

**Biology 297**  
**Undergraduate Lab Assistant**  
**Course Syllabus – Spring 2022**  
**Monday, 4:00-5:00 PM, ISC 101**

**Course Instructors:**

**Dr. Robert Feissner** (Office: ISC 356, Phone: 245-5022, e-mail: [feissner@geneseo.edu](mailto:feissner@geneseo.edu))

Office hours: MWF, 11:30 – 12:20, Friday by appointment only

**Course description & Teaching Philosophy:**

Students enrolled in Biology 297, Biology Lab Assistant, will assist the Undergraduate Laboratory Instructor and faculty supervisor in lab sections in Biology 116, General Biology Laboratory. Biology 297 students will take part in weekly instructional activities. Weekly class meetings (Monday, 4:00 PM) will emphasize preparation for lab and discussion of topical instructional strategies.

**Text and materials:**

The lab manual for Biology 116 will be provided on line. You should print a copy prior to the Monday night meeting. A preparation guide will be provided at the Monday meeting and will also be available online. A freshman biology text is a useful reference; copies of an older text are available in the lab classrooms.

**Evaluation:**

Class participation (interaction with students, engagement during laboratory preparation)	45%
Observation of teaching	30%
Bi-Weekly writing assignments	25%

1. Class participation will be assessed by direct observation by members of the instructional team including the course coordinator and the faculty advisor.
2. Some weeks you will be asked to teach or demonstrate something for the class. The faculty supervisor will observe you and provide feedback.
3. Every two weeks, you will participate in an online discussion about something you learned about biology or about teaching/leading/working with people through the laboratory. A suggested topic prompt or reading assignment will be provided to focus discussion. These prompts will touch upon experiences and events from labs and are intended to stimulate reflection on your teaching practice. A meaningful post for each prompt will be due every week on Monday, although discussion on a given topic may continue indefinitely.

**Grading scheme:**

In order to receive an A, you must: (1) attend and participate *enthusiastically* in the weekly meetings as well as the Biology 116 lab to which you are assigned, (2) be consistently punctual and well-prepared for lab, (3) perform the instructional activities assigned to you with care,

attention and enthusiasm, (4) communicate well with students in lab including initiating conversations with students, (5) work well with your faculty supervisor and lab instructor and (6) show growth through the semester.

A B grade will reflect serious problems with one category or lesser problems in two categories. If you exhibit serious problems in two categories or minor problems across several categories you will receive a C. If you have serious problems in more than 2 categories, you will receive a D. If you are negligent or have problems in 3 or more categories you will fail.

**Course Goals:**

This course has three major main objectives; the first is to gain an understanding of how the Biol 116 course is designed from the instructional perspective, the second is to practice small group student instruction, and the third is to observe and assist the Faculty supervisor.

**Learning Outcomes for Biology 297:**

Upon completion of this course, through the evaluation methods described above, students will:

1. Understand the structure and learning outcomes of the Biol 116 Course.
2. Demonstrate the ability to reflect on experiences in the classroom and suggest ways to alter teaching practices to improve learning.
3. Develop and teach mini-lessons on topics related to lab material using pre-determined learning objectives as a guide.

**Accessibility:**

SUNY Geneseo is dedicated to providing an equitable and inclusive educational experience for all students. The Office of Accessibility Services will coordinate reasonable accommodations for persons with documented physical, emotional, or cognitive disabilities, as well as medical conditions related to pregnancy or parenting. Students with letters of accommodation should submit a letter to each faculty member at the beginning of the semester and discuss specific arrangements. Please contact the [Office of Accessibility Services](#).

- Student responsibility: Please submit your letter of accommodations to us at the beginning of the semester and make an appointment to discuss arrangements.
- Instructor responsibility: We are committed to working with you to create a just learning environment while meeting the learning outcomes of the course. Unless you indicate otherwise, we will keep all accommodations confidential.

**Professionalism:**

Policy for this semester requires all students wear a face mask in instructional spaces including classrooms, lecture halls, and laboratories, and all common areas including residence halls and all buildings. There is misinformation circulating about exemptions from face mask requirements connected to interpretations of the Americans with Disabilities Act (ADA). At this time, the ADA does not cite a blanket exemption from face covering requirements for individuals with disabilities and has not issued documentation to support this exemption (e.g., “ADA cards”/letters/flyers). Please refer to the [ADA and Facemask Policy Guide](#) for more information.

If at any time you fall ill, we ask that you do not come to class. Should you miss a class due to illness it is important to get the notes from someone that is in the class and to contact your professor to be sure of what work you missed.

**BIOL 116: General Biology Laboratory      Spring, 2022 - Laboratory schedule: rev. 1/5/22**

<b>Week #</b>	<b>Week of:</b>	<b>Laboratory</b>	<b>Quizzes and Notes</b>
-----	Jan. 24	No meetings first week of classes	•
<b>1</b>	Jan. 31	Intro to Biol 116 Safety and Dichotomous keys.	<ul style="list-style-type: none"> <li>• <b>Prelab meetings will be recorded and posted to Canvas by 8:00 AM on Monday mornings. Review is required before your lab meeting.</b></li> <li>• Practice Quiz</li> </ul>
<b>2</b>	Feb. 7	Diversity and Taxonomy Part I (Skulls)	• QUIZ #1
<b>3</b>	Feb. 14	<b>Phylogeny online lab – Week of Diversity Summit</b>	• <i>n/a</i>
<b>4</b>	Feb. 21	Introduction to Data Analysis using R	• QUIZ #2
<b>5</b>	Feb. 28	Diffusion	• QUIZ #3
<b>6</b>	Mar. 7	Biostatistics Using R	• QUIZ #4
<b>7</b>	Mar. 14	<b>Spring Break – no labs this week</b>	• <i>n/a</i>
<b>8</b>	Mar. 21	Daphnia Lab Part I – herbal remedies	• QUIZ #5
<b>9</b>	Mar. 28	Daphnia Lab Part II – $\beta$ -blockers	• QUIZ #6
<b>10</b>	Apr. 4	Microbiology Lab Part I	<ul style="list-style-type: none"> <li>• QUIZ #7</li> <li>• <b>**BRING GOGGLES TO LAB THIS WEEK**</b></li> </ul>
<b>11</b>	Apr. 11	Microbiology Lab Part II	<ul style="list-style-type: none"> <li>• QUIZ #8</li> <li>• <b>**BRING GOGGLES TO LAB THIS WEEK**</b></li> </ul>
<b>12</b>	Apr. 18	<b>GREAT Day – no labs this week</b>	<i>n/a</i>
<b>13</b>	Apr. 25	Microbiology Lab Part III	<ul style="list-style-type: none"> <li>• QUIZ #9</li> <li>• <b>**BRING GOGGLES TO LAB THIS WEEK**</b></li> </ul>
<b>14</b>	May 2	Microbiology Lab Part IV Review Chapter 7 from <i>Writing in Biology</i>	<ul style="list-style-type: none"> <li>• QUIZ #10</li> <li>• Oral Presentation in lab week of Dec 6<sup>th</sup></li> <li>• <b>**BRING GOGGLES TO LAB THIS WEEK**</b></li> </ul>
<b>15</b>	May 9	Group Oral Presentations	• In Lab - Schedule will be established week of 5/2

**ASSIGNMENTS AND DUE DATES Spring, 2022: rev. 1/5/22**

<b>Week #</b>	<b>Due Date</b> <b>Week of...</b>	<b>Assignments Due: Assignments are due in your assigned lab section.</b> <b><i>Assignments in italics are individual assignments</i></b>
-----	Jan. 24	<b><u>Nothing Due</u></b>
<b>1</b>	Jan. 31	<b><u>Nothing Due</u></b>
<b>2</b>	Feb. 7	<ul style="list-style-type: none"> <li>• Dichotomous key</li> <li>• <i>Curriculum vitae</i></li> </ul>
<b>3</b>	Feb. 14	<b><u>Week of Diversity Summit - Nothing Due</u></b>
<b>4</b>	Feb. 21	<ul style="list-style-type: none"> <li>• Skulls and Phylogeny Assignment</li> </ul>
<b>5</b>	Feb. 28	<ul style="list-style-type: none"> <li>• Introduction to R assignment</li> </ul>
<b>6</b>	Mar. 7	<ul style="list-style-type: none"> <li>• Diffusion Lab Part I Written Assignment</li> </ul>
<b>7</b>	Mar. 14	<b><u>Spring Break - Nothing Due</u></b>
<b>8</b>	Mar. 21	<ul style="list-style-type: none"> <li>• Biostatistics Problem Set</li> <li>• Diffusion Lab Part II Written Assignment</li> </ul>
<b>9</b>	Mar. 28	<ul style="list-style-type: none"> <li>• Daphnia Lab Part I Written Assignment</li> </ul>
<b>10</b>	Apr. 4	<ul style="list-style-type: none"> <li>• Daphnia Lab Part II Written Assignment</li> </ul>
<b>11</b>	Apr. 11	<ul style="list-style-type: none"> <li>• Microbiology Lab Assignment Part I</li> </ul>
<b>12</b>	Apr. 18	<b><u>GREAT Day Week – Nothing Due</u></b>
<b>13</b>	Apr. 25	<ul style="list-style-type: none"> <li>• Microbiology Lab Assignment Part II</li> </ul>
<b>14</b>	May 2	<ul style="list-style-type: none"> <li>• Microbiology Lab Assignment Part III</li> </ul>
<b>15</b>	May 9	<ul style="list-style-type: none"> <li>• Microbiology Lab Presentation</li> </ul>