

INTEGRATED SCIENCE-BS-SECONDARY EDUCATION(WITH EDUCATION MAJOR)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	MTH 123¹ Trigonometry Prerequisite: MTH 122 or assignment through Grand Valley math placement (MTH 122 may be taken concurrently)	3
MTH 122¹ College Algebra Prerequisite: 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
PSY 101 Introductory Psychology (SBS)	3	WRT 150 Strategies in Writing	4
<i>Total</i>	14	<i>Total</i>	15
Year Two			
BIO 215 Ecology w/lab (<i>summer and fall only</i>) Prerequisites: BIO 120 and BIO 121 (BIO 120 may be taken concurrently)	4	CHM 116 Principles of Chemistry II w/lab Prerequisites: CHM 115 and (MTH 122 or MTH 125 or MTH 201)	5
CHM 115 Principles of Chemistry I w/lab Prerequisites: High school chemistry and (MTH 110 or MTH 122 or MTH 125 or MTH 201)	4	BIO 210 Evolutionary Biology Prerequisites: BIO 120 and BIO 121	3
MTH 201 Calculus I Prerequisites: MTH 122 and MTH 123, or MTH 124 or assignment through Grand Valley math placement	4	MTH 202 Calculus II Prerequisite: MTH 201	4
EDF 315 Diverse Perspectives on Education (US Div.)	3	PSY 301 Child Development Prerequisite: PSY 101	3
<i>Total</i>	15	<i>Total</i>	15
Spring/Summer			
Gen Ed (P&L)	3		
Gen Ed (HP)	3		
Gen Ed (SBS)	3		
<i>Total</i>	9		
Year Three			
PHY 230 Principles of Physics I Prerequisite: MTH 201 (MTH 202 is recommended as a Corequisite)	5	PHY 231 Principles of Physics II Prerequisite: PHY 230 and MTH 202	5
CHM 231 Introductory Organic Chemistry Prerequisite: CHM 109 or CHM 116	4	CHM 221 Survey of Analytical Chemistry Prerequisites: CHM 116 or one full year of general chemistry	4
GEO 203 Weather and Climate for Pre-Service Teachers	3	BIO 375 Genetics Prerequisite: BIO 120 Corequisite: BIO 376	3
Gen Ed (MUS 218 World Music***)	3	BIO 376 Genetics Laboratory Prerequisites: Concurrent enrollment in BIO 375 or successful completion of BIO 355	1
		Issues	3
<i>Total</i>	15	<i>Total</i>	16**
Year Four			
SCI 440 Physics and Chemistry in Secondary Education Prerequisites: Junior Standing, CHM 116 and PHY 221 or PHY 231	3	SCI 450 Earth and Life Science in Secondary Education Prerequisite: Junior Standing, BIO 120 and BIO 121, or GEO 111 and Geo 112	3
CHM 351 Introduction to Physical Chemistry Prerequisites: CHM 116, MTH 201, and PHY 220 or PHY 230 (may be taken concurrently)	3	PHY 302 Introduction to Modern Physics Prerequisite: PHY 231	4
GEO 214 Solid Earth Materials and Systems Prerequisites: GEO 111, CHM 115, GEO 112, and GEO 175)	4	GEO 220 Earth Surface Materials and Systems Prerequisites: GEO 111, CHM 115, GEO 112, and GEO 175	4
PHY 105 Descriptive Astronomy	3	Issues (SWS***)²	3
EDI 339 Assessment in Secondary Schools	3		
<i>Total</i>	16**	<i>Total</i>	14

Year Five ³			
Teacher Assisting		Student Teaching	
EDI 331 Methods and Strategies of Secondary Teaching	5	EDS 379 Universal Design for Learning: Secondary	3
EDI 310 Organizing and Managing Classroom Environments	3	Sophomore Standing, EDF 315, and EDI 337. B- or better required.	
EDR 321 Content Area Literacy (SWS)	3	EDI 431 Student Teaching: Secondary	8
EDT 370 Technology in Education	3	EDI 432 Student Teaching: Secondary Content	2
Must be taken with or after EDI 331 but before EDI 431		EDF 485 The Context of Educational Issues	3
		Must be taken with or after EDI 431	
<i>Total</i>	14	<i>Total</i>	16**

**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 in MTH 122 are encouraged to take the Math Proficiency Tests for MTH 122 and/or 123 online:** www.gvsu.edu/s/mv

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

³ Admission into the College of Education is a secondary application process. Plan to apply to the College of Education the semester before the semester you plan on starting teacher assisting.

General Education Categories fulfilled by the Biology major:	
Life Science and Physical Science: BIO 120 and CHM 115 (both fulfill lab requirement), PHY 230	
Mathematical Sciences: MTH 122, MTH 123, MTH 124, MTH 201	
Social and Behavioral Sciences: PSY 101	US Diversity: EDF 315

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 <http://www.gvsu.edu/clasadvising>

Your Academic Advisor in the CLAS Advising Center is Emily Davis, davisem1@gvsu.edu.

To schedule an appointment with an Integrated Science adviser in the CLAS Academic Advising Center, visit www.gvsu.edu/clasadvising and click on "Schedule Appointment"