



**Department of Biology Graduation Checklist**  
<https://biology.sfsu.edu/advising/undergraduate>

BIOL 699	Restricted to senior Biology majors; consent of the department and instructor.	Independent Study in Biology (1-3 units) <i>requires faculty mentor's approval</i>		yes	yes	no		
CHEM 336	see <a href="https://bulletin.sfsu.edu/courses/chem/">https://bulletin.sfsu.edu/courses/chem/</a>	Organic Chemistry II Laboratory (2)		yes	yes	yes		
<b>OR</b> CHEM 343 <sup>2</sup>	see <a href="https://bulletin.sfsu.edu/courses/chem/">https://bulletin.sfsu.edu/courses/chem/</a>	Biochemistry I Laboratory		yes	yes	no		

<sup>1</sup> **Required** for admission to Clinical Laboratory Science graduate programs.

<sup>2</sup> **Recommended** for admission to Clinical Laboratory Science graduate programs.

Course Num.	Course Title	Units

**What course has student taken to meet GVAR? (Typically Biol 402GW)**

GVAR course must be completed with a C- or better to meet graduation requirements

	Required	Completed
Total upper division unit requirements:	26	_____
Total units for major (minimum 60 units)	60-63	_____

**Recommendations for targeted post-graduate plans**

<b>Health profession</b>	Students generally required to take the full year of organic chemistry with lab: Chem 233/234 and Chem 335/336 (check your target program) Students should check their target programs to confirm requirements.
<b>Graduate programs</b>	Students generally required to take the full year of organic chemistry with lab: Chem 233/234 and Chem 335/336 (check your target program) Students should take the full year of biochemistry: Chem 340 and Chem 341 Students should complete at least two semesters of calculus and one semester of physical chemistry. Student should consult with major advisor to optimize course plan for goals.

**Clinical Laboratory Science Program**

Note the courses indicated in the checklist as required or recommended for CLS graduate programs  
 CLS graduate programs require a minimum 3.0 GPA.  
 Students should take Chem 130 (General Organic Chemistry, 3 units) and Chem 349 (General Biochemistry, 3 units)  
 Students must take the following courses as their upper division ELECTIVES in Microbiology concentration  
 BIOL 430 (Medical Microbiology, 3 units)  
 BIOL 435 (Immunology, 3 units)  
 BIOL 625 (Hematology, 3 units)  
 Students should take the following courses (not part of the major) required for CLS program:  
 CHEM 321 & 322 (Quantitative Chemical Analysis + Lab, 3/2 units)  
 Biol 612 (Human Physiology, 3 units)