

# Chemistry (2010-2011)

## Technical Emphasis

(For those students not planning to go to graduate school in chemistry)

This is a **general curriculum** guide and is not applicable to every student and is not a replacement for meeting with your advisor.

-Assumes MTH 110 requirement has been fulfilled-

Fall Semester – Year One	credits	Winter Semester- Year One	credits
CHM 115: Principles of Chemistry I ( <i>Gen Ed</i> )	5	CHM 116: Principles of Chemistry II	5
MTH 122: College Algebra ( <i>Gen Ed</i> )	3	MTH 123: Trigonometry	3
WRT 150: Strategies in Writing	4	Gen Ed.	3
Gen Ed.	3	Gen Ed.	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>14</b>
Fall Semester – Year Two	credits	Winter Semester – Year Two	credits
CHM 222: Quantitative Analysis	3	CHM 225: Instrumental Analysis I	3
CHM 245: Principles of Organic I <sup>1</sup>	3	CHM 247: Principles of Organic II <sup>1</sup>	3
CHM 246: Principles of Organic I Lab	1	CHM 248: Principles of Organic II Lab	1
MTH 201: Calculus I	5	STA 215: Introductory Applied Statistics	3
Gen Ed.	3	CIS 160: Programming with Visual Basic <b>OR</b>	3
		CIS 162: Computer Science I	4
		Gen Ed.	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16 or 17</b>
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
CHM 391: Chemistry Seminar I <sup>2</sup>	0	PHY 221: General Physics II	5
CHM 351: Introduction to Physical Chemistry	3	CHM 352: Applied Physical Chemistry	1
CHM 425: Instrumental Analysis II (Fall of even years)	3	CHM 391: Chemistry Seminar I <sup>2</sup>	1
PHY 220: General Physics I	5	CHM 311: Green Chemistry and Industrial Processes	3
Gen Ed. or Theme	3	WRT 305: Writing in the Disciplines <sup>3</sup>	3
<b>Total</b>	<b>14</b>	Gen Ed. or Theme	3
		<b>Total</b>	<b>16</b>
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
CHM 491: Chemistry Seminar II <sup>2</sup>	3	CHM 344: Qualitative Organic Analysis	3
Upper-Level Chemistry Elective <sup>4</sup>	3	CHM 491: Chemistry Seminar II <sup>2</sup>	1
Gen Ed. or Theme	3	Gen Ed. or Theme	3
Gen Ed. or Theme	3	Elective	3
Elective	3	Elective	3
		Elective	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>

### Notes:

<sup>1</sup>CHM 241 and CHM 242 may substitute for CHM 245/246/247/248. However, students must also take CHM 249 plus 28 additional lab-hour electives.

<sup>2</sup> Required of all chemistry majors. Two semesters of seminar are required for one credit. Students should register for zero credit in their first semester and one credit in their second semester.

<sup>3</sup> Students who pass out of WRT 305 have room to take a GenEd, Theme, or elective course in this semester.

<sup>4</sup> Students must select the elective from one of the following chemistry courses: CHM 321, 322, 441, 442, or 461.

### Special Notes:

A. This is a **general** curriculum guide and will not work for everyone, especially those students who have AP or CLEP credit.

B. Courses that have (*Gen Ed*) written after them are classes that are required in the major and also fulfill a section of the general education program.

C. Remember to fulfill your 2 SWS requirements; 1 can be taken in the gen ed program and 1 in your major.

D. Some classes are in multiple sections within the gen ed. If you take a course that can be counted in two categories, you can open up 1-2 more spots for chemistry electives.

E. You must have **120 credits** to graduate from Grand Valley State University.

**It is imperative to meet with your faculty advisor or an advisor in the CLAS Academic Advising Center early in your career. The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.**

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

Prepared by CLAS Academic Advising Center – 4/23/2010