# LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

## **DEPARTMENT OF\_BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

Name of Program and Degree Award: 70-Credit Major In Biology I (B.A.)

Hegis Number: 34022 Program Code: 0401.00 Effective Term: Spring 2017

1. Type of Change: Change in Degree Requirements

## 2. **From:**

The required courses and credits are distributed as follows: Credits (70)

- 8 In BIO 166 and 167: one counts as distribution and the other toward the major. Both are prerequisites to all other Biology courses.
- 24 In advanced Biology courses (200, 300, and 400 levels), with at least 12 credits at the 300 level or higher. Course schedule to be approved by the Department's student adviser.
  - 10 In general chemistry: CHE 166-167 and 168-169.
  - 10 In organic chemistry: CHE 232-233 and 234-235.
  - 10 In general physics: PHY 166\*-167.\*
  - 8 In mathematics: Either MAT 175 and 176 or 175 and 231.

\*Please note that the Physics Department has increased the credit requirements for this course to 5 credits.

Qualified students may also take BIO 450: Seminar in Biology; BIO 489: Introduction to Experimental Biology; BIO 490: Honors in Biological Sciences. Biology majors MUST consult with Departmental undergraduate advisers on completion of BIO 166 or 167 and when making course selections.

Special Note: Biology majors are not required to select a minor because of the extensive coursework in ancillary sciences required in the course of study.

### 3. **To:**

The required courses and credits are distributed as follows:

Credits (69-70)

- 8 In BIO 166 and 167: one counts as <u>General Education</u> and the other toward the major. Both are prerequisites to all other Biology courses.
- 24 In advanced Biology courses (200, 300, and 400 levels), with at least 12 credits at the 300 level or higher. Course schedule to be approved by the Department's student adviser.
  - 10 In general chemistry: CHE 166-167 and 168-169.
  - 10 In organic chemistry: CHE 232-233 and 234-235.
  - 10 In general physics: PHY 166-167.
  - 7-8 In mathematics: Either MAT 175 and 176 or MAT 175 and (MAT 231 or BIO 240 or PSY 226)

Qualified students may also take BIO 450: Seminar in Biology; BIO 489: Introduction to Experimental Biology; BIO 490: Honors in Biological Sciences. Biology majors MUST consult with Departmental undergraduate advisers on completion of BIO 166 or 167 and when making course selections.

- 4. Rationale (Explain how this change will impact learning outcomes of the department and Major/Program): Many health professional and graduate schools have changed their Math requirements and are asking that students graduating with a biology degree have the knowledge of statistics. The Department of Biological Sciences has been giving permission to students to take either MAT 176 or PSY 226 or Bio 240 to fulfill the Math requirements for the major. We are asking to revise the information in the Bulletin so that the option is officially available to students and they do not require permission from the department. The Physics credits were changes some time ago and minors are no longer required.
- 5. Date of departmental approval: May 18, 2016

# LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

## **DEPARTMENT OF\_BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

Name of Program and Degree Award: Biology Minor

Effective Term: Spring 2017

1. **Type of Change:** Change in Minor Requirements

### 2. **From**:

A minor in Biology consists of a minimum of 16 credits in Biology, including one course (4 credits) selected from <u>BIO 166</u>, <u>BIO 167</u>, <u>BIO 183</u>, or <u>BIO 184</u> and three courses (12 credits) selected from the 200, 300, or 400 levels, with at least two of these at the 300- or 400-level. The selected 100-level course will satisfy the distribution requirement in Biology.

## 3. **To**:

A minor in Biology will familiarize students with concepts and research tools that scientists use to understand the living world and solve real-world problems. By minoring in biology, students from various disciplines such as business, computer science, psychology, and health sciences can combine their expertise with their knowledge of the natural world to enhance their career options. A minor in Biology consists of a minimum of 16 credits in Biology, including BIO 166 and BIO 167 (8 credits), one 200 level course and one 300 or 400 level course (8 credits). The 100-level courses are STEM Variants that students can substitute to satisfy their General Education requirements.

- 4. Rationale (Explain how this change will impact learning outcomes of the department and Major/Program): The added description will help students understand the value of minoring in biology, and will guide them in selecting suitable courses in order to broaden their career options. Changes in the required 100-level courses will enable students to take more rigorous courses that are designed for the biology majors and meet the prerequisites for the more advanced level courses they have to take for the minor.
- 5. Date of departmental approval: 10/14/15

# **LEHMAN COLLEGE** OF THE **CITY UNIVERSITY OF NEW YORK**

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

# **CURRICULUM CHANGE**

1. Type of Change: Course description

# 2. **From**:

| Department(s)                                       | Biological Sciences  |
|---|--|
| Career  | [X] Undergraduate [ ] Graduate   |
| Academic  | [X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial  |
| Level   |  |
| Subject Area  | Biology  |
| Course Prefix                                       | Bio 181  |
| & Number  |  |
| Course Title  | Anatomy and Physiology I   |
| Description   | (Open only to students majoring in Nursing; Dietetics, Foods, and Nutrition; Health Education; and Physical Education). Study of human anatomy and physiology. Lecture topics include cell structure and function, tissues, and the study of the skeletal, muscular, nervous, and endocrine systems. Laboratory exercises complement the lecture material with the use of a workbook, models, and animal preparations. |
| Pre/ Co   |  |
| Requisites  |  |
| Credits   | 4  |
| Hours   | 5  |
| Liberal Arts  | [X] Yes [ ] No   |
| Course Attribute (e.g. Writing Intensive, WAC, etc) |  |
| General<br>Education<br>Component                   | _X Not Applicable Required English Composition Mathematics Science Flexible World Cultures   |

| Creative Expression Individual and Society Scientific World |
|---|
|   |

3. **To:** 

| <u> </u>  |  |
|---|--|
| Department(s)                                       | Biological Sciences  |
| Career  | [X] Undergraduate [] Graduate  |
| Academic  | [X] Regular [] Compensatory [] Developmental [] Remedial   |
| Level   |  |
| Subject Area  | Biology  |
| Course Prefix                                       | Bio 181  |
| & Number  |  |
| Course Title  | Anatomy and Physiology I   |
| Description   | (Open only to students majoring in Nursing; Dietetics, Foods, and Nutrition; Health Education; and Biology. Students majoring in Biology who have completed Bio 181 and Bio 182 can use those courses in place of Bio 228). Study of human anatomy and physiology. Lecture topics include cell structure and function, tissues, and the study of the skeletal, muscular, nervous, and endocrine systems. Laboratory exercises complement the lecture material with the use of a workbook, models, and animal preparations. |
| Pre/ Co   |  |
| Requisites  |  |
| Credits   | 4  |
| Hours   | 5  |
| Liberal Arts  | [X] Yes [] No  |
| Course Attribute (e.g. Writing Intensive, WAC, etc) |  |
| General   | X_ Not Applicable  |
| Education   | Required   |
| Component   | English Composition  Mathematics   |
|   | Science  |
|   | Science  |
|   | Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World   |

- 4. Rationale (Explain how this change will impact the learning outcomes of the department and Major/Program): Some students major in biology in order to prepare for health professional schools. The requirement for some of these schools is two-semesters of human anatomy and physiology courses. The requested change provides an option for biology students to take anatomy and physiology courses and have the credits count towards their major.
- 5. Date of departmental approval: May 18, 2016