

Name: \_\_\_\_\_ ID: \_\_\_\_\_ E-mail: \_\_\_\_\_ Class: \_\_\_\_\_

Major: **Chemical Biology**

Instructions Please print or type. The purpose of this study plan is to track your progress to degree completion by outlining the specific courses required for the program and when you expect to take them. Please indicate the term (semester) when you plan to take or have taken each course (e.g., 24F, 25S, 25F, etc.). If a choice of course is given for the requirement, circle the appropriate course number. For electives, fill in the course number. Courses completed via AP/IB or transfer credit should be marked as AP, IB, or TR respectively. Revise this plan as needed. An additional study plan will be required if you wish to pursue a minor or a second degree.

Term	Course	Credits	Grade	Term	Course	Credits	Grade
<b>TERM I</b>				<b>TERM III</b>			
I	BIO 181 - Biology and Biotechnology	3.0	_____	III	BIO 301 - Professional Ethics for Scientific Research <b>OR</b>	1.0	_____
I	BIO 182 - Biology and Biotechnology Laboratory	1.0	_____		CH 301 - Professional Ethics for Scientific Research	1.0	_____
I	CH 115 - General Chemistry I	3.0	_____	III	BIO 382 - Biological Systems	4.0	_____
I	CH 117 - General Chemistry Laboratory I	1.0	_____	III	CH 243 - Organic Chemistry I	3.0	_____
I	CH 179 - Career Pathways in Chemical and Biology Sciences	1.0	_____	III	CH 245 - Organic Chemistry Lab I	1.0	_____
I	HASS 103 - Writing and Communications Colloquium	3.0	_____	III	ENGR 241 - Probability & Statistics w/ Data Science Apps	4.0	_____
I	MA 121 - Differential Calculus	2.0	_____	III	PEP 111 - Mechanics	3.0	_____
I	MA 122 - Integral Calculus	2.0	_____	III	PRV 20X - Frontiers of Technology <sup>5</sup>	1.0	_____
I	PRV 101 - First Year Experience	1.0	_____				
<b>TERM II</b>				<b>TERM IV</b>			
II	BIO 291 - Cell and Molecular Biology	4.0	_____	IV	CH 244 - Organic Chemistry II	3.0	_____
II	CH 116 - General Chemistry II	3.0	_____	IV	CH 246 - Organic Chemistry Laboratory II	1.0	_____
II	CH 118 - General Chemistry Laboratory II	1.0	_____	IV	CH 321 - Thermodynamics	3.0	_____
II	CH 189 - Seminar in Chemistry and Biology	1.0	_____	IV	CS 105 - Introduction to Scientific Computing <b>OR</b>	3.0	_____
II	HASS 105 - Knowledge, Nature, Culture	3.0	_____		CS 115 - Introduction to Computer Science	4.0	_____
II	MA 125 - Vectors and Matrices	2.0	_____	IV	PEP 112 - Electricity and Magnetism	3.0	_____
II	MA 126 - Multivariable Calculus I	2.0	_____	IV	PEP 221 - Physics Lab I for Scientists	1.0	_____
				IV	PRV 20X - Frontiers of Technology	1.0	_____

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Original \_\_\_\_\_ Revision \_\_\_\_\_

Academic Advisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_ 2nd Degree \_\_\_\_\_

Name: \_\_\_\_\_ ID: \_\_\_\_\_ E-mail: \_\_\_\_\_ Class: \_\_\_\_\_

Major: **Chemical Biology**

Term	Course	Credits	Grade	Term	Course	Credits	Grade
<b>TERM V</b>				<b>TERM VII</b>			
V	BIO 484 - Genetics	4.0	_____	VII	BIO 568 - Computational Biology <b>OR</b>	3.0	_____
V	CH 362 - Instrumental Analysis I - Spectroscopy and Chromatography	4.0	_____		BIO 583 - Physiology	3.0	_____
V	CH 580 - Biochemistry I - Cellular Metabolism and Regulation	3.0	_____	VII	CH 498 - Senior Capstone Research Project I	3.0	_____
V	MGT 103 - Introduction to Entrepreneurial Thinking	2.0	_____	VII	IDE 401 - Senior Innovation II: Value Proposition	1.0	_____
V	PEP 222 - Physics Lab II for Scientists	1.0	_____	VII	General Elective <sup>3</sup> : _____	3.0	_____
V	Humanities <sup>4</sup> : _____	3.0	_____	VII	Technical Elective <sup>2</sup> : _____	3.0	_____
				VII	Humanities: _____	3.0	_____
<b>TERM VI</b>				<b>TERM VIII</b>			
VI	BIO 398 - Research Proposals for Undergraduate Research	1.0	_____	VIII	CH 499 - Senior Capstone Research Project II	3.0	_____
VI	CH 421 - Chemical Dynamics	4.0	_____	VIII	CH 582 - Biophysical Chemistry	3.0	_____
VI	CH 461 - Instrumental Analysis II - Electrochemistry	4.0	_____	VIII	IDE 402 - Senior Innovation III: Venture Planning and Pitch	1.0	_____
VI	CH 581 - Biochemistry II: Biomolecular Structure and Function	3.0	_____	VIII	General Elective: _____	3.0	_____
VI	PRV 20X - Frontiers of Technology	1.0	_____	VIII	General Elective: _____	3.0	_____
VI	Humanities: _____	3.0	_____	VIII	Humanities: _____	3.0	_____

**ADDITIONAL COURSES**

Notes:

- Inorganic Chemistry, CH 412, is required if you wish to pursue ACS certification and is only offered in Spring semester. If you are interested, it can be taken in Term V or Term VII. It can be used to fulfill a general elective or technical elective in addition to the ACS certification.
- Technical Electives can be selected from available CH and BIO 300, 400, and 500-level courses that are not already included in your degree program requirements. Suggested technical electives for the Chemical Biology program include the following:
  - BIO 307, BIO 392, BIO 485, BIO 487, BIO 507, BIO 508, BIO 526, BIO 586, BIO 584, CH 412, CH 520, CH 550, CH 574, BME 504, BME 505, BME 515, BME 561, CHE 560, MT 581, CS 544, PME 530/CHE 530, BME 508/MT 508.
  - Whichever of BIO 568 and BIO 583 you choose as a core course, the other may be chosen as a Technical Elective.
- If you are interested in taking a course related to biology or chemistry in another department not on this list, please contact your academic advisor. General Electives can be selected from available courses offered by programs in SES, SOB and HASS (including CH/BIO courses). Approval from the student's advisor and the course instructor may be required.
  - Recommended general elective if planning to pursue an engineering master's: MA 221 Differential Equations.
  - Recommended general elective courses connected to the major include: EN 250 Quantitative Biology and PEP 242 Modern Physics.
- Humanities: Please see [Humanities Requirements](#) for specific requirements.
- [SUCCESS Core Curriculum](#): Students must complete requirements including PRV 101, and three (3) courses from PRV 201, PRV 202, PRV 203, PRV 204, PRV 205.

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Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Original \_\_\_\_\_ Revision \_\_\_\_\_

Academic Advisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_ 2nd Degree \_\_\_\_\_