

BIOCHEMISTRY MAJOR GRADUATION CHECKLIST

Name:

SBU ID:

Phone:

Email:

Today's Date:

Transfer School:

Matriculation Semester:

Expd Graduation Date:

Cumulative GPA:

Course	Grade	Credits
CHE 131 or 141 Gen or Hon Chemistry I		4
CHE 133 or 143 Gen or Hon Chem Lab I		1
CHE 132 or 142 Gen or Hon Chemistry II		4
CHE 134 or 144 Gen or Hon Chem Lab II		1

OR

Course	Grade	Credits
CHE 152 Molecular Science I		4
CHE 154 Molecular Science Lab I		2

CHE 321 Organic Chemistry I		4
CHE 327 Organic Chemistry Lab		2
CHE 322 Organic Chemistry II		4

OR

CHE 331 Molecular Science II		4
CHE 327 or CHE 383 Org Chem Lab		2
CHE 332 Molecular Science III		4

CHE 312 Physical Chemistry (Short crs)		3
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OR

CHE 301 Phys Chem I (Chm major 1/2)		4
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MAT 125 Calculus A [MPS 7 ~131]		3
MAT 126 Calculus B (B+C=132)		3
MAT 127 Calculus C (B+C=132)		3
MPS 9 ~ 131,132		

OR

MAT 131 Calculus I [MPS 7 ~ 131]		4
MAT 132 Calculus II [MPS 9 ~ 131,132]		4

OR

AMS 151 Calculus I		3
AMS 161 Calculus II		3

PHY 121 Physics for the Life Sciences I		4
PHY 122 Physics for the Life Sciences II		4
Other physics options avail; see advisor		

OR

PHY 131 Class Physics I		3
PHY 133 Classical Physics Lab I		1
PHY 132 Class Physics II		3
PHY 134 Classical Physics Lab II		1

BIO 201 Organisms to Ecosystems		3
BIO 202 Molecular and Cellular Biology		3
BIO 203 Cellular and Organ Physiology		3
BIO 204 (pre-req for 205 & 207) Intro BIO lab I		2
BIO 458		0
BIO 205 or 207 (204 pre-req) Intro BIO lab II		2

AND

BIO 320, 321 or EBH 302 Genetics option		3
BIO 310 Cell Biology		3
BIO 361 Biochemistry I		3
BIO 362 Biochemistry II (prereq BIO 361)		3

BIO 365 Biochemistry Laboratory		2
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BIO ____ Upper Division Elective I		3 or 4
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BIO ____ Upper Division Elective II		3 or 4
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BIO 459 Write Effectively in Biology; Typically taken concurrently with BIO 365		0 credits
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Approved by:	Date:	
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Notes:

- Courses taken at other institutions must be approved IN ADVANCE and must be taken at four year institutions
- ALL BCH major COURSES MUST BE PASSED WITH A GRADE OF C OR HIGHER

UPPER DIVISION ELECTIVES (other courses only with prior approval of syllabus by Curriculum Committee) Scheduling is subject to change, be sure to verify with Undergraduate Biology Semester Course Offerings

Fall Semester Courses

- BIO 304 Genomics
- BIO 312 Bioinformatics
- BIO 314 Cancer Biology
- BIO 317 Principles of Cellular Signaling
- BIO 321 Introduction to Ecological Genetics and Genomics (can not count for both elective and genetics requirement)
- BIO 325 Animal Development
- BIO 335 Neurobiology Laboratory
- BIO 338 From Synapse to Circuit
- BIO 350 Darwinian Medicine
- BIO 354 Evolution
- BIO 364 Laboratory Techniques in Cancer Biology
- BIO 365 (Cannot count for both lab and upper division elective)
- CHE 345 Structure and Reactivity in Organic Chemistry
- EBH 302 Human Genetics (can not count for both elective and genetics requirement)
- BME 304 Genetic Engineering

Spring Semester Courses

- BIO 315 Microbiology
- BIO 327 Developmental Genetics Laboratory
- BIO 328 Mammalian Physiology
- BIO 332 Computational Modeling
- BIO 334 Principles of Neurobiology
- BIO 337 Neurotransmission and Neuromodulation
- BIO 339 Molecular Development of the Nervous System
- BIO 358 Biology of Human Social and Sexual Behavior
- CHE 346 Biomolecular Structure and Activity

Summer Semester (elective and required courses) subject to change

- BIO 316 Molecular Immunology
- BIO 315 Microbiology
- BIO 317 Principles of Cellular Signaling
- BIO 320 General Genetics
- BIO 358 Biology of Human Social and Sexual Behavior
- BIO 361 Biochemistry I

Not regularly offered

- BIO 374 Molecular Neurobiology
- BIO 409 Selected topics in Biochemistry, cell biology, and developmental biology
- HBP 390 Basic Mechanisms in Pathology

Transfer Credit

Transfer students who wish to complete the requirements for the Biochemistry major must take Biochemistry I and II (BIO 361 and 362) and must complete at least a minimum of nine (9) additional credits at Stony Brook in required upper-division Biology courses (BIO 310, 320, 311, and 365) and/or approved upper-division Biology elective courses.

SENIOR WRITING REQUIREMENT or WRTD – BIO 459 Write Effectively in Biology

Writing Sample Submission

To fulfill the upper-division writing requirement in Biochemistry, students must co-register for BIO 459 Writing Effectively in Biology and BIO 365. A writing sample (Lab Report) from BIO 365, preferably the first and/or second lab report must be submitted for evaluation and approved. The writing sample must contain a minimum of 750 words of text and can be a graded laboratory report, a graded term paper, or a graded report from a readings or research course. You should edit the original typed writing sample, using pen or pencil, to correct any errors in English language usage.

The original graded writing sample and the Upper Division Writing Requirements (UDWR) form should be signed by both the student and instructor and should be submitted to the Undergraduate Biology Office (110 CMM/BLL 631-632-8530). The Writing Center will evaluate the submission and contact the student directly if remediation is needed. **We recommend that you submit the writing sample mid semester, so that the writing evaluation will be completed by the end of the semester.** The Upper Division Writing Requirements (UDWR) form can be obtained from the following webpage:

<https://www.stonybrook.edu/commcms/biology/advising/Forms.php>

The deadline for submission of the writing sample is March 1 for students graduating the following May or August, and October 1 for students graduating the following December. However, students are urged to register for BIO 459 and submit appropriate materials in their junior year, or by the end of their next-to-last term, in order to allow for evaluation and possible revision. Later submissions are considered, but may delay graduation.

