# 2017-18 Department Student Success Plan Update

# **Department Of Biology**

Please complete this plan update and submit to your Dean by November 3. Your Dean will offer you feedback by November 17 and advance final version<sup>1</sup> to Academic Affairs by November 21. Previous report and plans can be found at this website: <a href="http://irt2.indstate.edu/cms7/sp16/index.cfm/department-plans/">http://irt2.indstate.edu/cms7/sp16/index.cfm/department-plans/</a>.

Person Primarily Responsible for Preparing this Report: Undergraduate Affairs Committee and Selman

- **1. Department goals to facilitate persistence to degree** (include action steps, dates, and person(s) responsible underneath each goal):
- 1) Reduce curricular barriers to timely degree completion—Strategic Plan Goal 1. Initiatives 1 and 5 Action steps:
  - a) Change time BIO 374 is offered to avoid conflict with Analytical Chemistry (which students need for Chemistry minor). **Spring 2018, Selman & Dannelly**
  - b) Offer BIO 101 in Spring and BIO 102 in Summer to aid students in staying on track for degree completion. **Spring 2018 & Summer 2018, Selman & faculty**
  - c) Biology faculty discuss advising model for core course sequence to determine if current order is best option for persistence to degree completion. **Spring 2018. Selman & all faculty**
- 2) Enhance Medical Laboratory Science (MLS) program—Strategic Plan Goal 2. Initiatives 1,2,7 Action steps:
  - a) Increase number of clinical placement options for students in MLS program. Fall 2018, Dannelly & Selman
  - b) Provide Biology faculty with tools to aid in advising students into this program. **Spring 2018, Dannelly**
- 3) Promote career readiness and connections between course content and careers—Strategic Plan Goal 2 Action steps:
  - a) Include at least one research-oriented lab in each of the core Biology courses (101L, 102L, 330L, 350L, 374L, & 380L). **Fall 2018, Biology core instructors** *Initiative 4*
  - b) Arrange invited alumni speakers and panel presentations, including minority alumni, to better-educate students about career options, and to maintain their interest in the major and degree completion. **Spring 2017-Spring 2018, Hews & Gonser** *Initiatives 2,3*
  - c) Prepare individual PowerPoint slide(s) to be used in BIO 101 in lectures that communicate and illustrate careers related to lecture topics. **Hughes & Lima, Spring 18-Fall 18** *Initiative 1*
  - d) Obtain SURE funding to increase research experience opportunities. Research exposure assists students in identifying their true career interests and in making connections between lecture content and actual practices in biological careers. **Gonser & Selman, Spring 2018-Fall 2018** *Initiative 4*
  - e) Work with Career Center to find mechanisms to fund undergraduate student participation in conferences with job networking opportunities. **O'Keefe, Spring 2018** *Initiative 8*
- 2. Department goals to enhance student performance and/or learning outcome achievement<sup>2</sup> (include action steps, dates, and person(s) responsible for each goal):

<sup>&</sup>lt;sup>1</sup> Dean will request a refinement to plan if it is not suitably addressing the questions. Plan will be shared with Trustees.

- 1) Increase use of Science Help Center by Biology students--- Strategic Plan Goal. 1 Initiative 2 and 4 Action steps:
  - a) Increase hours of available Biology tutors (hours that don't conflict with classes and evening hours). Find resources to support more hours. Spring 2018, Selman
  - b) Build an assignment into each Core course that requires use of Help Center. Spring 2018-Fall 2018, Core instructors
- 2) Promote regular attendance and study habits in introductory courses (BIO 101, 102, and 112) Strategic Plan Goal 1 Initiatives 2,4 and Goal 5 Initiatives 3,4,5

#### Action steps:

- a) Install card reader in S214 to enable instructors to track attendance for large classes held in this room. Fall 2018, Selman
- b) Use supplemental instructors in all 100-level lecture and Biology core courses. Fall 2018, Lima, Hughes, Dannelly, Hews, Mitchell, Steding, and BIO 112 instructors.
- c) Implement note-taking and success workshops providing students with examples of good notes and how-tos on notetaking. Spring 2018, Ahmad, Gonser, Steding, Fall 18 Lima, Hughes, and BIO 112 instructors
- 3) Review and revise Biology's Student Learning Outcomes and assessment plan—Strategic Plan Goal 2 *Initiative 7*

### Action steps:

- a) Discuss current SLOs with Assessment office and determine if changes are merited. **Spring** 18. Selman
- b) Make changes, if needed, to SLOs with aid from all faculty and submit revised SLOs to Assessment Office. Spring 2018, Selman.
- c) Explore use and cost of Biology Majors Field Test. Spring 2018, Selman
- 4) Enhancing the Learning Experience--- Strategic Plan Goal 5. Initiatives 3,4,5

## Action Steps:

- a) Identify courses with high failure and DFdrop rates over the past three years (2014–15, 2015–16, 2016–17), and examine grades for students who dropped. **Spring 2018, Selman**
- b) Secure resources and funding for classroom innovation (e.g., course redesign grants). Spring 18, Selman
- c) Assign highest rated teaching assistants to BIO 101 and 102 labs to demonstrate study skills and note-taking practices to Biology majors. Spring 2018, Selman & Gonser.

#### **Benchmark Metrics**

Metric	2016-17 FTFT-BDS Cohort Actual	2017-18 Target	3 Year Target (2019-20)
Freshmen Retention <sup>3</sup>	73.13%	74%	75%
(by <u>latest</u> department)			
4-Year Grad Rate	41.94%	43%	44%
(by <u>latest</u> department)			
	Source data for 2016-17 actual	2017-18 Target	3 Year Target (2019-20)
DFDr Rate	25.32%	24%	23%
Lower division course	78.98%	80%	81%
completion ratio			

<sup>&</sup>lt;sup>2</sup> Department/Program Student Learning Summary Form report may inform what is noted here.

<sup>&</sup>lt;sup>3</sup> In a very few cases, such as with departments with very small numbers of majors or who have few or no new freshmen who enroll in their program, this metric and a grad rate may not be applicable. Other appropriate metrics should be used instead (e.g., service course student performance, transfer students, part-time students, etc.).