This core science course is an introduction to the study of cells, cellular reproduction, inheritance and the gene, and the development of organisms. Among the topics are human genetics and genetic diseases, the causes and effects of genetic mutations, biotechnology and transgenic animals and plants, forensic DNA, stem cells and cloning, and human embryology.

Class Meeting: The class is completely online using the WSC Plato environment.

Phone and Voice Mail: 413-572-5291

E-Mail: Use email in course Plato website, not the WSC email.

Textbook: Customized book from *The Living World* by Johnson. 7th edition

Conduct of the Course: We will not meet face-to-face during this course. All communication will be conducted online. It is arranged by weeks. Each week has one or more topics (see the schedule of topics). Weeks begin on each Monday (except the first week) and end at midnight on the following Sunday. Content information is provided via the text, narrated PowerPoint presentations, tutorials, periodic podcasts and *Elluminate* sessions, and web links. Weekly requirements include reading the course content, participating in one or more discussion topics, usually doing a homework assignment, doing and reporting on activities, and a quiz on the week's material. Since this is a 4-credit course and is equivalent to a core lab course, the activity substitutes for the lab of the traditional course. The activities will vary in format throughout the semester, but all will require a report.
There will be no exams. You will be evaluated on your participation in discussion forums, conducting and reporting the results of various activities, quizzes and homework assignments. Details about each of these will be posted on each week’s Assignments and Activities page.

There are several ways by which we will communicate during the semester. For questions about course content, use the “Ask the Professor” forum which has a link on each week’s page. This way everyone can access the forum and learn for your questions. I will also be available for online office hour chats. You are not required to come to a chat session; I make it available for those who would like to use it. You may also use Who’s Online and email in the Plato course shell to contact me. Do not use the regular WSC email. In addition, some of the office hours will be used for Elluminate sessions which will be interactive. I will email you the web links for the sessions.

*Elluminate* is a program that allows 2 or more persons to view the same screen and files simultaneously. It also allows real time communication by chat or voice. These sessions can be recorded so if you can not be at the session, you can view and listen to it later. I will email the *Elluminate* code and password to you so you can log into the session.

There is also a Student Lounge discussion forum for you to communicate with each other, not with me.

The course is organized into weeks with specific topics and concepts to be covered. Our week will start on Monday except Week 1, so I will post the new content on Sunday evening. Each week will have a web page with links to the assignments, activities and discussions. Begin each week at the Weekly Assignments and Activities page (at the “Start Here” icon) for the instructions and background material for the week. I suggest printing this page for easy reference each week. Each Weekly Assignment and Activities page is divided into Introduction, Learning Objectives, Required Activities, and Additional References. Please note carefully the due dates and times for assignments. Assignments posted later than the due date will not receive full credit. Assignments turned in during week after the due date will be dropped one letter grade. Assignments later that a week will be dropped two letter grades.

*Homework and activities reports should be prepared as MS WORD .doc files and submitted as attached files to the appropriate web page, unless otherwise instructed.*

You will be expected to read information in the text, on the PowerPoint presentations and on the linked sites in order to answer questions posted in the Discussion forum each week. There will be one or two (usually) questions or statements that you need to respond to each week. Use the Discussion forum link on the “Getting Started Page” to learn about the discussion forum procedures and the grading rubric. You will make two responses in each discussion, one to
the question or topic and a second to a classmates post to the discussion. I will post general comments to the specific discussion forum topic. Please review my comments closely during the first several weeks. Your participation in the discussion is a large part of your grade.

You are expected to be able to use web browsers to access various sites and conduct activities on those sites. Several sites require that your browser be Java enabled and of course the speed of your processor and internet connection will influence the quality of your interactions with the web site. You are also expected to be able to download MS Excel files and conduct simple graphical and numerical analyses. I will post links to resources to help those who need it. Several activities require that you download Macromedia Projector files and complete a simulation activity. If you are unable to download this software, you can always visit the Biology Department Mac lab in Wilson 214 and conduct the simulations there.