

Biology 124: Biology for Health-Related Sciences Lab

UNM Valencia Campus

Semester: Spring

Year: 2017

CRN #: 33649 section 501

Credits: 1 credit hour

Course Description: This course is an overview of biological principles and laboratory techniques important for health science majors and non-majors. *Credit is not applicable toward a biology major or minor.*

Instructor: Dr. Ben Flicker

Contact Information: My office is AS132. My phone number on campus is 505-925-8726. My email address is benflicker@unm.edu. Aside from my office hours and immediately before and after class, email is the best way to contact me.

Office hours: Mondays 10:30-12:00 & 1:00-2:30; Tuesdays 3:00-4:30; Wednesdays 1:30-2:30; Thursdays 10:30-12:00, or by appointment.

Lab Assistant: Victor French- Office: LRC-124, 925-8568, vfrench@unm.edu

Student Learning Objectives:

- 1.) Students will display an understanding of the scientific method.
- 2.) Students will show the ability to analyze and interpret experimental data.
- 3.) Students will exhibit familiarity with basic cellular structure and anatomy.
- 4.) Students will demonstrate competency with basic microscopy.

Attendance: Attendance is Required for all classes. Labs cannot be made up. Students may be dropped from the class after 3 absences.

Attendance will be taken via a daily sign-in sheet. Excessive tardiness (greater than 10 minutes) will be counted as an absence.

Withdrawal: If you drop the course after the drop deadline, you will receive a grade of 'W'.

Missed exam/quiz policy: Missed quizzes and exams cannot be made up! Due to the practical nature of these, they can only be set up once.

Students with disabilities: Qualified Students with disabilities should see me or the testing center as soon as possible so we can meet your needs suitably and quickly.

Title IX: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the department of Education (see pg 15 - <http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf>). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct, and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX coordinator at the Office of Equal Opportunity (Oeo.unm.edu) For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>

Quizzes: 5 quizzes will be given throughout the quarter. These will be worth 20 points each. They will cover recent lab activities and be a mixture of practical and written elements.

Poster project: The main project, and source of points, for the semester will be a poster presentation. Over the course of the semester, working in groups, you will pick an experiment that we do in class to write and present about. The poster will be broken down into 5 parts, which will be due at various points in the semester (see schedule at the end of the syllabus). These parts, combined with the completed poster you will present during the final lab period of the semester, will count for 200 of the 400 points assigned during the semester.

Course Webpage: The course webpage can be found by logging in to learn.unm.edu. There, I will post course documents like the syllabus and other relevant course material. Any course announcements will be made on this webpage, so be sure to check it regularly.

Laboratory Policies:

- 1.) No food or drink is allowed in the lab at any time.
- 2.) No chewing gum in the lab.
- 3.) Absolutely no horseplay will be tolerated.
- 4.) Come on time and prepared for the lab activity and quiz for that day.
- 5.) Treat all lab equipment carefully and with respect

Course Grading Policy: Lecture grades will be based on the percentage of points earned (100% or higher = A+, 99-91% = A, 90% = A-. 88-89% = B+, 87-81% = B, 80% = B-, 79-78% = C+, 77-71% = C, 70% = C-, 69-68% = D+, 67-61% = D, 60% = D-, < 60% = F.

- 98 points: Participation (14 lab exercises @ 7 points each)
- 100 points: Quizzes (5 quizzes @ 20 points each)
- 100 points: Project portions (5 @ 20 points each)
- 100 points: Poster presentation
- 2 points: Free!
- = 400 Total points

| Date | Lab Exercise | Project portion due: |
|---------|---------------------------------|----------------------|
| 1/18/17 | Course Intro/ Scientific Method | |
| 1/25/17 | Biological molecules | |
| 2/1/17 | Biological molecules | Topic |
| 2/8/17 | Biological molecules | |
| 2/15/17 | Biological molecules | |
| 2/22/17 | Cell biology & Microscopy | Introduction |
| 3/1/17 | Cell biology & Microscopy | |
| 3/8/17 | Cell biology & Microscopy | |
| 3/15/17 | Spring Break: No Class! | |
| 3/22/17 | Mendelian genetics | |
| 3/29/17 | Mendelian genetics | |
| 4/5/17 | DNA barcoding | |
| 4/12/17 | DNA barcoding | Materials & Methods |
| 4/19/17 | DNA barcoding | Results & Discussion |
| 4/26/17 | Open session | Abstract |
| 5/3/17 | Poster Session | |