BIOL 1951H, Honors Biology: Cellular Processes

Spring Semester 2012, Section A (CRN# 21349, 4 Credit hours)
Department of Biology, College of Arts & Science, Valdosta State University

Lecture (BC 1025): T & R 2:00 p.m. – 3:15 p.m.
Laboratory (BC 1046): W 2:00 p.m. - 3:50 p.m.

Instructor: Dr. Brian C. Ring
Office: BC 2092
Office hours: **T / R** 11:00 a.m. – 12:30 p.m.
Phone: 249-4841 (Dept. office 333-5759)
Email: bcring@valdosta.edu **(please use WebCT first)**

Pre-Requisites: None but reserved for students admitted to the Honors Program.

Course Description: An introduction to the fundamental principles of cell and molecular biology. Prokaryotic and eukaryotic development will focus on the relationship of structure and function. Cellular solutions to fundamental problems such as cell recognition, energy acquisition and conversion (metabolism), genetic transmission, and cellular reproduction will be discussed. Taught in an enriched, discussion, and project-oriented classroom environment.

Course Outcomes: Upon completion of this course the student should be able to:

1) Communicate and describe life at the cellular level with a historical and contemporary perspective on humanity both in scientific curiosity and health (**HP2, HP5, & GE4**);

2) Identify and discuss, among your peers, common methods and themes cells employ for motion, metabolism, gene regulation, reproduction and how multicellular life begins and maintains itself (**HP4 & GE4**);

3) Demonstrate scholarly research and presentation skills through primary literature searches, written summaries, and presentation of findings related to the field of cell biology (**HP1, HP2, HP5, GE4**);

4) Develop practical laboratory knowledge and skills by guided hands-on experimentation and independent scientific investigation using the scientific method, followed by quantitative analysis and written lab reports (**HP3, HP6, HP7, GE5 & GE7, CCD.1).**

These course outcomes support all of the VSU Honors Program Objectives and the University General Educational Outcomes # 4, 5 & 7 as listed in the VSU Undergraduate Catalogue (see below).

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lecture/discussions. The chapter summary questions are posted on the BlazeView Course Page. Chapter summaries may be collected at the beginning or end of a topic session. Quizzes are random and composed primarily of short answer.

One or more students will lead one lecture topic series (100 pts total) by **a)** serving as moderator(s) of the chapter summary topic (30 pts), **b)** completion of a written sub-topic search (40 pts), and **c)**

TENTATIVE LECTURE & LABORATORY OUTLINE:

Week:	Date:	Topics:	Chapter: