

# Bachelor of Science in Biochemistry -- 120 Credits

JBIOCHM-BS (RG 4735)

Effective August 2016

## GENERAL EDUCATION REQUIREMENTS

### REQUIRED COURSES (RG 6813)

| Foundational Courses   | CR | Satisfied/Term |
|--|----|----------------|
| Engcmp 0003 or 0005  | 3  |                |
| Engcmp 0004 or 0006  | 3  |                |
| CommRc 0052 Public Speaking                                      | 3  |                |
| <b>Basic Algebra or Placement Test</b>                           |    |                |
| Math 0001 Algebra 1  | 3  |                |
| <b>Quantitative Reasoning (QR) - 1 Course</b>                    |    |                |
| <i>Note - a student cannot test out of their QR requirement.</i> |    |                |
|  | 3  |                |

### WORLDS OF KNOWLEDGE (RG 6825)

| Aesthetic and Creative Expression (RQ 3148) |        |              |    |                |
|---|--------|--------------|----|----------------|
| Subject                                     | Number | Course Title | CR | Satisfied/Term |
|   |        |              | 3  |                |
|   |        |              | 3  |                |

| Global History & Culture (RQ 3149) |        |              |    |                |
|------------------------------------|--------|--------------|----|----------------|
| Subject                            | Number | Course Title | CR | Satisfied/Term |
|                                    |        |              | 3  |                |
|                                    |        |              | 3  |                |

| Societies & Civics (RQ 3150) |        |              |    |                |
|------------------------------|--------|--------------|----|----------------|
| Subject                      | Number | Course Title | CR | Satisfied/Term |
|                              |        |              | 3  |                |
|                              |        |              | 3  |                |

| Science & Nature (RQ 3153) |        |                   |    |                |
|----------------------------|--------|-------------------|----|----------------|
| Subject                    | Number | Course Title      | CR | Satisfied/Term |
| Biol                       | 0110   | General Biology 1 | 3  |                |
| Phys                       | 0150   | Physics 1         | 4  |                |

### FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

|  | CR | Satisfied/Term |
|--|----|----------------|
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| Follow-Up Courses (RQ 3154) |        |                |    |                |
|-----------------------------|--------|----------------|----|----------------|
| Subject                     | Number | Course Title   | CR | Satisfied/Term |
| Biol                        | 0120   | Gen. Biology 2 | 3  |                |
| Phys                        | 0152   | Physics 2      | 4  |                |

Each student must take 2 courses in each World of Knowledge. The two courses taken within each World must be from different subjects. A student must take two additional "Follow-Up" courses from any World.

- >The minimum number of courses taken in the Worlds must be 10.
- >The Follow-Up courses may repeat a subject previously taken in a World.
- >A student cannot use a major required Subject course in one of the Worlds.
- >For example: A Biology student cannot use BIOL 0110 to fulfill a requirement in the Science and Nature World.
- >Students cannot use a course to count both in their QR requirement and one of the Worlds.
- >Students can choose QR and Worlds of Knowledge courses from published course lists.

## MAJOR REQUIREMENTS (RG 4735)

(RQ 3538)

| Required Biology Courses     |                       |  | CR       | Satisfied/Term |
|------------------------------|-----------------------|--|----------|----------------|
| Biol 0110                    | General Biology 1     |  | 3        |                |
| Biol 0111                    | General Biology 1 Lab |  | 1        |                |
| Biol 0120                    | General Biology 2     |  | 3        |                |
| Biol 0121                    | General Biology 2 Lab |  | 1        |                |
| <b>Requirement Satisfied</b> |                       |  | <b>8</b> |                |

(RQ 3540)

| Required Mathematics Courses |                        |  | CR       | Satisfied/Term |
|------------------------------|------------------------|--|----------|----------------|
| Math 0221                    | Analytic Geom & Calc 1 |  | 4        |                |
| Math 0231                    | Analytic Geom & Calc 2 |  | 4        |                |
| <b>Requirement Satisfied</b> |                        |  | <b>8</b> |                |

(RQ 3541)

| Required Physics Courses     |               |  | CR        | Satisfied/Term |
|------------------------------|---------------|--|-----------|----------------|
| Phys 0150                    | Physics 1     |  | 4         |                |
| Phys 0151                    | Physics 1 Lab |  | 1         |                |
| Phys 0152                    | Physics 2     |  | 4         |                |
| Phys 0153                    | Physics 2 Lab |  | 1         |                |
| <b>Requirement Satisfied</b> |               |  | <b>10</b> |                |

(RQ 3539)

| Required Chemistry Courses   |                         |  | CR        | Satisfied/Term |
|------------------------------|-------------------------|--|-----------|----------------|
| Chem 0111                    | General Chemistry 1     |  | 3         |                |
| Chem 0112                    | General Chemistry 2     |  | 3         |                |
| Chem 0113                    | General Chemistry 1 Lab |  | 1         |                |
| Chem 0114                    | General Chemistry 2 Lab |  | 1         |                |
| Chem 0231                    | Organic Chemistry 1     |  | 3         |                |
| Chem 0232                    | Organic Chemistry 2     |  | 3         |                |
| Chem 0233                    | Organic Chemistry 1 Lab |  | 1         |                |
| Chem 0234                    | Organic Chemistry 2 Lab |  | 1         |                |
| Chem 0325                    | Analytical Chemistry    |  | 4         |                |
| Chem 1131                    | Inorganic Chemistry     |  | 3         |                |
| Chem 1133                    | Synthesis & Char Lab    |  | 1         |                |
| Chem 1321                    | Biochemistry 1          |  | 3         |                |
| Chem 1323                    | Biochemistry Lab        |  | 1         |                |
| Chem 1322                    | Biochemistry 2          |  | 3         |                |
| Chem 1341                    | Physical Chemistry 1    |  | 3         |                |
| <b>Requirement Satisfied</b> |                         |  | <b>34</b> |                |

(RQL 1968-10, 20, 30)

| Biology Electives - Cellular Focus                  |                                     |    |                |  |
|---|-------------------------------------|----|----------------|--|
| Required  |                                     | CR | Satisfied/Term |  |
| Biol 0360   | Cell Biology                        | 3  |                |  |
|   | and Biol 0361 Cell Biology Lab      | 1  |                |  |
| <b>Select Biol 1125/1225 or Biol 1130/1230</b>      |                                     |    |                |  |
| Biol 1125   | Animal Physiology                   | 3  |                |  |
|   | and Biol 1225 Animal Physiology Lab | 1  |                |  |
| Biol 1130   | Biology of Plants                   | 3  |                |  |
|   | and Biol 1230 Biology of Plants Lab | 1  |                |  |
| <b>Select one additional Biology Elective below</b> |                                     |    |                |  |
| Biol 1135   | Developmental Biology               | 3  |                |  |
| Biol 1185   | Microbiology                        | 4  |                |  |
| Biol 1186   | Immunology                          | 3  |                |  |
| <b>Requirement Satisfied</b>                        |                                     |    | <b>15-16</b>   |  |

(RQL 1968-40, 50)

| Biology Electives - Genetics Focus             |                                     |    |                |  |
|--|-------------------------------------|----|----------------|--|
| Required                                       |                                     | CR | Satisfied/Term |  |
| Biol 0350                                      | Genetics                            | 4  |                |  |
| Biol 1137                                      | Molecular Genetics                  | 3  |                |  |
| <b>Select Biol 1125/1225 or Biol 1130/1230</b> |                                     |    |                |  |
| Biol 1125                                      | Animal Physiology                   | 3  |                |  |
|  | and Biol 1225 Animal Physiology Lab | 1  |                |  |
| Biol 1130                                      | Biology of Plants                   | 3  |                |  |
|  | and Biol 1230 Biology of Plants Lab | 1  |                |  |
| <b>Requirement Satisfied</b>                   |                                     |    | <b>11</b>      |  |

MGPA (RQ 1969)

Major 50% (RQ 2856)

### IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.

Updated 6/4/18