NNHS BIOTECHNOLOGY COURSE INFORMATION

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Mission: To educate students to be self-directed learners, collaborative workers, complex thinkers, quality producers, and community contributors

Course Description: Biotechnology is an advanced course designed to introduce students to the terminology, techniques and applications of biotechnology. This is a lab based class where class participation is critical to success. Laboratory activities are an integral part of the curriculum, including the use of electrophoresis, micropipettes, PCR, and bacterial plating. In addition, students will learn appropriate laboratory documentation and analysis skills. The teacher's role is to guide students and expose them to new material, but the student is ultimately responsible for utilizing all of the resources to master the subject.

Course Learning Units:
- Introduction including the science behind biotechnology
- Applications in Forensic Science
- Applications in Agriculture
- Applications in Medicine and Research
- Applications in Environmental and Energy
- Lab Techniques and Methodology (applied to all units)

Grading: The course grade will reflect student learning and the student's ability to apply and demonstrate knowledge. Due to the nature of the course, many lab activities cannot be completed outside of the designated lab date. Therefore, absences on lab days may impact a student's overall grade.

Overall Semester grade:

- 85% Course work
- 15% Final Exam

Course Work: Within each unit, summative and formative sections are weighted as follows

- 90% Summative (lab techniques, assessments, projects, lab practical)
- 10% Formative (daily work; quizzes)

Grading Scale:
- A= 90-100%
- B= 80-89%
- C= 70-79%
- D=60-69%
- F= <59%

Academic Integrity

Students will be expected to submit only original work and follow the academic integrity policy described in the student handbook.
Reassessment Policy for Summative Assessments

1. Reassessments are only available for ONE summative unit exam.

2. Eligibility for a reassessment is up to teacher discretion based on the following. Students are required to have their original assignments for the unit turned in on time and they are expected to participate throughout the unit. Reassessments are a privilege for students.

3. Students need to complete all unit work on time to be eligible to take that unit reassessment. Also, students will be responsible for completing an additional assignment, specific to that unit.

4. The reassessment will take place at the end of the semester on a unit exam of the student’s choice.

5. Reassessments will be a new form of the assessment that addresses all of the same topics that were on the original assessment.

Communication:

- Students should contact their teacher directly to seek extra help, communicate information or express concerns.

- It is extremely important that students discuss missing a lab due to pre-planned absences such as college visits, field trips, and assemblies with the teacher in advance of the lab. Missing class on lab days may impact the lab grade.

- Teachers make every effort to respond to emails and phone calls within 48 hours during the work week. Individual teachers will notify students of their office hours and availability.

What to do if a student needs help

- Make an appointment with your teacher.

- Work with a peer tutor in the Literacy Center

- After school homework help in the Literacy Center (schedule TBD)

- Go to Biology Morning Help Thursdays at 7:15 in room 201

Parents and Guardians

- Check Infinite Campus for students’ grade.

- Please ask your student about their school work. Please ask them for access to their Canvas account.

Attendance policy:

With this being a lab intensive course, attendance is a necessity to success in class. As stated in the Student Handbook, excessive absences may result in the student being withdrawn from the course. Since all the labs last for multiple days, you will be unable to actively participate to complete the work you missed if you are absent. Make-up material will be available to you, but should not be looked at as a replacement for missing scheduled classroom activities. Pre-planned absences (such as college visits, field trips, or athletic events) will not extend deadlines or exam dates.

If you are absent it is your responsibility to check the calendar, CANVAS, and come to class prepared.