

## AS-T Biology to B.S. Biology: Molecular Biology Concentration 2023-2024

This pathway is for students who have completed an AS-T in Biology with IGETC for STEM, and have sent official degree verification to CSUMB. The CSUMB pathway includes 6 units of lower-division GE (based on IGETC for STEM), the CSU American Institutions requirement, and 9 units of upper-division GE.

Transfer students who did not complete an Associate for Transfer in Biology should meet with the Biology academic advisor to update their individualized pathway in the “My Learning Plan” degree planner in Oasis.

Fall Junior Courses (15 units)	Course or GE Title	Units	GE/Major
<b>BIO 330 or BIO 332 or BIO 341 or BIO 370</b>	Physiology or Evolutionary Biol course	3	Concentration
<b>STAT 250</b>	Applied Stats for Science & Tech	4	Major
<b>CHEM 211 &amp; CHEM 211L</b>	Organic Chemistry I	3+2	Major
<b>SL 210S or SBS 212S or HCOM 260S</b>	D-Civics/SL course to complete American institutions and IGETC GE	3	DCSL, US2,3
Spring Junior Courses (13 units)	Course or GE Title	Units	GE/Major
<b>BIO 311</b>	Genetics	4	UDB, core
<b>CHEM 310</b>	Biochemistry I	3	Concentration
<b>BIO 320 or BIO 322</b>	Microbiology or Plant Pathology	4	Rsch Meth #1
<b>BIO 301</b>	Research & Tech Writing in Biology	2	GWAR, Core
Fall Senior Courses (17 units)	Course or GE Title	Units	GE/Major
<b>BIO 378S or BIO 379S</b>	Biology-related service learning	3	UDSL, Major
<b>BIO 320, 322, 330, 332, 370, 380, 410, 412, 413, 414, 421, 425, 430, 444, 461, or CHEM 350, CHEM 410, or MSCI 331</b>	Additional Molecular Biology core course not counted previously for other requirement	4	Concentration
<b>BIO 320 or 322 or 344L or 380 or 425 or 430 or 444 or 461 or CHEM 310L or CHEM 350</b>	Additional Molecular BIO Research Methods	4	Rsch Meth #2
Major Concentration Elective	Major Concentration Elective	3	Concentration
<b>Lower-division GE area C and World Culture and Language requirement</b>	Language other than English	3	C2, WCL
Spring Senior Courses (15 units)	Course or GE Title	Units	GE/Major
Major Concentration Elective	Major Concentration Elective	3	Concentration
<b>Upper-division Arts or Humanities</b>	UD C	3	UDC
<b>HCOM 353 or SBS 350 or HCOM 369</b>	UD Social Science US history and CSUMB ethnic studies requirement	3	UDD, US1, ES*
<b>BIO 412 or 413 or 414 or CHEM 410 OR BIO 492 and one of (BIO 410 or 421 or 444 or 461) OR MSCI 410 and BIO/MSCI 430 OR BIO 491 and 3 units of (BIO 394 or 397 or 494 or 497 or RSCH 394)</b>	Integrative Learning (Capstone) course or course combination	3-5	Concentration
<b>Electives as needed to reach 120 units</b>	As needed to reach 120 units	1-3	Elective if needed
<b>Total Molec Biol AS-T pathway:</b>		<b>60</b>	

\*Note: Transfer students with catalog rights to a GE catalog prior to fall 2021 must complete CSUMB’s Ethnic Studies (ES) requirement.