COLLEGE OF LIBERAL ARTS AND SCIENCES (CLAS) ACADEMIC ADVISING CENTER 2013-2014

CHEMISTRY-BA OR BS-TECHNICAL

THIS IS A **GENERAL** CURRICULUM GUIDE AND IS NOT APPLICABLE TO EVERY STUDENT. IT IS IMPORTANT TO MEET WITH YOUR ADVISOR.

Year One			
CHM 115 Principles of Chemistry I Prerequisites: High school chemistry and (MTH 110 or MTH 122 or MTH 125 or MTH 201)	5	**CHM 116** Principles of Chemistry II Prerequisites: CHM 115 and (MTH 122 or MTH 125 or MTH 201)	5
MTH 122 College Algebra Prerequisite: MTH 110 or assignment through Grand Valley math placement	3	**MTH 123** Trigonometry Prerequisite: MTH 122 or assignment through Grand Valley math placement (MTH 122 may be taken concurrently)	3
WRT 150 Strategies in Writing	4	Gen Ed	3
Gen Ed	3	Gen Ed	3
Total	*15*	*Total*	*14*
Year Two			
CHM 222 Quantitative Analysis Prerequisites: CHM 116; Corequisite: CHM 241 or CHM 245	3	**CHM 225** Instrumental Analysis I Prerequisites: CHM 222	3
[1]**CHM 245** Principles of Organic Chemistry I	3	[1]**CHM 247** Principles of Organic Chemistry II	3
CHM 246 Principles of Organic Chemistry I Lab Prerequisites: CHM 116	1	**CHM 248** Principles of Organic Chemistry II Lab Prerequisites: CHM 245 and CHM 246	1
MTH 201 Calculus I Prerequisites: MTH 122 and MTH 123 or assignment through Grand Valley math placement	4	**CIS 160** Programming with Visual Basic **OR CIS 162** Computer Science I Prerequisite: MTH 110	3 4
Gen Ed	3	**STA 215** Introductory Applied Statistics Prerequisite: MTH 110 or equivalent	3
		Gen Ed	3
Total	*15*	*Total*	*16-17**
Year Three			
[5]**CHM 351** Introduction to Physical Chemistry Prerequisites: CHM 116, MTH 201, and PHY 220 (may be taken concurrently)	3	[5, 7]**CHM 352** *SWS* Applied Physical Chemistry Prerequisites: CHM 116, MTH 201, CHM 351 and PHY 220 (may be taken concurrently)	1
[4]**CHM 391** Chemistry Seminar I	0	[4]**CHM 391** Chemistry Seminar I	1
[2]**CHM 425** Instrumental Analysis II Prerequisite: CHM 225	3	**PHY 221** General Physics II Prerequisites: PHY 220	5
PHY 220 General Physics I Prerequisites: MTH 122 and MTH 123	5	**CHM 311** Green Chemistry and Industrial Processes Prerequisites: CHM 242 or CHM 247	3
Issue/Theme	3	Issue/Theme	3
[3]Elective	1	Gen Ed	3
Total	*15*	*Total*	*16**
Year Four			
[4]**CHM 491** Chemistry Seminar II	0	[4]**CHM 491** Chemistry Seminar II	1
[6]Upper level Chemistry Elective Course	3	**CHM 344** Qualitative Organic Analysis Prerequisite: CHM 247 or CHM 248 or CHM 249	3
Gen Ed	3	Gen Ed	3
[3]Elective	3	[3]Elective	3
[3]Elective	3	[3]Elective	3
[3]Elective	3	[3]Elective	3
Total	*15*	*Total*	*16**

See reverse for notes.

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

It is imperative to meet with your faculty advisor or 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

[1] CHM 241 and CHM 242 may substitute for CHM 245/246/247/248.
[2] Offered fall semester on sufficient demand. Since CHM 425 is not offered every fall semester, it is important students add it in the junior year if offered. See your faculty advisor if you have questions regarding CHM 425.
[3] Elective refers to any course to help you earn the required 120 credits needed to graduate.
[4] Required of all chemistry majors. Two semesters of seminar are required for one credit. Students should register for zero credits in their first semester and one credit in their second semester.
[5] Students interested in Graduate School should take CHM 356, 353, 358 and 355 or 455 instead of CHM 351 and 352.
[6] Students must select the elective from one of the following chemistry courses: CHM 321, 322, 441, 442, or 461. CHM 321 is offered winter semesters of odd-numbered years. CHM 322 is offered fall semesters of odd-numbered years.
[7] Students must complete two courses with an SWS attribute.

Chemistry students can pursue a Bachelor of Arts or Bachelor of Science degree. Students who wish to obtain a BA must fulfill 3rd semester proficiency in a foreign language (201 level). The BS degree requirements are incorporated into the major requirements.

Declaring the Chemistry-Technical 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," from here scroll down and choose "Chemistry-**BA or BS** Technical"
5. Click "Submit" and then "Change to New Program"

General Education Overlap

General Education Categories fulfilled by the Chemistry –Technical Major:
Physical Sciences with Lab: CHM 115
Mathematical Sciences: MTH 122 or MTH 123

Upper Level Chemistry Elective Courses **Choose ONE of the following:**
CHM 321 Environmental Chemistry
CHM 322 Environmental Chemical Analysis
CHM 441 Advanced Organic Chemistry
CHM 442 Polymer Chemistry
CHM 461 Biochemistry I

Please Friend the GVSU Chemistry Facebook page: https://www.facebook.com/gvsu.chemistrystockroom