# Program Review Executive Summary Template

**Institution Name:** Oklahoma Panhandle State University  
**Program Name and State Regents Code:** 004 Biology BS  
**List Any Options:** Academic, Natural Sciences  
**Date of Review:** 11/8/2019  
**Recommended Date of Next Review:** 2024

## Centrality to Institutional Mission:
The program of Biology follows the Oklahoma Panhandle State University mission of “Rooted in “Progress through Knowledge,” OPSU is committed to promoting excellence in the preparation of students for success in a global community.” This is done through its goals, which align to the primary points of “progress through knowledge… in a global community” with a focus on oral and written communication, analytical and quantitative reasoning, and social responsibility and cultural awareness.

## Program Objectives and Goals:

### Goal 1: Oral and Written Communication: Communicate effectively using written, oral, and symbolic languages

**Student Learning Objectives:**
1) Students present information to various audiences  
2) Students will construct lab reports

### Goal 2: Analytical and Quantitative Reasoning: Read and think critically by analyzing, assimilating, and applying information

**Student Learning Objectives:**
1) Students apply scientific principles  
2) Students will solve statistical calculations related to biology and biological research

### Goal 3: Social Responsibility and Cultural Awareness: Be an aware and active participant in the global, dynamic community

**Student Learning Objectives:**
1) Students recognize how to apply biological principles to current events

## Quality Indicators Such As:

- Student benchmarks were exceeded in all student-learning objectives at the time of the Program Review.  
- Student evaluations were used to inspire the changes of courses on a day-to-day basis using exit surveys and discussions with program graduates.  
- Learning environments for the student are becoming more effective. Faculty in the department participated in a campus wide evaluation of the learning management system; the digital learning space of D2L was reevaluated Summer 2018 and found to still be a great fit for our students and their learning.  
- The capacity of the program to meet needs and expectations of constituencies is met through student, faculty, and administrator aspirations and expectations, monitoring changes in trends for biological and healthcare research, and constant technological and educational emphases on trends and aspirations of students.

## Productivity for Most Recent 5 Years:

<table>
<thead>
<tr>
<th>Number of Degrees</th>
<th>Number of Majors</th>
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<tbody>
<tr>
<td>23</td>
<td>84.25</td>
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### Other Quantitative Measures

- Number of Courses for Major: 12-16
- Student Credit Hours in Major: 52-60
- 2014/2015 Direct Instructional Costs: $238440
- 2015/2016 Direct Instructional Costs: $222041
- 2016/2017 Direct Instructional Costs: $219435
- 2017/2018 Direct Instructional Costs: $226242
- 2018/2019 Direct Instructional Costs: $151349.53

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Credential</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Justin K. Collins</td>
<td>PhD</td>
<td>Oklahoma State University</td>
</tr>
<tr>
<td>Serafin Tenoch Ramon</td>
<td>MS</td>
<td>West Texas A&amp;M University</td>
</tr>
<tr>
<td>David Ferrell</td>
<td>PhD</td>
<td>Florida State University</td>
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- Supporting Credit Hour Production: 25
- Number of FTE faculty in specialized courses: 3
- Transferred to other university for future degree: 28 known over last 4 years

### Duplication and Demand

The Bachelor in Biology is a program in demand due to healthcare needs in the area. Duplication of this program is seen in all universities in the area, but does not cost more to run as it is a program required by general education.

### Effective Use of Resources

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<tbody>
<tr>
<td>Cost to operate program per student credit hour</td>
<td>$248.75</td>
<td>$259.55</td>
<td>$266.74</td>
<td>$274.21</td>
<td>$300.17</td>
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<tr>
<td>Faculty/ student ratio</td>
<td>1/14.88</td>
<td>1/11.25</td>
<td>1/13.72</td>
<td>1/13.67</td>
<td>1/20.4</td>
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### Strengths and Weaknesses

Strengths of the program include small class size, sufficient benchtop and storage space in labs, the availability of equipment, teaching facilities and instructing technology, and the strong rapport between students and instructors. Weaknesses include replenishment of current laboratory materials, technologies, specimens, and instructional materials as well as a lack of teaching assistants for large introductory courses.

### Recommendations

Maintain.