

**GEOLOGY-CHEMISTRY-BS****CLAS Academic Advising Center Advisor – Heather Chafin – [chafinhe@gvsu.edu](mailto:chafinhe@gvsu.edu) – 616-331-8585**THIS IS A **GENERAL** CURRICULUM GUIDE AND IS NOT APPLICABLE TO EVERY STUDENT. IT IS IMPORTANT TO MEET WITH YOUR ADVISOR.

Year One			
<sup>3</sup> CHM 115 Principles of Chemistry I Prerequisites: High school chemistry, MTH 110 or MTH 122 or MTH 125 or MTH 201	4	CHM 116 Principles of Chemistry II Prerequisites: CHM 115 and MTH 122 or MTH 125 or MTH 201	5
<sup>3</sup> GEO 111 Exploring the Earth <i>Gen Ed</i>	4	GEO 112 Earth History	4
MTH 122 College Algebra <i>Gen Ed</i> Prerequisite: MTH 110 or assignment through math placement exam	3	Prerequisite: A course in physical or general geology MTH 123 Trigonometry	3
WRT 150 Strategies of Writing ( <b>Take in Winter if Possible</b> )	4	Prerequisite: MTH 122 (can be taken concurrently) or assignment through math placement exam Gen Ed	3
<i>Total</i>	15	<i>Total</i>	15
Year Two			
GEO 211 Mineralogy Prerequisites: GEO 111 and CHM 115	4	GEO 212 Petrology Prerequisites: GEO 112, GEO 211, and CHM 115	4
GEO 175 Research Tools for Geosciences Prerequisites: GEO 111 and GEO 112 (can be taken concurrently)	1	CHM 225 Instrumental Analysis I Prerequisite: CHM 222	3
CHM 222 Quantitative Analysis Prerequisites: CHM 116; CHM 241 or CHM 245 can be taken concurrently	3	MTH 201 Calculus I Prerequisites: (MTH 122 and MTH 123), or assignment through math placement exam Gen Ed	4 3
<sup>4</sup> CHM 241 Organic Chemistry for Life Science I <b>OR</b> CHM 245/246 Principles of Organic Chemistry w/ lab Prerequisites: CHM 116 Gen Ed	5 (4) 3		
<i>Total</i>	15/16	<i>Total</i>	14
Year Three			
GEO 311 Structural Geology Prerequisites: GEO 212 and MTH 123	4	GEO 312 Sedimentation-Stratigraphy Prerequisite: GEO 211	4
CHM 351 Introduction to Physical Chemistry Prerequisites: CHM 116, MTH 201, and PHY 220 (may be taken concurrently)	3	CHM 352 Applied Physical Chemistry Prerequisites: CHM 116, MTH 201, CHM 351 (may be taken concurrently), and PHY 220 (may be taken concurrently)	1
GEO 445 Introduction to Geochemistry Prerequisites: GEO 112; MTH 122 and CHM 116 (may be taken concurrently); MTH 201 strongly recommended	4	Gen Ed	3
PHY 230 Principles of Physics I Prerequisites: MTH 201, MTH 202 is strongly encouraged as a corequisite	5	Gen Ed	3
		Issue	3
<i>Total</i>	16*	<i>Total</i>	14
Year Four			
<sup>2</sup> GEO 485 SWS Geology Seminar Prerequisite: Geology or Earth Science major or minor Gen Ed	1 3	GEO 495: Global Tectonics (Capstone) Prerequisite: GEO 311 CHM 491 Chemistry Seminar II	3 1
Issue	3	Prerequisites: Senior Standing and GeoChem major Gen Ed	3
Gen Ed	3	<sup>2</sup> GEO 485 Geology Seminar	1
<sup>1</sup> Elective	3	Prerequisite: Geology or Earth Science major or minor	
<sup>1</sup> Elective	3	<sup>1</sup> Elective	3
		<sup>1</sup> Elective	3
<i>Total</i>	16*	<i>Total</i>	14

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

<sup>1</sup> Elective refers to any course to help you earn the required 120 credits to graduate.<sup>2</sup>Students must complete a total of two courses with an SWS attribute.

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>

<sup>3</sup>***Students with an ACT Science Subscore below 22 tend to be more successful if they only take one science course during the Fall semester of Year 1.***

*CHM 180 is recommended prior to CHM 115 if chemistry was not taken in high school or if the ACT science subscore is below 22. However, CHM 180 does NOT count toward the Geo-Chemistry major.*

**Declaring the Geology-Chemistry Major:**

1. Log into myBanner from the GVSU homepage
2. Once logged in, select "Student," "Student Records," and then "Change Major"
3. Click on the "Change Major 1/Program" box
4. Click on the down arrow in the box next to "New Major 1/Program"
5. From here scroll down and find "Geology-Chemistry"
6. Click "Submit" and then click "Change to New Program"

Please Note: Once you declare your major, the department will assign you a faculty advisor. Please be sure to meet with them regularly as well as your professional advisor in the CLAS Academic Advising Center (Heather Chafin).

**General Education Overlap**

General Education Categories fulfilled by the Geology Chemistry Major:	
Mathematical Sciences: MTH 122	Physical Science with a Lab: GEO 111