

Note that this is a "Typical Program." Actual programs will vary. See the Academic Catalog for official details.

**CHEMISTRY B.S. DEGREE****Advisor: Drs. Bordeaux and Nalliah**

<b>Fall 2008</b>		<b>Spring 2009</b>			
CH 161:	<u>Principles of Chemistry I</u>	4	CH 162:	<u>Principles of Chemistry II</u>	4
MA 171:	<u>Analytic Geometry &amp; Calculus I<sup>1</sup></u>	4	MA 172:	<u>Analytic Geometry &amp; Calculus II<sup>1</sup></u>	4
HS 115:	Hist Persp on Cult & Civ I	3	BI 161:	Cell Biology <sup>3</sup>	4
EN 121:	Academic Writing and Research	3	HS 116:	Hist Persp on Cult & Civ II	3
PE 110:	Introduction to Physical Wellness	1			
SS 111:	University Life <sup>2</sup>	.5			
	<b>total</b>	<b>15.5</b>		<b>total</b>	<b>15</b>
<b>Fall 2009</b>		<b>Spring 2010</b>			
CH 263:	<u>Organic Chemistry I</u>	4	CH 264:	<u>Organic Chemistry II</u>	4
MA 273:	<u>Analytic Geometry &amp; Calculus III</u>	4	* MA 371:	<u>Differential Equations</u>	4
PH 211:	<u>Principles of Physics I</u>	4	PH 212:	<u>Principles of Physics II</u>	4
EN 151:	Perspectives on Literature	3	BR 111:	Biblical History and Literature	3
			115:	Introduction to AR/MU/TH	2
	<b>total</b>	<b>15</b>		<b>total</b>	<b>17</b>
<b>Fall 2010</b>		<b>Spring 2011</b>			
* CH 361:	<u>Physical Chemistry I</u>	4	* CH 371:	<u>Physical Chemistry II</u>	4
* CH 441:	<u>Advanced Inorganic Chemistry</u>	3	* CH 445:	<u>Advanced Laboratory Analysis<sup>4</sup></u>	2
MI 285:	Core Curriculum Christian Faith	3	PE 111:	Physical Education Activities	1
CO 215:	Public Speaking	3	PL ____:	Introduction to Philosophy/Ethics	3
	Creative Studio Arts	1		Core Curriculum Social Science	3
				Elective [300+ level] <sup>6</sup>	2
	<b>total</b>	<b>14</b>		<b>total</b>	<b>15</b>
<b>Fall 2011</b>		<b>Spring 2012</b>			
* CH 331:	<u>Quantitative Analysis</u>	4	* CH 333:	<u>Instrumental Analysis</u>	4
* CH 411:	<u>Biochemistry<sup>3</sup></u>	3	* PH 261:	<u>Analog and Digital Electronics<sup>4</sup></u>	2
* CH 451:	<u>Senior Seminar in Chemistry</u>	1	CAP 475:	Capstone Seminar	2
CH 490:	<u>Independent Study<sup>5</sup></u>	1-2		Core Curriculum Social Science	3
BR ____:	Bible Elective [300+ level]	3		Elective	4
	Elective	4			
	<b>total</b>	<b>16-17</b>		<b>total</b>	<b>15</b>

**NOTES:**

1. Chemistry majors not yet placing into MA 171/172 should take MA 141 in the Spring of the freshman year (*see mathematics placement policy in Catalog under Academic Information*).
2. SS 111 is required in the fall semester of the freshman year for first-time freshman only.
3. BI 161 Cell Biology, is recommended as an elective. Students may choose to take BI 161 in the Spring of the Freshman, Sophomore, or Junior year depending on the need for early fulfillment of prerequisites for other Biology courses. BI 161 is recommended before CH 411 Biochemistry.
4. CH 445 may be substituted for PH 261 or taken as an elective in the major. CH 445 is offered on sufficient demand.
5. Chemistry majors must complete an independent study in chemical research for graduation. It is imperative that the student apply to summer programs in the winter of the junior year at the latest. Application in the sophomore year is encouraged.
6. Majors must be careful in selection of electives so that a sufficient number of upper division courses are taken. A minimum of 36 hours of 300+ courses is required for graduation.

\*Indicates alternating year course.

Underlining indicates required for major.