

BIOCHEMISTRY Major

Student: _____

Minor? Additional Goals (Minor, Study abroad, minor, pre-professional...) _____

Fall			
Dept & Course #	WOT	Theme (E/F)	Cr.
CHEM 125	NW	Truth (E)	4
INTG 100			4
LANG			4
BIOL 101	NW	Truth (E)	4
CHEM 201	NW		1
INTG 105			1

Spring			
Dept & Course #	WOT	Theme (E/F)	Cr.
CHEM 250			4
XXXX XXX	CI		4
LANG			4
BIOL 201			4
CHEM 202			1

Fall			
Dept & Course #	WOT	Theme (E/F)	Cr.
CHEM 251			4
THEO 1XX	TE		4
PHYS 105/191	QR	Mvmt (E)	4
LANG			4
CHEM 203		Mvmt (E)	1

Spring			
Dept & Course #	WOT	Theme (E/F)	Cr.
CHEM 255	QR		4
PHYS 106/200	NW	Truth (E)	4
MATH 119	AS	Mvmt (E)	4
XXXX XXX	SW		4
CHEM 205			1

Fall			
Dept & Course #	WOT	Theme (E/F)	Cr.
CHEM 315	NW	Mvmt (E)	4
BIOL 317			4
⁴ BIOL 3XX or 2 CHEM 3XX			4
MATH 120/124	AS		4

Spring			
Dept & Course #	WOT	Theme (E/F)	Cr.
XXXX XXX	CS		4
XXXX XXX	AE		4
XXXX XXX	GL		4

Fall			
Dept & Course #	WOT	Theme (E/F)	Cr.
THEO 3XX	TI		4
XXXX XXX	HE		4
XXXX XXX		focus	4
BIOL 311			4

Spring			
Dept & Course #	WOT	Theme (E/F)	Cr.
INTG 300			4
BCHM 375	EX		2
BCHM XXX			0
XXXX XXX	BN		4
BIOL 318			4

Integrations Curriculum:

Foundational Courses:

- ___ College Success (INTG 105)
- ___ Learning Foundations INTG 100 (LF)
- ___ Culture & Social Difference: Identity (CI)
- ___ Theological Explorations (TE)

Ways of Thinking:

- ___ Abstract Structures (AS)
- ___ Artistic Expression (AE)
- ___ Human Experience (HE)
- ___ Natural World (NW)
- ___ Social World (SW)

Additional:

- ___ Artistic Engagement (AR)
- ___ Quantitative Reasoning (QR)
- ___ Experiential Engagement (EX)
- ___ Global Engagement (GL)**
- ___ Benedictine (BN)**

** GL and BN waived for students entering AY2020 & AY2021

Upper-Level Coursework

- ___ Theological Integrations (TI)
- ___ Cultural & Social Difference: Systems (CS)
- ___ Learning Integrations – INTG 300 (LI)

Global Language

- ___ 111 Beginning I
- ___ 112 Beginning II
- ___ 211 Intermediate

Themes (One theme, at least two depts)

- ___ Thematic Encounter
- ___ Thematic Encounter
- ___ Thematic Focus

General Requirements:

- ___ 124 Total credits
- ___ 40 upper division credits
- ___ Cumulative GPA > 2.0
- ___ Major GPA > 2.0

Integrations notes on next page

BIOCHEM Major Requirements:

Chemistry Courses:

- ___ CHEM 125 (4): Intro Chem St/Prop
- ___ CHEM 250 (4): Reactivity 1
- ___ CHEM 251 (4): Reactivity 2
- ___ CHEM 255 (4): Macro Chem Analysis
- ___ CHEM 315 (4): Advanced Reactivity

___ ⁴Biochem elective (1 x 4cr biology or 2 x 2cr chemistry)

Chemistry Labs:

- ___ CHEM 201 (0,1): Purif/Struct
- ___ CHEM 202 (0,1): Purif/Chrom
- ___ CHEM 203 (0,1): Synthesis
- ___ CHEM 205 (0,1): Measurement

Biology Courses:

- ___ BIOL 101 (4): Foundations of Biol
- ___ BIOL 201 (4): Intermed Cell Bio, & Ge
- ___ BIOL 311 (4, F): Cell Biol
- ___ BIOL 317 (4): Biochemistry
- ___ BIOL 318 (4, Sp): Molec Genetics

Additional Courses:

- ___ BCHM 375 (2, Sp): Cptsone
- ___ BCHM XXX (0)

Supporting Courses:

- ___ MATH 119 (4): Calc I
- ___ MATH 120 (4): Calc II OR
- ___ MATH 124 (4): Stats
- ___ PHYS 105/191(4)
- ___ PHYS 106/200 (4)

⁴Biochem Electives (4 credits required):

- BIOL 307 (4, F): Microorganisms
- BIOL 319 (4, Sp): Immunology
- BIOL 323 (4, F): Animal Physiology
- BIOL 329 (4): Histology
- BIOL 339 (4, Sp): Evolution
- BIOL 320 (4, Sp): Neurobiology
- BIOL 373L (4): Mathematical Modeling

- CHEM 323 (2): Topics in Biochemistry
- CHEM 347 (2, F): Chemical Biology
- CHEM 352 (2): Signal Transduction
- CHEM 353 (2, Sp): Xenobiotic Metabolism
- CHEM 358 (2): Biomacromolecules

In Depth Course Offerings (subject to change):

Fall 2022			
CHEM	Course Name	Conc.	Prerequisites
346	Nanomaterials	EN, IM	CHEM 255
347 ^a	Chemical Biology	BCHM, CB	CHEM 251
322A	Forensics	CB	Pre-req: 250, Co-Req: 255, 205

Spring 2023			
CHEM	Course Name	Conc.	Prerequisites
343	Climate & Habitat Change	EN, IM	CHEM 255
322B	Analysis of Food Products	IM, EN	CHEM 202, 250
353 ^a	Xenobiotic Metabolism	CB, BCHM	CHEM 315
364	Medicinal Chemistry	CB	CHEM 315

^a: Courses count as electives towards BCHM major

**Thematic Focus Courses with additional WOT
(as of February 2022):**

Theme - Truth:

Dept & Course #	WOT
COMM 379A	HE, (BN too)
ECON 328	HE
EDUC 379A	SW
ENG 379A	HE
ENVR 279A	SW
HIST 279A	HE
HIST 279B	HE
HIST 279C	HE
HIST 279D	HE
INTG 279A	AE
PHIL 279A	HE
PHIL 379B	HE
SOCI 279A	SW
SOCI 379A	SW

Theme - Movement:

Dept & Course #	WOT
COMM 278A	HE
ENVR 278A	HE
GEND 278A	HE
HIST 278A	HE
HIST 278B	HE
MUSC 378A	AE, HE
SOCI 378A	GL, SW