NNHS BIOTECHNOLOGY COURSE INFORMATION
2020-2021

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:

- Unit 1 - Introduction including the science behind biotechnology
- Unit 2 – Applications in Forensics
- Unit 3 – Applications in Research and Medicine
- Unit 4 – Applications in Agriculture and Environmental Science
- Lab Techniques and Methodology (applied to all units)

Grading Calculation
At Naperville North we define formative and summative work as follows:

- Formative work is used to monitor student’s learning to provide ongoing feedback that can be used by students to improve their learning. Examples may include: practice activities, homework, quizzes, etc.
- Summative work is used to evaluate student learning at the end of an instructional unit or segment of learning by comparing it against a standard or benchmark. Examples may include: quizzes, labs, tests, etc.

Grades communicate each student’s progress toward mastery of goals/standards for the course. Grades should not be reduced or inflated due to student behaviors outside of the standards.

- No extra credit will be issued.
- Formative assignments will be accepted up to the end of each unit.
- A zero on a summative assessment will only indicate that no attempt was made by the student
  - Violations of the academic integrity policy will be consequenced by administration in collaboration with the IC/teacher.
- Formative work submitted after the due date cannot be penalized more than a total of 10%.
- Summative work submitted after the due date cannot be penalized more than a total of 10% and must be submitted prior to the end of the next unit.

Your course grade will reflect what you have learned, not what you have completed.

85% Course content grade
15% Final Exam

Course Content Grade

- Formative
  - 10% Classwork, labs, homework, formative quizzes
- Summative:
  - 90% Tests, summative quizzes
Reassessment Policy
Students will be provided multiple and varied opportunities to demonstrate mastery of learning standards.
- The purpose of reassessment is to allow students to demonstrate mastery of course standards in which they remain deficient.
- Students will be required to engage in further learning and reassessment when students do not demonstrate sufficient learning of the course essential standards.
- Students who have demonstrated sufficient learning of the essential standards (but scored below 80%), will be allowed reassessment opportunities on summative assessments if they so choose. To be eligible for reassessment, students must
  - Demonstrate readiness for the summative assessment through completion of formative work.
  - Complete designated learning experiences as assigned by the teacher.
- Project-based assessments that include multiple opportunities for feedback and improvement in the assessment process will represent multiple attempts and be considered a reassessment.
- At the end of each semester, students will be given an option to retake any Unit Test.
- Higher reassessment grades will replace the original assessment score (but will not exceed 80%).
- Any percentage lower than 50% will be put into the grade book at 50%, the lowest possible grade on completed work. (incomplete or work not turned in will receive a grade of 0 in the grade book.

Academic Integrity
Academic Integrity Students will be expected to submit only original work and follow the academic integrity policy described in the NNHS student handbook.
- Level 1 infraction will follow our reassessment policy, students will earn no more than – 80%;
- Level 2 infraction – 50%;
- Level 3 infraction – 0%

What to do if a student needs help
- Make an appointment with your teacher.
- After School Tutoring will be available for students M, W, Th after school in the Learning Commons.
- Peer tutors available before school and during lunch periods in the Lit Center.

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.
Digital Viewing Options
Food Inc, Unnatural Selection, Ted Talks, and other documentaries

Science Department Contact Information

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