

SLO Performance Report (2019-20)

Program: Biology

Date: 08-17-2020

Terms: Spring 2020, Fall 2019, Summer 2019

BIOLB18: Essentials of Human Anatomy and Physiology

1. Upon completion of the course, the student will be able to Compare and contrast structure and function at the chemical through human organ system levels of organization.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

2. Upon completion of the course, the student will be able to Demonstrate independent and collaborative work on laboratory exercises operating basic lab equipment while using safety procedures.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

3. Upon completion of the course, the student will be able to Apply homeostatic mechanisms to predict physiological outcomes.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

4. Upon completion of the course, the student will be able to Use proper anatomy and physiology terminology.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

5. Upon completion of the course, the student will be able to Evaluate information regarding the human body and medical issues relevant to real-life examples

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

BIOLB16: General Microbiology

Upon completion the student will be able to: Compare and contrast the characteristics for various microbes with regards to infections, treatment, and control. (This includes prions, viruses, bacteria, protozoans, and multicellular parasites.)

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|-------|----------------------|-------|--------------------|-------|----------------------------|-------|-------|-------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Explain the dynamics of commensal, opportunistic, and pathological relationships particularly between microbes and humans.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|-------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 2 | 1.92% | 0 | 0.00% | 69 | 66.35% | 33 | 31.73% | 104 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 2 | 1.92% | 0 | 0.00% | 69 | 66.35% | 33 | 31.73% | 104 | 100.00% |

Evaluate and apply the proper methods of microbial control necessary in sample scenarios or case studies.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|-------|----------------------|-------|--------------------|-------|----------------------------|-------|-------|-------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Describe microbial metabolic pathways in general terms and specifically evaluate the implications for food production and human disease.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Summarize basic bacterial genetic principles and analyze consequences of mutation and genetic recombination.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Articulate and diagram the role of the immune system in maintaining homeostasis, challenging infections, and fighting cancer.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Apply the scientific method by stating a question; researching the topic; determining appropriate tests; performing tests; collecting, analyzing, and presenting data; and finally proposing new questions about the topic.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|---------------|--------------------|---------------|----------------------------|---------------|------------|----------------|
| Spring 2020 | 0 | 0.00% | 42 | 42.00% | 34 | 34.00% | 24 | 24.00% | 100 | 100.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 42 | 42.00% | 34 | 34.00% | 24 | 24.00% | 100 | 100.00% |

Correctly perform microbiologic lab skills and safety practices which extend to relevant situations in the student's homes.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|---------------|--------------------|--------------|----------------------------|--------------|-----------|----------------|
| Spring 2020 | 0 | 0.00% | 68 | 93.15% | 5 | 6.85% | 0 | 0.00% | 73 | 100.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 68 | 93.15% | 5 | 6.85% | 0 | 0.00% | 73 | 100.00% |

Retrieve, evaluate, and use contemporary microbiologic information.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|---------------|--------------------|---------------|----------------------------|---------------|------------|----------------|
| Spring 2020 | 0 | 0.00% | 110 | 63.58% | 39 | 22.54% | 24 | 13.87% | 173 | 100.00% |
| Fall 2019 | 2 | 1.92% | 0 | 0.00% | 69 | 66.35% | 33 | 31.73% | 104 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 2 | 0.72% | 110 | 39.71% | 108 | 38.99% | 57 | 20.58% | 277 | 100.00% |

BIOLB18: Essentials of Human Anatomy and Physiology

1. Upon completion of the course, the student will be able to Compare and contrast structure and function at the chemical through human organ system levels of organization.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

2. Upon completion of the course, the student will be able to Demonstrate independent and collaborative work on laboratory exercises operating basic lab equipment while using safety procedures.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

3. Upon completion of the course, the student will be able to Apply homeostatic mechanisms to predict physiological outcomes.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

4. Upon completion of the course, the student will be able to Use proper anatomy and physiology terminology.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

5. Upon completion of the course, the student will be able to Evaluate information regarding the human body and medical issues relevant to real-life examples

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

BIOLB21: Special Projects in Biology

Upon completion of the course, the student will be able to: Collect, assemble, maintain and organize biological collections

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Select and evaluate biological materials needed for laboratory preparation

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Analyze a biological topic or concept which the student judges to be difficult for other students to learn or understand. The student must create, organize, prepare and present to students an activity designed to help them grasp the biological topic

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Design and organize a pre-exam review session including: examining topics to distinguish importance, creating review questions &/or activities and suggesting effective study techniques.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

BIOLB8: Introduction to Environmental Science

1. Upon successful completion of the course, the student will be able to identify and describe major global, regional and local environmental issues.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to analyze the scientific basis of major environmental issues by interpreting quantitative data and creating visual representations of data in order to identify and evaluate potential solutions.

CSLO not included in any Assessment Rubric

3. Upon successful completion of the course, the student will be able to investigate relationships between human actions and environmental issues and examine the impacts of these issues on human populations.

CSLO not included in any Assessment Rubric

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

BIOLB32: Human Anatomy and Physiology I

Describe and distinguish various roles of major classes of biomolecules in living cells.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----------|---------------|----------------------|--------------|--------------------|---------------|----------------------------|---------------|-----------|----------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 17 | 45.95% | 6 | 16.22% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 17 | 45.95% | 6 | 16.22% | 37 | 100.00% |

Demonstrate an understanding of how homeostasis is maintained in the body.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 19 | 51.35% | 4 | 10.81% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 19 | 51.35% | 4 | 10.81% | 37 | 100.00% |

Analyze experimental data to demonstrate physiological principles.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 18 | 48.65% | 5 | 13.51% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 18 | 48.65% | 5 | 13.51% | 37 | 100.00% |

Demonstrate an understanding of the scientific method, experimental design, and the philosophy of science. Apply the scientific method and philosophy of science by designing components of and carrying out physiological experiments.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 17 | 45.95% | 6 | 16.22% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 17 | 45.95% | 6 | 16.22% | 37 | 100.00% |

Describe key structural features of different human cells and major tissue types.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 12 | 32.43% | 11 | 29.73% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 12 | 32.43% | 11 | 29.73% | 37 | 100.00% |

Identify and describe the anatomy of the systems of the human body.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 15 | 40.54% | 8 | 21.62% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 15 | 40.54% | 8 | 21.62% | 37 | 100.00% |

Identify key functions of major organ systems and the physiological mechanisms underlying their operation.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 11 | 29.73% | 12 | 32.43% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 11 | 29.73% | 12 | 32.43% | 37 | 100.00% |

Relate structure and function at the cellular through system levels of organization of human body systems

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|-------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 21 | 56.76% | 2 | 5.41% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 21 | 56.76% | 2 | 5.41% | 37 | 100.00% |

Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 8 | 21.62% | 15 | 40.54% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 8 | 21.62% | 15 | 40.54% | 37 | 100.00% |

Demonstrate knowledge of metabolic and physiological disorders of the major organ systems.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 12 | 32.43% | 11 | 29.73% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 12 | 32.43% | 11 | 29.73% | 37 | 100.00% |

Describe key functional features of different types of human cells and how they communicate.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 17 | 45.95% | 6 | 16.22% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 17 | 45.95% | 6 | 16.22% | 37 | 100.00% |

Demonstrate an understanding of how organ systems of the body are integrated and regulated.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 14 | 37.84% | 0 | 0.00% | 14 | 37.84% | 9 | 24.32% | 37 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 14 | 37.84% | 0 | 0.00% | 14 | 37.84% | 9 | 24.32% | 37 | 100.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 168 | 37.84% | 0 | 0.00% | 181 | 40.77% | 95 | 21.40% | 444 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 168 | 37.84% | 0 | 0.00% | 181 | 40.77% | 95 | 21.40% | 444 | 100.00% |

BIOLB33: Human Anatomy and Physiology II

Describe and distinguish various roles of major classes of biomolecules in living cells.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----------|--------------|----------------------|--------------|--------------------|---------------|----------------------------|---------------|------------|----------------|
| | | | | | | | | | | |
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 7 | 43.75% | 9 | 56.25% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 87 | 55.77% | 53 | 33.97% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 94 | 54.65% | 62 | 36.05% | 172 | 100.00% |

Demonstrate an understanding of how homeostasis is maintained in the body.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----------|--------------|----------------------|--------------|--------------------|---------------|----------------------------|---------------|------------|----------------|
| | | | | | | | | | | |
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 16 | 100.00% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 123 | 78.85% | 17 | 10.90% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 123 | 71.51% | 33 | 19.19% | 172 | 100.00% |

Analyze experimental data to demonstrate physiological principles.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----------|--------------|----------------------|--------------|--------------------|---------------|----------------------------|---------------|------------|----------------|
| | | | | | | | | | | |
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 9 | 56.25% | 7 | 43.75% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 108 | 69.23% | 32 | 20.51% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 117 | 68.02% | 39 | 22.67% | 172 | 100.00% |

Demonstrate an understanding of the scientific method, experimental design, and the philosophy of science. Apply the scientific method and philosophy of science by designing components of and carrying out physiological experiments.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 1 | 6.25% | 0 | 0.00% | 14 | 87.50% | 1 | 6.25% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 116 | 74.36% | 24 | 15.38% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 17 | 9.88% | 0 | 0.00% | 130 | 75.58% | 25 | 14.53% | 172 | 100.00% |

Describe key structural features of different human cell and major tissue types.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 11 | 68.75% | 5 | 31.25% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 85 | 54.49% | 55 | 35.26% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 96 | 55.81% | 60 | 34.88% | 172 | 100.00% |

Identify and describe the anatomy of the systems of the human body.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 15 | 93.75% | 1 | 6.25% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 112 | 71.79% | 28 | 17.95% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 127 | 73.84% | 29 | 16.86% | 172 | 100.00% |

Identify key functions of major organ systems and the physiological mechanisms underlying their operation.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 15 | 93.75% | 1 | 6.25% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 109 | 69.87% | 31 | 19.87% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 124 | 72.09% | 32 | 18.60% | 172 | 100.00% |

Relate structure and function at the cellular through system levels of organization of human body systems

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|-------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 15 | 93.75% | 1 | 6.25% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 127 | 81.41% | 13 | 8.33% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 142 | 82.56% | 14 | 8.14% | 172 | 100.00% |

Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 15 | 93.75% | 1 | 6.25% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 117 | 75.00% | 23 | 14.74% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 132 | 76.74% | 24 | 13.95% | 172 | 100.00% |

Demonstrate knowledge of metabolic and physiological disorders of the major organ systems.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 4 | 25.00% | 12 | 75.00% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 87 | 55.77% | 53 | 33.97% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 91 | 52.91% | 65 | 37.79% | 172 | 100.00% |

Describe key functional features of different types of human cells and how they communicate.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 8 | 50.00% | 8 | 50.00% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 83 | 53.21% | 57 | 36.54% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 91 | 52.91% | 65 | 37.79% | 172 | 100.00% |

Demonstrate an understanding of how organ systems of the body are integrated and regulated.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 5 | 31.25% | 11 | 68.75% | 16 | 100.00% |
| Fall 2019 | 16 | 10.26% | 0 | 0.00% | 67 | 42.95% | 73 | 46.79% | 156 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 9.30% | 0 | 0.00% | 72 | 41.86% | 84 | 48.84% | 172 | 100.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|--------|----------------------|-------|--------------------|--------|----------------------------|--------|-------|---------|
| Spring 2020 | 1 | 0.52% | 0 | 0.00% | 118 | 61.46% | 73 | 38.02% | 192 | 100.00% |
| Fall 2019 | 192 | 10.26% | 0 | 0.00% | 1221 | 65.22% | 459 | 24.52% | 1872 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 193 | 9.35% | 0 | 0.00% | 1339 | 64.87% | 532 | 25.78% | 2064 | 100.00% |

BIOLB3A: General Biology I

Upon completion of the course, students will be able to: demonstrate knowledge about the essential elements of life, major hypothesis for life's history, and mechanisms for the diversification of life.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Students will compare and contrast the development , life cycles, anatomical and physiological characteristics of major taxa of organisms.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Students will evaluate the relationships of organisms to each other and their environments.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Students will describe and identify key characteristics and classify representative specimens down to representative phyla.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Students will apply the processes of scientific inquiry and phylogenetic analysis to the diversity of organisms.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|---------------|----------------------|--------------|--------------------|---------------|----------------------------|---------------|-----------|----------------|
| Spring 2020 | 7 | 15.22% | 3 | 6.52% | 16 | 34.78% | 20 | 43.48% | 46 | 100.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 7 | 15.22% | 3 | 6.52% | 16 | 34.78% | 20 | 43.48% | 46 | 100.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|---------------|----------------------|--------------|--------------------|---------------|----------------------------|---------------|-----------|----------------|
| Spring 2020 | 7 | 15.22% | 3 | 6.52% | 16 | 34.78% | 20 | 43.48% | 46 | 100.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 7 | 15.22% | 3 | 6.52% | 16 | 34.78% | 20 | 43.48% | 46 | 100.00% |

BIOLB3B: General Biology II

Upon completion of this course, the student will be able to research a topic relevant to course material, design experiments, synthesize and evaluate their data and communicate their findings both orally and in a written format.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Illustrate the mechanism of evolution by natural selection and consider how this process is the unifying theme in Biology.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Identify, describe and compare the functions of prokaryotic and eukaryotic cells structures and biological macromolecules.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Compare and contrast catabolic and anabolic metabolic pathways, cellular communication and cellular division of prokaryotic and eukaryotic cells. .

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Illustrate and describe the structure and replication of DNA, transcription of DNA and translation of mRNA into proteins.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Solve genetic problems by employing the fundamentals of Mendelian genetics.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

BIOLB8: Introduction to Environmental Science

1. Upon successful completion of the course, the student will be able to identify and describe major global, regional and local environmental issues.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to analyze the scientific basis of major environmental issues by interpreting quantitative data and creating visual representations of data in order to identify and evaluate potential solutions.

CSLO not included in any Assessment Rubric

3. Upon successful completion of the course, the student will be able to investigate relationships between human actions and environmental issues and examine the impacts of these issues on human populations.

CSLO not included in any Assessment Rubric

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----|-------|----------------------|-------|--------------------|-------|----------------------------|-------|-------|-------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

BIOLB11: Concepts of Biology

research a topic, design experiments, synthesize and evaluate the information, justify and express their opinions.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

identify various cells and their structural components, and differentiate the functions of each of their components.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

1) understand the significance of DNA as the basis for heredity, structure, function and disease in living organisms; 2) describe the DNA molecule and explain how it is used in living systems to create proteins; and 3) describe how proteins function in living cells.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----------|---------------|----------------------|---------------|--------------------|---------------|----------------------------|---------------|-----------|----------------|
| Spring 2020 | 13 | 18.06% | 24 | 33.33% | 26 | 36.11% | 9 | 12.50% | 72 | 100.00% |
| Fall 2019 | 3 | 12.50% | 7 | 29.17% | 5 | 20.83% | 9 | 37.50% | 24 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 16.67% | 31 | 32.29% | 31 | 32.29% | 18 | 18.75% | 96 | 100.00% |

describe the organs found in selected human organ systems, then explain the role played by each organ in the overall functioning of that system.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

compare and contrast characteristics of various organisms particularly related to energy sources (feeding style), cellular composition, reproduction and relationship to the ecosystem.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

1) describe the flow of energy through the ecosystem, then construct a food web, placing specific species of organisms at each level; 2) choose a common ecosystem disturbance of human origin and predict the effects of that disturbance on a food web and understand the complexity of ecosystems and environmental issues.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

1) recognize, value, and apply major biological concepts contributing to current issues in the biological realm; and 2) apply critical thinking skills to formulate and defend a position on a controversial issue of biological importance.

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|----------|--------------|----------------------|--------------|--------------------|--------------|----------------------------|--------------|----------|--------------|
| Spring 2020 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Fall 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |

Totals for CSLOs

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|-----------|---------------|----------------------|---------------|--------------------|---------------|----------------------------|---------------|-----------|----------------|
| Spring 2020 | 13 | 18.06% | 24 | 33.33% | 26 | 36.11% | 9 | 12.50% | 72 | 100.00% |
| Fall 2019 | 3 | 12.50% | 7 | 29.17% | 5 | 20.83% | 9 | 37.50% | 24 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 16 | 16.67% | 31 | 32.29% | 31 | 32.29% | 18 | 18.75% | 96 | 100.00% |

Report Totals:

| | N/A | | Exceeds expectations | | Meets expectations | | Does not meet expectations | | Total | |
|-------------|------------|---------------|----------------------|--------------|--------------------|---------------|----------------------------|---------------|-------------|----------------|
| Spring 2020 | 21 | 4.35% | 137 | 28.36% | 199 | 41.20% | 126 | 26.09% | 483 | 100.00% |
| Fall 2019 | 365 | 14.93% | 7 | 0.29% | 1476 | 60.39% | 596 | 24.39% | 2444 | 100.00% |
| Summer 2019 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Totals | 386 | 13.19% | 144 | 4.92% | 1675 | 57.23% | 722 | 24.67% | 2927 | 100.00% |