

Name: _____

BASED ON CREDITS

BIOCHEMISTRY - MOLECULAR BIOLOGY, B.S.

129 credits and Three 1-credit PE courses

GENERAL EDUCATION CORE

BASIC REQUIREMENTS

(6 credits and three 1-credit PE courses)

Composition and Rhetoric

- EN 103 Composition and Rhetoric I
- EN 104 Composition and Rhetoric II

Physical Education Courses

- PE 100
- PE _____
- PE _____

MODES OF THINKING (9 credits)

Literature (Select one)

- EN 110, EN 112, EN 115

Mathematics (**Satisfied by Major**)

Natural Science (**Satisfied by Major**)

Philosophy

- PL 109

Social Sciences (Select one)

- CJ 109, CM 130, EC 209, EC 112, HCM 230, PO 103, PO 109, PS 109, or SO 109

CULTURAL LITERACY (18 credits)

Humanities I and II. *Preferably* select a set (e.g., HI 201/202). However, a combination (e.g., PO 201 + HI 214) is acceptable.

- Hum. I: HI 201, PO 201, HI 213
- Hum. II: HI 202, PO 202, HI 214, HI 262

Humanities III: Great Works of Art & Music

- _____

Humanities IV: Great Works of Literature

- _____

Foreign Language/World Cultures

(Select either two of the same language, any two WC, or one WC and one approved course with international study)

- _____
- _____

CHRISTIAN VALUES AND THEOLOGY

(9 credits)

Catholic Theology

- TH 109

Intermediate Theology (200/300 level TH)

- TH _____

Values Seminar

- _____

MAJOR (69 credits)

- CH 101: General Chemistry I
- CH 102: General Chemistry II
- CH 231: Organic Chemistry I
- CH 232: Organic Chemistry II
- CH 351: Physical Chemistry I
- BI/CH 435: Biochemistry I
- BI/CH 436: Biochemistry II
- BI/CH 455: Research Seminar
- BI 151: Introductory Biology I
- BI 255: Molecular Biology
- BI 257: Introduction to Bioinformatics
- BI 330: Genetics
- BI 360: Advanced Molecular Biology
- MA 121: Calculus I
- MA 122: Calculus II
- PH 201: Gen. Phys. I: Mechanics and Heat
- PH 202: Gen. Phys. II: Wave Phenomena and Electromagnetism

FREE ELECTIVES (Minimum of 18 credits)

Recommended electives: Additional STEM Courses

OPTIONAL MINOR

- | | |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

DE SALES UNIVERSITY
Example Plan: BIOCHEMISTRY-MOLECULAR BIOLOGY MAJOR (B. S.)

FIRST YEAR

FALL SEMESTER (15 credits and 1-credit PE)

General Chemistry I (CH 101+101L+101P)
Calculus I (MA 121)
Composition and Rhetoric I (EN 103)
General Biology I (BI 151+151L)
Lifetime Fitness and Wellness (PE 100)

SPRING SEMESTER (17 credits)

General Chemistry II (CH 102+102L+102P)
Calculus II (MA 122)
Composition and Rhetoric II (EN 104)
Philosophy MOT (PL 109)
Free Elective

SECOND YEAR

FALL SEMESTER (17 to 19 credits)

Organic Chemistry I (CH 231+231L)
Molecular Biology (BI 255+255L)
Humanities I
Foreign Language/World Cultures I
Odd Years: Gen Phys. I. (PH-201+201L)
Even Years: Social Science MOT

SPRING SEMESTER (15 to 17 credits and 1-Credit PE)

Organic Chemistry II (CH 232+232L)
Humanities II
Foreign Language/World Cultures II
Physical Education (Activity)
Even Years: Gen Phys. II (PH-202+202L)
Odd Years: Genetics (BI 330+330L)
Odd Years: Free Elective

THIRD YEAR

FALL SEMESTER (15 credits and 1-credit PE)

Biochemistry I (CH/BI 435+435L)
Catholic Theology (TH 109)
Physical Education (Activity)
Odd Years: Gen. Phys. I (PH 201+201L)
Odd Years: Research Seminar (CH-455)
Even Years: Intro to Bioinformatics (BI 257)
Even Years: Physical Chemistry I (CH 351+351L)

SPRING SEMESTER (16-17 credits)

Biochemistry II (CH/BI 436+436L)
Intermediate Theology (200-300)
Even Years: Gen Phys. II (PH-202+202L)
Even Years: Adv. Molecular. Biology (BI 360+360L)
Odd Years: Genetics (BI 330+330L)
Odd Years: Free Elective
Odd Years: Free Elective

FOURTH YEAR

FALL SEMESTER (15 to 17 credits)

Humanities III
Literature MOT
Free Elective
Odd Years: Social Science MOT
Odd Years: Research Seminar (CH-455)
Even Years: Physical Chemistry I (CH 351+351L)
Even Years: Intro to Bioinformatics (BI 257)

SPRING SEMESTER (15 to 16 credits)

Humanities IV
Values Seminar
Free Elective
Free Elective
Even Years: Adv. Molecular. Biology (BI 360+360L)
Odd Years: Free Elective

Note: Odd/Even designation refers to the calendar year for the semester the course is being taken by the student.
Odd Years are FA23, FA25, FA27, SP23, SP25, SP27 etc.
Even Years are FA22, FA24, FA26, SP24, SP26, SP28 etc.