**Assessment Report –BIOLOGY 2015**

**Rosemont College --Undergraduate**

**I. General information:**

Date of Report: May 15, 2015

Semesters or Academic Years Covered: Fall 2014-Spring 2015

Division: Professional and Natural Science

Department: Biology

Chair or Person Preparing the Report: Aikaterini Skokotas

1. **Departmental Profile:**

Number of Majors: 52

Number of Faculty: 2 full time

1 part time

Courses Offered in the Assessment Period:

BIO-0150 Life Science I and BIO-0151Laboratory and BIO-0151 H (Honors Laboratory), BIO-0155 Life Science II and BIO-0156 Laboratory, BIO-0200 Microbiology and BIO-0201 Laboratory, BIO-0220 Genetics and BIO-0222 Laboratory, BIO-0400 Molecular Genetics and BIO-0401Laboratory, BIO-0245 Vertebrate Anatomy and Physiology I and BIO-0247 Laboratory and BIO-0247-H (Honors) Laboratory, BIO-0250 Vertebrate Anatomy and Physiology II and BIO-0251 Laboratory, BIO-0230 Ecology, BIO-0335 Immunology, BIO-0450 Introductory Research, BIO-0460 Biology Internship, BIO-0421 Senior Seminar and BIO-0130 Science Issues Lecture and BIO-0131 Laboratory, and BIO-115 Science for Life

**III. Assessment results**

1. *Learning Outcomes for Majors*

This year we collected data dealing with Goal I, Objective 1 (demonstrate knowledge in different fields of biology)**,** Goal II**,** Objective1 (analyze and interpret results and produce lab reports using scientific format) and Goal III, Objective 1 (demonstrate effective oral communication skills in the field of biology). Please refer to plan for details.

1. *Assessment of Majors*

**Goal I: Objective 1 (Demonstrate knowledge in different fields of biology)**

The ETS Major Field Test in Biology was used to collect data regarding students’ knowledge in different fields of biology.

**In 2015**, our 5 graduates achieved a raw score average of 145.6 +/-3.8 falling within the range of the national mean score of 153.2+/- 13.3. Also, 100% (5 out of 5) of the students’ scores fall within or above the range of the national mean thereby satisfying the requirement of the outcome (50%).

The ETS test is further divided into 4 subgroups.

* In subgroup 1 (Cell biology), students scored on average score of 50.2 +/- 5.4 falling within the national average score of 53.2 +/- 13.2. 100% (5 out of 5) of the students’ scores fall within or above the range of the national mean thereby satisfying the requirement of the outcome.
* In subgroup 2 (Molecular Biology/Genetics) students scored on average score of 52.8 +/- 7.7 falling within the national average score of 53.6 +/- 12.9. 100% (5 out of 5) of the students’ scores fall within or above the range of the national mean thereby satisfying the requirement of the outcome.
* In subgroup 3 (Organismal Biology), students scored on average score of 43.8 +/- 4.8 falling within the national average score of 54 +/- 13.7. 80% (4 out of 5) of the students’ scores fall within or above the range of the national mean thereby satisfying the requirement of the outcome.
* In subgroup 4 (Population Biology /Ecology/Evolution) students scored on average score of 40.6 +/- 5.4 falling within the national average score of 52.7 +/- 13.4. 80 % (4 out of 5) of the students’ scores fall within or above the range of the national mean thereby satisfying the requirement of the outcome.

**Goal II: Objective1 (analyze and interpret results and produce lab reports using scientific format)**

Students are introduced to scientific writing in BIO-0200 Genetics. Students are expected to become more proficient in scientific writing in the 400 level course Molecular Genetics. Their first lab report in BIO-0220 was used as a baseline to compare their scores to their final lab report in BIO-0400. The average score for their first lab report in BIO-0200 was 86.5 whereas the score for their final lab report in BIO-0400 was 89.5. The students’ scores on average improved by 3 points.

**Goal III: Objective 1 (demonstrate effective oral communication skills in the field of biology).**

Oral presentations were assessed in the following courses: BIO-150 Life Science I, BIO-0200 Microbiology, and BIO-0421 Senior Seminar. An oral presentation rubric was used to assess the following areas of the presentation: organization, content, presentation skills, visual aids, handling of questions after presentation and length of presentation. Each of these areas is scored as follows: exemplary (4), proficient (3), performing (2) and emerging (1) and a total score was calculated.

* In BIO-0150 Life Science I (fall 2012), 100% (17 out of 17) of student were proficient or better scoring 13 or above out of a total of 24 points. 71% (12 out of 17) scored exemplary, 19 points or above out of 24 total points. The remaining 29% of the class (5 out of 17) scored proficient, 13 points or above out of 24 points.
* In BIO-0200 Microbiology (Spring 2013), 100% (11 out of 11) of students were proficient or better. They scored 13 or above out of a total of 24 points. 91% (10 out of 11) scored exemplary, 19 points or above out of 24 total points. Only one student scored proficient.
* In BIO-0421 Senior Seminar (Spring 2013), 100% (5 out of 5) of students were proficient or better. They scored 13 or above out of a total of 24 points. 40% (2 out of 5) scored exemplary and 60% (3 out of 5) scored proficient.

On average, 100% of students scored proficient or better.

1. *Changes Based on Assessment*

According to the raw ETS scores, our students performed well and their scores fell within or above the national mean. The Subgroup ETS scores also fell within the range of the national mean.

1. *Recommendations for Improving the Assessment Process*

None are being recommended at this time.