# Course Syllabus - 2014-2015

Course Title: Biology

Instructor: Mr. Kevin Fairhurst

Contact: 480.987.5973 ext: 4643

Room B103

kfairhurst@gcusd.org

Available for tutoring during Achievement Hour or from 2-3pm on Tue. and Thu.

<u>Textbook:</u> Biggs, Alton, et al. <u>Biology</u>. Columbus, OH: McGraw-Hill Education, 2012.

You will be given instructions for how to access the electronic version of the textbook using

your web-enabled device (computer, tablet, smartphone, et cetera).

Materials: 1" (or thicker) 3-ring binder (may be used for multiple subjects/classes)

Lined notebook paper

Graph Paper

Spiral notebook (for note taking)

Composition notebook (for lab write-ups)

Pens (blue or black ink preferred)

Pencils (#2 hardness)

# Course Competencies/Objectives:

This course in biology is taught using the Arizona Department of Education state standards for high school science. The standards are summarized below:

	Understand	the role	of the	cell and	cellular	processes.
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Understand the molecular basis of heredity and resulting genetic diversity.

Analyze the relationships among various organisms and their environment.

Understand the scientific principles and processes involved in biological evolution.

Understand the organization of living systems, and the role of energy within those systems.

Formulate predictions, questions or hypotheses based on observations.

Design and conduct controlled investigations.

Evaluate experimental design, analyze data to explain results and propose further investigations.

Identify individual, cultural, and technological contributions to scientific knowledge.

<u>Course Description:</u> Biology is a lab based course which will address the following topics: ecology, biochemistry, cellular structure and function, cellular energy and reproduction, human inheritance, genetics and molecular genetics, natural selection, evolution, phylogeny and taxonomy, bacteria and viruses along with an introduction to plants and animals. Students will be expected to learn and demonstrate basic laboratory techniques and safety procedures. Students will also be exposed to critical reading and analysis along with technical writing skills. Some lab activities may require dissection.

#### Course Overview:

Semester 1: Quarter 1

Unit 1: Intro to Biology Unit 2: Chemistry of Life

Unit 3: Cell Structure and Function

Unit 4: Cellular Energy

Semester 1: Quarter 2

Unit 5: Cell Cycle
Unit 6: Genetics
Unit 7: Biotechnology
Unit 8: Evolution

Semester 2: Quarter 3

Unit 9: Classification of Organisms

Unit 10: Ecology

Unit 11: Viruses & Prokaryotes

Semester 2: Quarter 4

Unit 12: Protists & Fungi

Unit 13: Plants

Unit 14: Animals (including Frog Dissection)

Unit 15: Human Body Systems

<u>Grading System</u>: A=100-90%, B=89-80%, C=79-70%, D=69-65%, D=64-60%, F=59-0%

Grades will be earned from points accumulated during each semester from the following categories:

Assignments - 35% Assessments - 45% Final Exam - 20%

- Tests require a minimum score of 70% or remediation is required. Your final grade will be greatly benefited by daily, on time, attendance and a good attitude and effort. Grades are updates weekly in Synergy.
- Assignments may be any of the following: homework, classwork, notebook checks, etc. Assessments may be any of the following: tests, formative assessments, reading guizzes, lab write-ups, projects, etc.

<u>Attendance</u> is very important to your success. The information given in class, lab time, and group interactions is very difficult to make up. Every effort should be made to be in class on time each day. However, should you be absent for any reason, it is your responsibility to schedule the date and time with me on which you will make up missed assignments. Please refer to the "Make Up Work" and "Late Work Policy" below.

<u>Make Up Work</u> Students who have EXCUSED absences have 1 extra day for each day absent to complete make up assignments.

<u>Late Work Policy</u> Students will have up until the unit assessment to turn in any late assignments for 50% of the credit earned. If the students fail to turn in those assignments by set date, then it will remain a zero in Synergy. Please check the Synergy calendar to see when assignments, tests/quizzes, and projects are scheduled.

### Classroom Management:

District guidelines for student behavior and QCHS's code of conduct form the basis for our experiences together. In addition to these standards I expect the following:

- Please do not talk during instruction
- Know the class procedures
- Follow class routines
- Be respectful of yourself and others
- Accept responsibility for your choices

The best discipline is <u>self-discipline</u>. At this point in your life you are capable of exercising this quality. I am not a baby sitter, nor should you require one. You are not here to be entertained; you are here to learn - <u>for your own sake</u>. Should issues arise, consequences should be understood and accepted.

## Consequences:

1st Step - A verbal warning.

2<sup>nd</sup> Step - A second verbal warning, parent contact via phone and/or email.

3<sup>rd</sup> Step - A written referral and parent contact.

4<sup>th</sup> Step - Administrative referral and parent contact

Please remember the following policies apply to all students and classrooms at Queen Creek High School:

- 1) Electronic devices are not to be used for personal use while classes are actively in session.
- 2) Hats, hoods, sunglasses are not to be worn indoors.
- 3) Food and drinks (except water) are not permitted in the classrooms.
- 4) Your Student ID must be carried at all times.
- 5) The school dress code will be enforced daily.

	T AND PARENT ACKNOWLEDGEMENT	
Students: Your signature below represents that you procedures statement for this course and them. You also know that if you have a proposed your teacher before or after school or continuous.	nd understand the consequences if you roblem or need help to be successful in	choose not to comply with
Student Name (please print legibly)	Student Signature	Date
Student Technology Agreement: I will abide by the QCUSD technology agree	ment given to me at the beginning of the s	school year.
Student Signature		
As a parent, you acknowledge the above	and also understand that your son or o	daughter needs your full
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through nutrition, rest, and emotional su film will be shown in class. All films show acknowledges your permission to show yo	ipport. Parents, please also note that t in are relevant to course content. Your our child films with ratings of "G" only.	ntenance of good health here may be a time when o signature here