

Grambling State University  
CHEMISTRY DEPARTMENT

Bachelor of Science  
**PROFESSIONAL (Concentration)**

(*revised May 28, 2008*)

Designed using the ACS guidelines

Name: \_\_\_\_\_ Catalog: \_\_\_\_\_ Advisor: \_\_\_\_\_

Course Number	Course Name	Hrs.	Prerequisite (P) Co-requisite (C)	Grade	Semester / Yr & Faculty Approval
<b>FRESHMAN YEAR</b>					
CHEM 111	General Chemistry	3			
CHEM 113	General Chemistry Laboratory	1	CHEM 111 (C)		
CHEM 112	General Chemistry	3	CHEM 111 (P)		
CHEM 114	General Chemistry Laboratory	1	CHEM 112 (C)		
ENG 101	Freshman Composition I	3			
ENG 102	Freshman Composition II	3	ENG 101 (P)		
<b>HIST 101</b>	<b>Western Civilization</b>	<b>3</b>			
MATH 153	Calculus I	3			
MATH 154	Calculus II	3	MATH 153 (P)		
BIOL 113/115	Principles of Biology Lecture/Lab	4			
PHYS <b>153</b>	General Physics I	<b>4</b>	<b>MATH 153 (C)</b>		
FYE 101	<b>First Year Experience</b>	1			
FYE 102	<b>First Year Experience</b>	1	FYE 101 (P)		
	<b>TOTAL</b>	<b>33</b>			
<b>SOPHOMORE YEAR</b>					
CHEM 223	Organic Chemistry	3	CHEM 112 (P)		
CHEM 225	Organic Chemistry Laboratory	1	CHEM 223 (C)		
CHEM 224	Organic Chemistry	3	CHEM 223 (P)		
CHEM 226	Organic Chemistry Laboratory	1	CHEM 224 (C)		
CHEM 230	Quantitative Analysis Lecture	3	CHEM 112 (P)		
CHEM 232	Quantitative Analysis Laboratory	2	CHEM 230 (C)		
MATH 201	Calculus III	3	MATH 154 (P)		
<b>ART 210</b>	<b>Fine and Performing Arts</b>	<b>3</b>			
<b>HIST 104</b>	<b>Modern World History</b>	<b>3</b>			
PHYS <b>154</b>	General Physics II	<b>4</b>	PHYS <b>153</b> (P)		
ENG 207	Introduction to Technical Writing	3			
GET 300	Rising Junior Exam	0			
CHEM 236	Practical Inorganic Chemistry	2	CHEM 112 (P)		
	<b>TOTAL</b>	<b>31</b>			

Course Number	Course Name	Hrs.	Prerequisites (P) Co-requisite (C)	Grade	Semester / Yr & Faculty Approval
<b>JUNIOR YEAR</b>					
CHEM 341	Physical Chemistry	3	CHEM 230/232 MATH 154 (P)		
CHEM 343	Physical Chemistry Laboratory	1	CHEM 341 (C)		
CHEM 342	Physical Chemistry	3	CHEM 341 (P)		
CHEM 344	Physical Chemistry Laboratory	1	CHEM 342 (C)		
MATH 403	Differential Equations	3	MATH 154 (P)		
	<b>Foreign Language</b>	6			
ENG 200	World Literature	3			
<b>CS 110</b>	<b>Computer Science I</b>	<b>3</b>			
CHEM 461	Biochemistry	3	CHEM 224 (P)		
CHEM 451	Seminar	1			
<b>SOC 101</b>	<b>Intro to the Social Sciences</b>	<b>3</b>			
	<b>TOTAL</b>	<b>30</b>			
<b>SENIOR YEAR</b>					
CHEM 430	Instrumental Analysis Lecture	3	CHEM 341 (P)		
CHEM 432	Instrumental Analysis Laboratory	2	CHEM 224/230 (P)		
CHEM 434	Inorganic Chemistry	3			
CHEM 450	Independent Study/Research	3	Faculty Approval		
CHEM Electives*		4			
ECON 201	Macroeconomics	3	MATH 131 or higher		
EET 202	Electronic Devices I	3			
EET 222	Electronic Devices laboratory	1			
<b>Electives</b>		<b>9</b>			
	<b>TOTAL</b>	<b>31</b>			
	<b>GRAND TOTAL</b>	<b>125</b>			

**\*Recommended Chemistry Electives: CHEM 410 with CHEM 420 or CHEM 470; or CHEM 462/464.**

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