
Principles of the Biomedical Sciences™ Course Syllabus

This course provides an introduction to the biomedical sciences through exciting hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They will determine the factors that led to the death of a fictional woman as they sequentially piece together evidence found in her medical history and her autopsy report. Students will investigate lifestyle choices and medical treatments that might have prolonged the woman's life and demonstrate how the development of disease is related to changes in human body systems. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes and allow students to design experiments to solve problems. Key biological concepts including maintenance of homeostasis in the body, metabolism, inheritance of traits, and defense against disease are embedded in the curriculum. This course is designed to provide an overview of all the courses in the biomedical sciences program and lay the scientific foundation for subsequent courses.

This is a college level course and you should be prepared to put forth that level of effort and energy.

NOTEBOOKS

Students will be required to keep and maintain a notebook for this class. The notebook should be a three-ring binder, (3"), with tabbed dividers (8) for each unit. The notebook should not be shared with another class, but used exclusively for this class. **The notebook is to be brought daily to class.**

The following materials are to be included in the notebook:

Syllabus	How to use a Microscope
Course Outline	How to write a Lab Report
Career Journal Guidelines	Outlining/Summarizing Guidelines
Documentation Protocol	Design Process
Aseptic Techniques	Logger Pro Resource Sheet
Experimental Design	Notes/Class Work
Graphing Basics	Assignments/Worksheets

TECHNOLOGY

ALL activities will be done on your **assigned** classroom computer. Should your assigned laptop become damaged by you - you will be responsible for the damages. You are responsible for logging off, shutting down, plugging in and replacing the computer in its proper location on the computer cart. Please **LOOK** at how your computer is in its slot so you can replace it **EXACTLY** like you found it. The cord needs to be placed **IN** the computer slot while in use.

GRADES

Grades will be calculated using a point system. Each activity, project, lab, or assignment will be assigned a specific number of points. Many activities, labs, and projects will have rubrics to be used for grading. Each activity is explained in detail and **requires the student to read and follow directions carefully.**

Grades will be calculated according to the following:

35%	Tests & Quizzes	30%	Labs/Presentations/Projects
15%	Career Journals	10%	Classwork/Homework
		10%	Notebook Checks

ATTENDANCE/TARDIES

Students are expected to attend class and be on time every day. The attendance and tardy policies in the student handbook will be followed. In the event of an absence, it is the **student's responsibility** to find out what they missed and need to make up.

WRITING COMPONENT

Each unit will have notes, activities, homework/classwork, labs, lab write-ups, projects, career journals, etc in which students will demonstrate their mastery of the writing process. You will be asked to write **professional level discussions and conclusions.** This is often one of the hardest tasks to get used to in the beginning. Make sure you are putting forth your best effort at all times.

LAB EXPECTATIONS

Labs may be held in my room or in the chemistry lab. Appropriate attire will be: **long pants & close toed shoes.** Personal Protective Equipment may also be required. This may consist of **goggles and gloves.** PPE is to be worn at **ALL** times and removed only with instructor approval. If you do not have appropriate lab attire on the day of a lab, you cannot participate and you will lose your lab participation points.

You will use various data collection hardware - please treat it responsibly & follow all recommended safety procedures.

CLASS EXPECTATIONS

1. Students will put their name (**first & last**), class period, date & activity # on **ALL** papers. Google Docs will always use a **HEADER** with this information.
2. Students will bring **any necessary materials** to class. This includes, but is not limited to: your binder, paper, pen/pencil, assignment, etc. This includes your brain☺ and a positive attitude.
3. Students will hand in **assignments when they are due**. Assignments are due at the **beginning** of class unless noted otherwise. Late assignments result in a 50% deduction.
4. Students will observe and follow all handbook guidelines.
5. Students will be **RESPECTFUL** of themselves, classmates, teachers & school property.
6. Students will take responsibility for their work in **all** situations.
 - a. If you miss class, it is up to **YOU** to get your make up work - not for me to give it to you!!
 - b. If you are having trouble with the content of class, it is up to **YOU** to get help. I am more than willing to help you in any way I can, but you have to let me know you **need** help.
 - c. A student who knows they will be absent from class (sports, music, etc) is expected to hand in any work assigned for that day. You may hand in work the day before or the morning of; any work handed in later than the assigned class time will be counted as late. **Missed tests are expected to be made up the day you return.**
7. Students will **be on time to class**. Tardies result in detentions. Detentions will be served after three (3) tardies. **TARDY**=not in your assigned seat when bell rings.
8. Locker & restroom passes **may be given** (at appropriate times).
9. **NO CHEATING** - this includes copying conclusion questions, tests, homework, etc. Both the copier & the one who allows the other to copy will receive a **zero** on the assignment and administration will be notified.
10. Follow all lab procedures & protocols. No goofing off - everyone must **ACTIVELY** participate in the lab activities. Failure to follow lab dress code results in no lab & loss of participation points. If personal protective equipment must be worn, it must be worn at all times & removed only with instructor permission.

PLAGIARISM/ACADEMIC DISHONESTY

Plagiarism and academic dishonesty are serious offenses. The academic work of a student is expected to be his/her own effort.

- Students must give the author(s) credit for any source material used
- To represent ideas or interpretations taken from any source without giving credit is a flagrant act
- To present a borrowed passage after having changed a few words, even if the source is cited, is also plagiarism
- To use another student's work is also plagiarism

Students who commit any act of academic dishonesty will receive a failing grade on that portion of the course work. Acts of academic dishonesty will be reported to parents and administration.

Your work represents your integrity as a professional. Make sure you always work toward having high standards and thus a respectable reputation as a professional.

CONTACT INFORMATION

Remind 101 - text 81010 @annag
Mrs McNeel's Weebly - mrsmcneel.weebly.com

I am available before school & after school most days for help. No Monday or Friday mornings - I am in the school store.

I can be contacted via email at demcneel@ginorthwest.org; or at 385-6394, ext 5165 before or after school.

Student Signature _____ Date _____

Parent Signature _____ Date _____