



## Undergraduate Degree Map for Completion in Four Years

<b>College:</b>	College of Science, Engineering & Technology <input type="button" value="v"/>
<b>Department:</b>	Chemistry & Geology <input type="button" value="v"/>
<b>Name of Program:</b>	BIOCHEMISTRY <input type="button" value="v"/>
<b>Degree Designation:</b>	BA <input type="button" value="v"/>
<b>Emphasis/Concentration:</b>	<input type="text"/> <input type="button" value="v"/>
<b>Option:</b>	<input type="text"/>
<b>Version:</b>	2 <input type="button" value="v"/>
<b>Version Explanation:</b>	<input type="text"/>
<b>Type of Program:</b>	Broad Major <input type="button" value="v"/>
<b>Minor Required:</b>	No <input type="button" value="v"/>
<b>Specific Minor (if required):</b>	<input type="text"/>

### Program Description:

Biochemistry is a discipline which encompasses both biology and chemistry. This rapidly expanding science focuses on the study of the molecular aspects of living organisms. The tools and concepts of biochemistry are important as a foundation for careers in many areas of research and in medicine. Students considering a BA or BS degree in biochemistry should consult a biochemistry advisor for specific information regarding the program. This major is appropriate for students in pre-professional programs such as pre-dental, pre-medical, and pre-pharmacy programs.

### Admission Requirements:

Admission to a program is necessary before a student can enroll in 300- and 400-level courses. To be eligible for admission to the biochemistry program a student must have declared biochemistry as a first major, completed 32 credits, including BIOL 105 and BIOL 106 as well as CHEM 201 and CHEM 202 and achieved a minimum grade point average of 2.0. Students should also have an assigned biochemistry advisor with whom they have discussed the program. Applications for admission to the biochemistry program are available in the department office.

### Advising:

You are expected to meet with your advisor on a regular basis to ensure courses are taken in an order that will lead to successful completion of the degree.

College of Science, Engineering & Technology Advising Center  
 Ken Adams, Student Relations Coordinator  
 Trafton C-125  
 507-389-1521

A complete listing of program faculty, policies, and course descriptions is available in the undergraduate bulletin.

## TERM 1 - FALL

<i>Designator:</i>	<i>Course:</i>	<i>Course Name:</i>	<i>Credits:</i>	<i>Milestones:</i>
				Overall GPA $\geq$ 2.0 Course Completion Rate $\geq$ 67% Completion of $\geq$ 15 credit hours
CHEM	201	GENERAL CHEMISTRY I	5	C OR BETTER
ENG	101	COMPOSITION	4	
MATH	121	CALCULUS I	4	C OR BETTER
		GENERAL EDUCATION COURSE	3	
				OVERALL GPA IN REQUIRED COURSES $\geq$ 2.2

Insert item

**Term 1 Notes:**


## TERM 2 - SPRING

<i>Designator:</i>	<i>Course:</i>	<i>Course Name:</i>	<i>Credits:</i>	<i>Milestones:</i>
				Overall GPA $\geq$ 2.0 Course Completion Rate $\geq$ 67% Completion of $\geq$ 30 credit hours Advance to Sophomore status
CHEM	202	GENERAL CHEMISTRY II	5	C OR BETTER
BIOL	105	GENERAL BIOLOGY I	4	
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	
				OVERALL GPA IN REQUIRED COURSES $\geq$ 2.2

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**Term 2 Notes:**


## TERM 3 - FALL

<i>Designator:</i>	<i>Course:</i>	<i>Course Name:</i>	<i>Credits:</i>	<i>Milestones:</i>
				Overall GPA $\geq$ 2.0 Course Completion Rate $\geq$ 67%
CHEM	305	ANALYTICAL CHEMISTRY	4	
CHEM	322	ORGANIC CHEMISTRY I	4	C OR BETTER
BIOL	106	GENERAL BIOLOGY II	4	C OR BETTER
		GENERAL EDUCATION COURSE	3	
				OVERALL GPA IN REQUIRED COURSES $\geq$ 2.2
				APPLY FOR ADMISSION TO COLLEGE

Insert item

**Term 3 Notes:**

**TERM 4 - SPRING**

<i>Designator:</i>	<i>Course:</i>	<i>Course Name:</i>	<i>Credits:</i>	<i>Milestones:</i>
				Overall GPA $\geq$ 2.0 Course Completion Rate $\geq$ 67% Completion of $\geq$ 60 credit hours Advance to Junior status
CHEM	324	ORGANIC CHEMISTRY II	3	C OR BETTER
CHEM	325	ORGANIC CHEMISTRY II LABORATORY	1	C OR BETTER
CHEM	340	QUANTITATIVE SKILLS FOR CHEMISTRY AND BIOCHEMISTRY	1	C OR BETTER
BIOL	211	GENETICS	4	OVERALL GPA IN REQUIRED COURSES $\geq$ 2.2
		GENERAL EDUCATION COURSE	3	
		GENERAL ELECTIVE COURSE	1-4	
		GENERAL ELECTIVE COURSE	1-4	
		GENERAL ELECTIVE COURSE	1-4	
		GENERAL ELECTIVE COURSE	1-4	

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**Term 4 Notes:**

**TERM 5 - FALL**

<i>Designator:</i>	<i>Course:</i>	<i>Course Name:</i>	<i>Credits:</i>	<i>Milestones:</i>
				Overall GPA $\geq$ 2.0 Course Completion Rate $\geq$ 67% Apply for Graduation
CHEM	460	BIOCHEMISTRY I	3	OVERALL GPA IN REQUIRED COURSES $\geq$ 2.2
CHEM	465	BIOCHEMICAL TECHNIQUES I	1	
BIOL	270	MICROBIOLOGY	4	
		LANGUAGE I	4	
		GENERAL ELECTIVE COURSE	3	

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**Term 5 Notes:**

**TERM 6 - SPRING**

<i>Designator:</i>	<i>Course:</i>	<i>Course Name:</i>	<i>Credits:</i>	<i>Milestones:</i>
				Overall GPA $\geq 2.0$ Course Completion Rate $\geq 67\%$ Completion of $\geq 90$ credit hours Advance to Senior status
CHEM	461	BIOCHEMISTRY II	3	OVERALL GPA IN REQUIRED COURSES $\geq 2.2$
CHEM	466W	BIOCHEMICAL TECHNIQUES II	2	
		LANGUAGE II	4	
		GENERAL EDUCATION COURSE	3	
		GENERAL ELECTIVE COURSE	1-4	
		GENERAL ELECTIVE COURSE	1-4	
		GENERAL ELECTIVE COURSE	1-4	
		GENERAL ELECTIVE COURSE	1-4	

Insert item

**Term 6 Notes:**

GENERAL ELECTIVE COURSES MINIMUM CREDITS 4

### TERM 7 - FALL

<i>Designator:</i>	<i>Course:</i>	<i>Course Name:</i>	<i>Credits:</i>	<i>Milestones:</i>
				Overall GPA $\geq 2.0$ Course Completion Rate $\geq 67\%$
CHEM	474	CHROMATOGRAPHY	2	OVERALL GPA IN REQUIRED COURSES $\geq 2.2$
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	
		UPPER-DIVISION ELECTIVE BIOL OR CHEM	3	

Insert item

**Term 7 Notes:**

GENERAL EDUCATION COURSES MINIMUM 6 CREDITS

### TERM 8 - SPRING

<i>Designator:</i>	<i>Course:</i>	<i>Course Name:</i>	<i>Credits:</i>	<i>Milestones:</i>
				Overall GPA $\geq 2.0$ Course Completion Rate $\geq 67\%$
CHEM	494 OR 495	BIOCHEMISTRY CAPSTONE EXPERIENCE OR SENIOR SEMINAR	1	OVERALL GPA IN REQUIRED COURSES $\geq 2.2$
BIOL	479	MOLECULAR BIOLOGY	4	
		UPPER-DIVISION COURSE	2	
		UPPER-DIVISION ELECTIVE BIOL OR CHEM	2-4	
		UPPER-DIVISION ELECTIVE BIOL OR CHEM	2-4	

Designator:	Course:	Course Name:	Credits:	Milestones:
		UPPER-DIVISION ELECTIVE BIOL OR CHEM	2-4	Overall GPA $\geq$ 2.0 Course Completion Rate $\geq$ 67%

Insert item

**Term 8 Notes:**

UPPER-DIVISION ELECTIVE MINIMUM CREDITS 6

**PROGRAM NOTES**

1. ELECTIVES TAKEN IN SEMESTERS 7, AND 8 MUST BE APPROVED BY A BIOCHEMISTRY FACULTY MEMBER IF THE COURSE ARE TO BE USED TOWARD THE BIOCHEMISTRY BA.
2. APPLY FOR ADMISSION TO THE COLLEGE AFTER THREE SEMESTERS.
3. ELECTIVES MUST BE SELECTED TO MEET THE UPPER-DIVISION 40 CREDIT MINIMUM. HAVE YOUR ADVISOR APPROVE YOUR ELECTIVES.
4. TO USE THIS MAP, STUDENTS MUST HAVE A CURRENT ACT MATH SUBSCORE OF 24, OR A MINIMUM ACCUPLACER COLLEGE LEVEL MATH SCORE 103 OR A MINIMUM ACCUPLACER CALCULUS READINESS SCORE OF 22 OR A MINIMUM SCORE OF C OR BETTER IN

**DEGREE MAP CHECKLIST: GRADUATION REQUIREMENTS**

<input type="checkbox"/>	1. Minimum of 15 credits per semester
<input type="checkbox"/>	2. General Education = 44 credits
<input type="checkbox"/>	3. Diverse Cultures = 2 course (6 credits minimum) from two disciplines
<input type="checkbox"/>	4. Writing Intensive = 2 courses (6 credits minimum)
<input type="checkbox"/>	5. Major = <input type="text"/> credits
<input type="checkbox"/>	6. Upper-Division Requirements = 40 credits minimum
<input type="checkbox"/>	7. Professional Education (if required) = 30 credits
<input type="checkbox"/>	8. Language Requirements (if BA) = 8 credits minimum
<input type="checkbox"/>	9. Minor = <input type="text"/> credits
<input type="checkbox"/>	10. Total credits required for degree <input type="text"/>

**DEGREE MAP COMPLETE**

<input checked="" type="checkbox"/>	Map is complete and ready for review <ol style="list-style-type: none"> <li>1. Faculty please send an email to your Department Chair when map is ready to review.</li> <li>2. Department Chair please send an email to your Dean when map is ready to review.</li> <li>3. Dean please send an email to the Assistant Vice President for Undergraduate Studies when map is ready to review.</li> </ol>
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**DEAN APPROVAL**

<input checked="" type="checkbox"/>	Map reviewed and approved by Dean
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Save and Close