Ed (P&L)	3		
<i>Total</i>	10		
Year Two			
CHM 116 Principles of Chemistry II w/lab Prerequisites: CHM 115 and (MTH 110 or MTH 122 or MTH 125 or MTH 201)	5	BIO 210 Evolutionary Biology Prerequisites: BIO 120 and BIO 121	3
GEO 203 Weather and Climate for Pre-Service Teachers Gen Ed Foundations – Arts (1)	3	CHM 231 Introductory Organic Chemistry Prerequisite: CHM 109 or CHM 116	4
PHY 201 Inquiry: The Mechanical and Thermal World	4	EDR 225 Intro to Teaching Multilingual Learners	3
		PHY 202 Physics for Teachers: Motion, Energy, Forces	4
<i>Total</i>	15	<i>Total</i>	14
Spring/Summer			
EDF 315 Diverse Perspectives on Education (US Div.)	3		
Gen Ed (Issues, with SWS)	3		
PSY 331 Adolescent Development Prerequisite: PSY 101	3		
<i>Total</i>	9		
Year Three			
PHY 203 Physics for Teachers: Light, Sound, Electromagnet Prerequisite: PHY 202	3	Gen Ed Foundations – Hist & Global Perspectives	3
CHM 221 Survey of Analytical Chemistry w/lab Prerequisites: CHM 116 or one full year of general chemistry	4	SCI 326 Experimental Methods in Physical Science Prerequisite: PHY 203 and CHM 116	3
BIO 375 Genetics Prerequisite: BIO 120, Corequisite: BIO 376	3	PHY 205 Astronomy for Teachers	3
BIO 376 Genetics Laboratory Prerequisites: BIO 375 or successful completion of BIO 355	1	SCI 450 Earth and Life Science in Secondary Education Prerequisite: Junior Standing, BIO 120 and BIO 121, GEO 111 and Geo 112	3
GEO 220 Earth Surface Materials and Systems w/lab Prerequisites: GEO 111, CHM 115, and GEO 112	4	SCI 316 Engineering Design Prerequisite: PHY 203	3
<i>Total</i>	15	<i>Total</i>	15
Year Four			

SCI 336 Ecology for Secondary Science Teachers (SWS) (summer and fall only) Prerequisites: BIO 120 and BIO 121 (BIO 120 may be taken concurrently), GEO 203, GEO 112, and PHY 201. xxx see revised syllabus xxxx	4	Student Apprenticeship: EDI 331 Methods and Strategies of Secondary Teaching EDI 332 Content Area Seminar ⁵ EDS 319 xxxx new name xxx sunset Universal Design for Learning: Secondary Sophomore Standing, EDF 315, and EDI 339. B- or better required. EDT 477 Teaching with Technology: Secondary Must be taken with or after EDI 331 but before EDI 431	4
SCI 440 Physics and Chemistry in Secondary Education Prerequisites: Junior Standing, CHM 116 and PHY 221 or PHY 231	3		2
EDF 260 Educational Research & Assessment (SWS)	3		3
GEO 214 Solid Earth Materials and Systems Prerequisites: GEO 111, CHM 115, GEO 112, and GEO 175)	4		3
<i>Total</i>	14	<i>Total</i>	12
Year Five			
Student Internship: EDI 431 Student Teaching: Secondary EDI 432 Student Teaching: Secondary Content EDF 495 The Context of Educational Issues Must be taken with or after EDI 431	7 or 8 2 3		
<i>Total</i>	12-13**	<i>Total</i>	

*The block tuition rate is for 12-15 credits. You will pay additional tuition for any credits over 15

*This course is recommended to help complete program in timely basis but is not a necessary program requirement.

¹ Students who self-place into WRT120 should take this course in the fall semester and then take WRT 130 in the winter semester of the first year. Students who self-place into WRT 150 should take this course in either semester of the first year. A grade of C or higher is required to fulfill these requirements.

² Students must complete a total of two courses with an SWS attribute.

³ SCI courses are offered in alternate years. See your major or CLAS advisor to determine your sequence.

⁴ Admission into the apprenticeship and internship semesters is a secondary application process. Plan to apply the semester before the semester you plan on starting teacher assisting.

⁵EDS 379 may be taken prior to the Apprenticeship Semester but must be completed prior to the Internship Semester. Permit required (Education – 616-3316650). Prerequisites for EDS 379: Sophomore Standing, EDF 315, and EDI 339. B- or better required.

General Education Overlap:	
Life Science with Lab: BIO 120	Physical Science with Lab: CHM 115
Mathematical Sciences: MTH 122, STA 215	Social and Behavioral Sciences: PSY 101, EDF 115
US Diversity: EDF 315	Issues: EDT 476
Second Major in Education	
Education Major Prerequisites (9 credits)	
A 2.7 cumulative GPA in the Education Major Prerequisites is required with no grade lower than a C	
– EDF 315 Diverse Perspectives on Education (3)	– PSY 331 Adolescent Development (3)
– EDF 260 Introduction to Learning and Assessment (3)	Prerequisite: PSY 101
Teacher Apprenticeship (14 - 17 credits)	Student Internship (13 credits)
– EDI 331 Teacher Assisting-Secondary (4) – EDI 310 Organizing and Managing Classroom Environments (3) – EDR 332 Content Area Seminar (2) – EDT 477 Teaching with Technology (3) Must be taken with or after EDI 331 but before EDI 431 – EDS 319 Universal Design for Learning: Secondary (3)**	– EDI 431 Student Teaching, Secondary (7) – EDI 432 Student Teaching, Secondary Content (2) – EDF 495 The Context of Educational Issues (3) Must be taken with or after EDI 431

Guide for Declaring Majors

- Log into myBanner from the GVSU homepage
- Once logged in select "Student", "Student Records", and then, "Change Major"
- Click on the "Change Major 1/Program" box
Click on the down arrow in the box next to "New Major 1/Program," from here scroll down and choose:
"Integrated Science BS-Secondary"
Click "Submit." The system will automatically declare your 2nd major in "Education" and give you the option to declare a minor. *****Integrated Science-Secondary is a comprehensive major and a minor is not required.

It is imperative to meet with your faculty advisor and an advisor in the CLAS Academic Advising Center regularly. The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585. Online at: <http://www.gvsu.edu/clasadvising>