Syllabus

I. General Information

Instructor:	Piotr Filipczak, PhD
Email	pfilipczak@unm.edu
Phone:	505-925-8876
Office Hours:	Monday, 1:30 pm – 3:30 pm (VAHS 110, Biotechnology Lab) Tuesday, 1:30 pm – 2:30 pm (VAHS 110, Biotechnology Lab) Wednesday, 1:30 pm – 3:30 pm (VAHS 110, Biotechnology Lab)
Office Number:	VAAS 132A
Course Section:	501
Meeting Room:	VAAS 135
Meeting Time:	Thursday, 1:30 pm – 4:15 pm

II. 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.

III. Resources

Instructor will provide lab manuals to students by posting them in Canvas prior to the class on a weekly basis. There is no fee for these manuals, but students must print them out. Print for the first week manual will be provided by instructor.

IV. 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

V. Student Learning Outcomes

1.) Students will explain the scientific method and be able to use it to develop and test a hypothesis.

2.) Students will show the ability to analyze and interpret experimental data.

3.) Students will demonstrate use of laboratory equipment to perform scientific measurements.

4.) Students will demonstrate competency with basic microscopy.

5.) Students will be able to describe the stages of mitosis and meiosis.

6.) Students will be able to describe the importance, structure and replication of DNA in cells.

7.) Students will be able to describe the structure and function of enzymes.

8.) Students will be able to describe the structure of DNA and the flow of genetic material in a cell.

VI. Course Requirements

Attendance: Students enrolled in the course are obligated to attend at least **85%** of meetings and complete at least **85%** of lab reports. Thus, missing **3** out of 16 on-campus meetings or not completing **3** out of 13 lab reports may result in a failing grade. Students who missed **15%** of the course will be dropped by the instructor with a W, F or D (depending on the stage of the course).

Compliance and Safety: Students must read, understand and obey safety rules while present in a chemical laboratory. That will be documented by signing safety contract during the first on-campus meeting. Students who do not obey the safety rules will be suspended from the class by the instructor with the consequent failing grade.

VII. Students Evaluation Criteria

Type of Assignment:	**Points per Assignment:**	**Total Points in this Category:**	**Contribution to the Final Grade:**
Lab Reports(10x)	10 pts	100 pts	33 %
Quizzes (10x)	10 pts	100 pts	33 %
Midterm Exam (1x)	40 pts	40 pts	14 %
Final Exam (1x)	60 pts	60 pts	20 %
Total		**300 pts**	**100%**

- **Lab Reports:** Experimental component to be completed in class. Complete lab report to be turned in within one-week time. Two lowest scores will be dropped from the final grade. In case of a missed assignment, students can make up one report within one week from the original due date.
- **Quizzes:** Closed-book assignments to be completed in class. One lowest score will be dropped from the final grade. In case of a missed test, students can make up one quiz within one week from the original due date. To do so, such students must contact the instructor within 48 hours of missing the test to arrange the meeting.
- **Midterm and Final Exam:** Closed-book assignments to be completed in class during the final week of the course. In case of a missed exam, students must contact the instructor within 48 hours of missing the test to arrange the meeting.

Grading scale:

- 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

VIII. Course Policies

Academic Integrity: All homework, quizzes and exams in this course must be completed by students as their original and individual work. No group work is allowed when it comes to completing assignments. While taking quizzes and exams, only resources listed by the instructor (such as non-graphing calculator, scratch paper, periodic table etc.) are allowed. Use of any other resources such as but not limited to textbooks, unauthorized internet websites, personal notes are forbidden. Plagiarism or cheating is not tolerated. Any instance of this will result in a grade of zero for that assignment. For more details on academic integrity violation examples, please see the UNM Academic Dishonesty Policy: https://policy.unm.edu/regents-policies/section-4/4-8.html.

Compliance and Safety: Students must read, understood and obey safety rules while present in chemical laboratory. That will be documented by signing safety contract

during the first on-campus meeting. Student who does not obey the safety rules and brings the risk on himself/herself and/or on colleague students, may be suspended from the class by the instructor at any time of the course with the consequent non-passing grade.

Communication: Email is the best way to contact your instructor. My typical response time is less than 24 hours during the workweek and less than 48 hours during the weekend. A summary of the most important information about the course will be posted every Monday via Canvas course shell. Small changes to the original schedule and course design are possible and will be announced by the instructor in a timely manner via Canvas or UNM-associated email.

Accommodations: UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact Accessibility Resource Center at arcsrvs@unm.edu or 505-277-3506.

UAP 2720 and 2740. Our classroom and university should foster mutual respect, kindness, and support. If you have concerns about discrimination, harassment, or violence, please seek support and report incidents. Find confidential services at LoboRESPECT Advocacy Center, the Women's Resource Center, and the LGBTQ Resource Center. UNM prohibits discrimination on the basis of sex (including gender, sex stereotyping, gender expression, and gender identity). All instructors are "responsible employees" who must communicate reports of sexual harassment, sexual misconduct and sexual violence to Compliance, Ethics and Equal Opportunity. For more information, please see UAP 2720 and UAP 2740.

Credit-hour statement: This is a three-credit-hour course. Class meets for three 50-minute sessions/two 75-minute sessions of direct instruction for fifteen weeks during the Fall 2025 semester. Please plan for a minimum of six hours of out-of-class work (or homework, study, assignment completion, and class preparation) each week.

Respectful Conduct Expectations: I am committed to building with you a positive classroom environment in which everyone can learn. I reserve the right to intervene and enforce standards of respectful behavior when classroom conduct is inconsistent with University expectations [and/or classroom community agreements]. Interventions and enforcement may include but are not limited to required meetings to discuss classroom expectations, written notification of expectations, and/or removal from a class meeting. Removal from a class meeting will result in an unexcused absence. [Insert number] or more unexcused absences may result in permanent removal and a drop from the course (see attendance policy). The University of New Mexico ensures freedom of academic inquiry, free expression and open debate, and a respectful campus through adherence

to the following policies: D75: Classroom Conduct, Student Code of Conduct, University Policy 2240 – Respectful Campus, University Policy 2210 – Campus Violence.

Responsible Learning and Academic Honesty: Cheating and plagiarism (academic dishonesty) are often driven by lack of time, desperation, or lack of knowledge about how to identify a source. Communicate with me and ask for help, even at the last minute, rather than risking your academic career by committing academic dishonesty. Academic dishonesty involves claiming that work created by another source is your own original work. It is a Student Code of Conduct violation that can lead to a disciplinary procedure. When you use a resource in work submitted for this class, document how you used it and distinguish clearly between your original work and the material taken from the resource.

Thriving and Finding Support: Students are especially successful at UNM when they take advantage of support and get involved in campus and academic life. Your MyUNM login page provides direct links to wellbeing resources, including financial capability, mental health, food, jobs, and resource centers. MyUNM will help you identify academic resources like peer tutoring and opportunities like study abroad. You can contact academic advisors and resource advisors for information and guidance via Student Hub on MyUNM. I look forward to providing you with information about academic opportunities related to our class and to helping you find support resources.

IX. Course Schedule

WEEK	DATE	SUBJECTS
1	8/20	Course Intro/ Scientific Method and Epidemiology
2	8/27	Data Collection and Graphing
3	9/3	Aseptic Method
4	9/10	Biological Molecules
5	9/17	Microscopy and Cell Biology
6	9/24	Diffusion and Osmosis
7	10/1	**Midterm**
8	10/8	***No Meeting – Fall Break***
9	10/15	Enzymes
10	10/22	Cellular Respiration I - Aerobic
11	10/29	Cellular Respiration II - Anaerobic
12	11/5	Genetics I – PCR
13	11/12	Genetics II – Electrophoresis
14	11/19	Mitosis
15	11/26	***No Meeting – Thanksgiving***
16	12/3	**Final Practical Exam**