Biology

2 credits/2 semesters

Ms McQuade

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(Preferred contact method)



**Course Title:**

**Credit(s):**

**Teacher:**

**Phone #:**

**FAX #:**

**E-Mail:**

**Course Description:**

Biology I is a required Core 40 science course for all Indiana students. The course will explore topics in biochemistry (elements and compounds as they relate to living organisms), cell structure, developmental biology, organism structure and system regulation, genetics, ecology and evolution. In addition, there is an in-depth study of selected biological topics, with an emphasis on the molecular aspects of biology throughout the course. Course activities include lecture, lab activities, video presentations, demonstrations and student projects. Students will be required to complete the Core 40 test as prescribed by the state of Indiana as part of the assessment activities.

**Textbook/Resources:**

Johnson, G.B. & Raven, P. H. (2006). Biology. United States of America: Holt, Rinehart, and Winston.

The Princeton Review. (2005). Mastering the Core 40. United States of America: Glencoe/McGraw-Hill.

Textbook website: go.hrw.com Keyword: HX6 Home

**Supplies:**

3 Ring Binder with at least a 1.5” spine

Bound composition notebook

Pens/pencils

**Learning Goals:** Upon completion of this course students will

Master a minimum of 70% of all stated objectives. Complete the Indiana Core 40 End of Course Assessment, as prescribed by the State of Indiana.

**Course Expectations:**

The major objective is to have all students learn and be successful in this class. No student has the right to interfere in any way with my ability to teach and students to learn.

1. All students are expected to follow the outlined procedures as stated in the LCHS Code of Conduct

2. All students are expected to have a laboratory safety contract with parent signature on file before beginning any lab work.

3. All students are expected to follow specific class rules that will be handed out as an addendum in class.

**Grade Determination:**

**Examinations/Quizzes**

50

**% of Grade**

Labs

30

**% of Grade**

Classwork/Homework

20

**% of Grade**

Bonus Point MAY be available on some Chapter Tests via designated test questions. In accordance with LC Science Dept. Policy, NO OTHER TYPE OF EXTRA CREDIT POINTS WILL BE AVAILABLE.

**Semester Formula:**

First 9 weeks =

45

of the semester grade

Second 9 weeks =

45

of the semester grade

Final Exam =

10

of the semester grade

**Late Work Policy:**

Only late work due to absences will be accepted. Absent students must make up late work during a time interval equal to their length of absence.

**Methods of Instruction:**

Lecture

Guided Practice

Independent Practice

Cooperative Learning

Lab Experiments

Reading Strategies: Directed reading, Concept mapping, SQ4R

**Grading Scale:**

92.50-100

= A

89.50-92.49

= A-

86.50-89.49

= B+

82.50-86.49

= B

79.50-82.49

= B-

76.50-79.49

= C+

72.50-76.49

= C

69.50-72.49

= C-

66.50-69.49

= D+

62.50-66.49

= D

59.50-62.49

= D-

0-59.49

= F

**Additional Information:**

The letter grades are based on a "rounded" grading scale. No further rounding will be done. For example, a percentage of 89.5 is an A-, however 89.4999 repeating will not be rounded.

STUDENTS are responsible for obtaining and using SRT passes, as well as scheduling after school review sessions with the instructor if they need additional help. Please note that some instructors are NOT available during SRT, due to their teaching load.

**Course Outline:**

Weeks Textbook Reference Chapters

Semester One Topics

1-2 1. Brief Overview of Biology Topics Chapter 1

3-5 2. The Chemistry of Biology Chapter 2

9-12 4. Structure and Function of Cells and Membranes Chapter 3& 4

6-8 3. Ecology Topics Chapters 15-18

13-16 5. Photosynthesis and Cellular Respiration Chapter 5

17-18 6. Review and Semester Examination

Semester Two Topics

1-4 1. The Cell Cycle, Mitosis and Meiosis Chapters 6-7

5-8 2. DNA Replication and Protein Synthesis Chapters 9-10

9-12 3. Mendel and the Science of Genetics Chapter 8

13-16 4. Evolution, Classification and Earth History Chapters 12-14, 19.1

17 5. Review and Core 40 Exam

18 6. Review and Semester Examination