Biology 1103 Introductory Biology Lab, Spring 2019 CRN#: 22521

Instructor: Dr. Hsini Lin; Email: hlin@utep.edu
Office: Biology Building Room 214; Office Hours: 9:00 am – 10:00 am, T, R

Course Objectives

This laboratory course accompanies the Introductory Biology class for non-majors. It provides elementary aspects of evolution, physiology, development, genetics, and ecology in plants and animals.

Course Content

No textbook is required for this course. All the course content will be available via the UTEP Blackboard. You can access blackboard by the following instruction.

- Log onto my.utep.edu with your UTEP user name and password.
- Click on the “Blackboard” icon
- Click on “Courses” on the top
- Click on “Introductory Biology Lab (c) – BIOL-1103”
- After you get in the class site, you will see:

  Home Page          All the course materials will be available here
  Announcements      Information regarding this course will be announced here
  Syllabus           A copy of the syllabus will be accessible from here
  Assignments        Place for you to upload your homework or assignments
  Calendar           It shows the due date of the assessments and assignments
  Discussion         If you have any question or concerns regarding the course, you can post your question on the discussion board since some of your classmates may have the same question.
  Mail               If you have questions that are personnel you can contact me via email. You can also contact your classmates by sending them email.
  Tech Support       List contact information to reach the UTEP technical support. If you have any difficulty with Blackboard, you should UTEP technical support. I am not capable of providing you with technical assistance.
  My Grade           You can access your grades from here
Course Schedule

The topics covered in this lab are practical applications of the main topics taught in your class. You are supposed to communicate with your instructor on a weekly base to report the results of your activities. Some activities will be computer based and others will be hands-on experiments. In total, we have 10 activities during the semester (You can find a list of the activities by clicking on Home Page  Lab Activities  Introduction to Biology):

• Four computer-based interactive exercises (you can find specific instructions by clicking on Home Page  Lab Activities  Virtual Activities for Online Lab 1103):

  For every computer-based interactive exercise the teams have to submit a short report (1 or two paragraphs long). Explain what you learned, what is the connection of this activity for your career and goals, was the activity interesting? Discuss the importance of this topic in elementary, secondary and high school education.

  1. Activity 2 Biochemistry
  2. Activity 3 Cell structure and function
  3. Activity 7 Mendelian genetics
  4. Activity 8 Biotechnology

• Three hands-on experimental activities:

  1. Osmosis: you can find specific instructions by clicking on Home Page  Lab Activities  Online Osmosis Lab Activity
  2. Metabolic Pathways (including: respiration and photosynthesis): you can find specific instructions by clicking on Home Page  Lab Activities  Online Metabolic Pathway Lab Activity
  3. DNA Extraction: you can find specific instructions by clicking on Home Page  Lab Activities  Online DNA Extraction Lab Activity

• Journal Article Analysis: you can find specific instructions by clicking on Home Page  Lab Activities  Online Journal Article Lab Activity

• Science Project: you can find specific instructions by clicking on Home Page  Lab Activities  Online Science Project Lab Activity

You should conduct the Scheduled Lab Activities according to the dates listed in the course schedule. The assignments (lab reports) should be submitted online via the Assignment Tab before the Lab Report Due Date. Point deduction (10 points/day) will be applied to late submission.
## Course Schedule

<table>
<thead>
<tr>
<th>Unit</th>
<th>Date</th>
<th>Scheduled Lab Activity</th>
<th>Lab Report Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01/22 ~ 02/01</td>
<td>Getting Ready for the Course (Sign up group, contact your team members and Create a Group Resume)</td>
<td>02/07 (Thursday)</td>
</tr>
<tr>
<td>2</td>
<td>02/04 ~ 02/08</td>
<td>Biochemistry</td>
<td>02/14 (Thursday)</td>
</tr>
<tr>
<td>3</td>
<td>02/11 ~ 02/15</td>
<td>Cell Structure and Function</td>
<td>02/21 (Thursday)</td>
</tr>
<tr>
<td>4</td>
<td>02/18 ~ 02/22</td>
<td>Journal Article Activity</td>
<td>02/28 (Thursday)</td>
</tr>
<tr>
<td>5</td>
<td>03/04 ~ 03/08</td>
<td>Osmosis</td>
<td>03/14 (Thursday)</td>
</tr>
<tr>
<td>6</td>
<td>03/11 ~ 03/29</td>
<td>Metabolic Pathway 1 &amp; 2 Spring Break: 03/18 ~ 03/22</td>
<td>04/04 (Thursday)</td>
</tr>
<tr>
<td>7</td>
<td>04/01 ~ 04/05</td>
<td>DNA Extraction</td>
<td>04/11 (Thursday)</td>
</tr>
<tr>
<td>8</td>
<td>04/08 ~ 04/12</td>
<td>Mendelian Genetics</td>
<td>04/18 (Thursday)</td>
</tr>
<tr>
<td>9</td>
<td>04/15 ~ 04/19</td>
<td>Biotechnology</td>
<td>04/26 (Thursday)</td>
</tr>
<tr>
<td>10</td>
<td>04/22 ~ 05/03</td>
<td>Science Project</td>
<td>05/09 (Thursday)</td>
</tr>
</tbody>
</table>

### Grading Policy

- Group resume: 10%
- Journal article activity: 10%
- Science project: 10%

Grading scale: A=90-100%; B=80-89%; C=70-79%; D=60-69%; F is <60%.  

Total: 30%
3 hands-on experimental activities
- Osmosis: 5%,
- Metabolic pathway (including respiration and photosynthesis): 20% 
- DNA extraction: 5% 

4 computer-based interactive exercises
- Biochemistry: 10%,
- Cell structure & function: 10%, 
- Mendelian genetics: 10% 
- Biotechnology: 10% 

Absence/Drop/Incomplete Policy:
It is your responsibility to complete the scheduled activities before the dead-line. If you cannot complete the assigned activities due to a serious illness or a legitimate excuse such as military personnel called to active duty or training, make arrangements with me before you leave. **April 5th** is the last day students may drop with an automatic “W”. The College of Science will remain aligned with the University and not approve any drop requests after that date.

All grades of Incomplete must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the dean. Although UTEP will allow a maximum of one year to complete this contract, the College of Science requests it be limited to month based upon completion data. A grade of Incomplete is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

Academic Integrity Policy
UTEP’s policies regarding academic integrity apply in this course. Information on this policy can be found at [http://academics.utep.edu/Default.aspx?tabid=23785](http://academics.utep.edu/Default.aspx?tabid=23785)

Disability Statement
If a student has or suspects he/she has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148 or at <dss@utep.edu> or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.

Respect for Diversity
It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students’ learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Adapted from University of Iowa College of Education