

Biology Lab for Non-majors

Biology 124

Spring 2016

Syllabus

Instructor: Piotr T. Filipczak, PhD

Contact Information: email - pfilipczak@lrri.org, tel. 505-717-3246

Office Hours: Thursday 2:30-3:00 p.m., Academic Building, room A113

Class Time and Place: Thursday 3:00-5:45 p.m., Academics Building, room A135

Course Description:

It is an introduction to the problems and concepts in basic biology. The laboratory course will provide the student with skills needed to work in a laboratory setting. This laboratory course does not fulfill a requirement for a Biology major.

Required Lab Manual:

“Thinking About Biology: An Introductory Laboratory Manual”, Bress and Weisshaar, 5th edition.

Student Learning Objectives:

At the completion of this course the student will be able to:

- Demonstrate the correlation of lecture concepts with laboratory exercises.
- Use a compound and dissecting microscope to identify microscopic structures.
- Explain and illustrate concepts of cell biology including: function and properties of cells, diffusion and osmosis, organic molecules (carbohydrates, proteins, lipids, nucleic acids), enzyme structure and function, mitosis and meiosis, and human genetics.
- Relate the structure of tissues and organs to its function.
- Identify gross anatomy of a fetal pig.

Grading Policy:

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|----------------------------|-----|
| • Attendance/Participation | 10% |
| • Lab Assignments | 15% |
| • Quizzes (4 of 5) | 30% |
| • Midterm Exam | 20% |
| • Final Exam | 25% |

Grades:

- 100 or higher – A+
- 94-99.99 – A
- 90-93.99 – A-
- 87-89.99 – B+
- 83-86.99 – B
- 80-82.99 – B-
- 77-79.99 – C+
- 73-76.99 – C
- 70-72.99 – C-
- 60-69.99 – D
- below 60 – F

Make-up Exam:

There are no make-up exams in this course.

UNM Learn:

This course will use UNM Learn (learn.unm.edu) for a variety of materials. You are responsible for all material distributed here. The due dates and due times are strictly enforced.

Attendance:

Each absence will result in a 10% loss of your attendance grade. Laboratory exercises cannot be made up under any circumstances.

Withdrawal:

If a student wishes to drop a course a grade of W may be given. It will be at the instructor's discretion whether the withdrawal will be granted.

Safety:

No food or drink is allowed in the laboratory. Please store your personal items in cabinets. For good laboratory practice wear closed toe shoes.

Financial Assistance:

It is the student's responsibility to know policies for funding their education. It is the student's responsibility to maintain funding for their education.

Cell Phones:

As a courtesy to the class, please turn off all cell phones or pagers. DO NOT TEXT MESSAGE DURING CLASS. Any sight of a cell phone during exams or quizzes will result in an automatic fail for that assignment.

Special Needs:

Qualified students with disabilities should contact the instructor by the end of the 1st week of the semester to ensure that your needs are met in a timely manner.

Academic Dishonesty:

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet the standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

UNM Valencia Campus Course Catalog:

It is in the student's best interest to have read and fully understand the catalog. Understanding the catalog helps you navigate through your degree of choice.

Thursday Bio 124 laboratory schedule:

Course Week	Lab Exercise	Activities	Quizzes
01/18/16	Lab Intro/#1 Scientific Method	1, 2, 3, 4, 5, 6	
01/25/16	#7 Organic Molecules	1, 2	
02/1/16	#2-3 Microscopy/Cell Biology	1, 3, 4, 5, 6/1, 3, 4	
02/8/16	#4 Diffusion and Osmosis	1, 2, 3, 4	Quiz #1
02/15/16	#8 Enzymes	1, 3	
02/22/16	#9 Molecular Genetics	1, 2, 3, 4, 5	Quiz #2
02/29/16	#10 Mitosis	1, 2, 3, 4	
03/07/16	Midterm Practical		
03/14/16	SPRING BREAK (NO CLASS)		
03/21/16	#11 Meiosis and Genetics	1, 2, 3, 4, 5, 6, 7	Quiz #3
03/28/16	#12 Human Genetics	1, 2, 3, 5	
04/04/16	#14 Tissues and Organs	1, 2, 3, 6, 7	Quiz #4
04/11/16	#15 Cardiovascular System	1, 2, 3, 4	
04/18/16	#16 Fetal Pig I	1, 2, 3, 4, 5, 6	Quiz #5
04/25/16	#17 Fetal Pig II	1, 2, 3, 4, 6	
05/02/16	Final Practical		