

**Degree Roadmap for students who completed the  
Transfer AS-T degree in Biology  
Catalog Year 2018-19**

**SJSU Degree: BS in Biological Science, Concentration Microbiology (with a Chemistry Minor)**

The AS-T in Biology guarantees completion of 60 transferable units and the STEM lower division core GE satisfied (missing one course in GE Area C and one course in GE Area D). This transfer degree will meet the BIOL 30, 31; CHEM 1A, 1B; PHYS 2A, 2B; and MATH 30 requirements at SJSU. Below is the path to the BS Biological Science, Concentration Microbiology degree, and a Minor in Chemistry in 60 semester units with the transfer AS-T Biology degree:

Students in this major must complete all lower division courses in the Requirements of the Major with a "C- or better" to graduate. Any course that is prerequisite to any Chemistry course must be passed with a grade of "C or better."

(This roadmap has an approved P.E. waiver)

1st Semester at SJSU	Recommended Course	Units
WST taken and passed		
GE Area C - Remaining lower GE	GE Area C	3
Preparation for the Major: BIOL 55	BIOL 55	3
Major: MICR 101	MICR 101	4*
Chemistry Minor: CHEM 120S	CHEM 120S	1*
Chemistry Minor: CHEM 112A	CHEM 112A	3*
	Semester Total	14

2nd Semester at SJSU	Recommended Course	Units
SJSU Studies Area V in US Government & California Government (or a different Area V if US2+3 is met prior to transfer)	POLS 170V meets US2+3 + Area V (if US2+3 was met previously then take a different Area V course)	3*
GE Area D - Remaining lower GE	GE Area D	3
Major: BIOL 107	BIOL 107	3*
Major: BIOL 100W course, also satisfies SJSU Studies Area Z	BIOL 100W	3*
Chemistry Minor: CHEM 112B	CHEM 112B	3*
	Semester Total	15

3rd Semester at SJSU	Recommended Course	Units
Major: MICR 166 - Partially completes Area R	MICR 166	4*
Major: MICR 141	MICR 141	3*
**Major: Upper Division Microbiology Elective(s) – select 4 units from: BIOL 116 (3U), BIOL 116L (3U), BIOL 118 (4U), BIOL 124 (3U), BIOL 125 (2U), BIOL 134 (4U), BIOL 135A (3U), BIOL 156 (3U), BIOL 180 (1-4U), MICR 140 (3U), MICR 140L (2U), MICR 141L (3U), MICR 166 (3U), MICR 170 (3U)	UD Microbiology Elective – select 4 units from list.	4*
Chemistry Minor: CHEM 113A	CHEM 113A	2*
Chemistry Minor: CHEM 135	CHEM 135	4*
	Semester Total	17

4th Semester at SJSU	Recommended Course	Units
SJSU Studies Area S in US History (or a different Area S if US1 is met prior to transfer)	HIST 170S meets US1 + Area S (if US1 was met previously then take a different Area S course)	3*
Major: MICR 127 - Partially fulfills Area R	MICR 127	2*
**Major: Upper Division Microbiology Electives – select 9 units from: BIOL 107L (2U), BIOL 135L (3U), BIOL 180 (1-4U), MICR 122 (2U), MICR 122L (2U), MICR 123 (1U), MICR 123L (2U), MICR 142 (3U), MICR 142L (3U)	UD Microbiology Elective – select 9 units from list.	9*
	Semester Total	14

**Notes:** \*A minimum of 40 upper division units must be completed for degree. This roadmap is a sample pathway. Check with a major advisor regarding the most appropriate course sequence for you. 60 units minimum will be transferred with this degree, however up to 70 transfer units can be applied to the lower division and lower division free electives if articulated.

\*\* At least 6 lab elective units must be completed for degree.