BIOL 1107 Laboratory, Sections D-E Spring Semester 2014

Laboratory BC 1083:

Section D, Wednesday 9:00 am-11:50 am Section E, Wednesday 1 pm-3:50 pm

Instructor: Dr. Cristina Calestani

Office: BC 2085 Phone: (229) 333-7175

F 1 1 1 4 6 11 4

Email: ccalestani@valdosta.edu

Office hours:

Tuesday and Thursday 3:30-5 pm

Or by appointment (please send an email to my valdosta.edu account with "appointment" in the

subject line).

Required Text

R.H. Goddard. 2011. Methods and Investigations in Basic Biology. Fifth Edition. Hayden-McNeil Publishing, Plymouth, MI.

ASSESSMENTS

Online Quizzes. The quizzes will be based on material from the previous lab and the upcoming lab.

A new timed quiz will be posted on Blazeview weekly, starting from January 23.

A new Quiz will be open at 9 am each Thursday and will be closed at 11:59 pm on the following Tuesday.

- The Instructor will communicate to the class any change to the quiz schedule.
- You will have 1 attempt. Each quiz will have multiple-choice questions with only one correct answer. The order of the multiple answers will be randomized for each student attempt, meaning that the list of the multiple answers might be in a different order for each student. After you select your quiz answer remember to click on SAVE and FINISH. Note that opening a quiz window without answering will count as one attempt and will receive a grade of zero.
- If you miss a quiz you must provide documented evidence (e.g. from doctor, police, etc.) that <u>circumstances</u> beyond your control prevented you from taking a quiz during the time it was open. Malfunction of your home computer is NOT an acceptable excuse. You can take the quizzes from one of the many computers available to students in campus. Failure to provide reasonable evidence will result in a grade of 0 for the quiz. Makeup quizzes will be administered at any time during the semester at the discretion of the instructor.

Lab Assignments. There will be two assignments in the format of laboratory report.

Assignment 1: Independent Microscopy Project

Assignment 2: Investigation of the effects of temperature and pH on enzyme activity

Each assignment is worth 50 points. Specific information for each assignment will be provided during the lab.

Lab Notebook. Students are required to keep a lab notebook in a ½" 3-ring binder. The lab notebook will be used during the weekly lab quiz, and will be turned-in the last day of lab to be graded. Your notebook grade will be based on completeness, accuracy, and order. More information can be found in the lab manual.

GRADES

Quizzes (12): 10 points each (120 points total) Lab Assignments (2): 50 points each (100 total)

Lab Notebook: 50 points

Total laboratory points: 270 *Extra-credits: 10 points max.*

Laboratory grade calculation: (Quizzes+ Assignments + Lab notebook + Extra-Credits)/270

Attendance Policy: Laboratory attendance is mandatory. Students who miss three labs, with or without a documented excuse, cannot receive a lab grade above a "D" (60%), and may get a failing grade for the course. Attendance will be recorded at the beginning of each lab (within the first 5 minutes). There will be a five points penalty for arriving later than 5 minutes. Students arriving more than 30 minutes late will be considered absent.

There are no make-ups for the laboratories.

If you miss a lab you must provide documented evidence (e.g. note from a doctor) that <u>circumstances beyond your control</u> prevented you from coming to the lab. It is the instructor's prerogative to accept the excuse or not.

Classroom Accommodations

Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in Farber Hall. For the VSU's Access Office contact information please see http://www.valdosta.edu/student/disability/

Behavior in the Classroom

It is assumed that all students will act in a mature manner in the classroom, showing consideration for their peers and the instructor. Any student who consistently distracts other students or the instructor will be removed from the course. **Cell phones must be turned off or set to silent mode in the classroom.**

Cheating or Plagiarism

Incidents of cheating or plagiarism will result in an automatic F for the course and referral to The Office of Student Conduct for disciplinary action. For VSU's Academic Integrity Code please see http://www.valdosta.edu/administration/student-affairs/student-conduct-office/
For VSU's Academic Honesty policies and procedure please see http://www.valdosta.edu/academics/academic-affairs/vp-office/academic-honesty-policies-and-procedures.php

Learning Support

☐ The Student Success Center: The Student Success Center (SSC) provides free peer tutoring in core
courses, the top four of which are math, writing, Spanish, and biology/chemistry. It also offers time
managment and study skills workshops as well as provides free professional academic advising and on-
campus job information in one location: Langdale Residence Hall. Help is available to all VSU students.
Call 333-7570 to make an appointment, or visit the website: http://www.valdosta.edu/academics/student-success-center/

□ **Odum Library** provides a variety of services to assist classroom instruction, including library instruction, course reserves, and interlibrary loan. Please see http://www.valdosta.edu/academics/library/ for further information.

Tentative Laboratory Schedule, BIOL 1107, section D-E Spring 2014

Date	Topic	Due Dates
Jan. 15	General Lab Introduction	
Jan. 22	Laboratory Safety	
	Exercise 1: "The Black Box" - Scientific Method	
Jan. 29	Exercise 2: Basic Light Microscope Operation and Microscope checkout:	
	Use of the Light Microscope	
Feb. 5	Exercise 3: Observation of living cells with Light Microscopy; Basic	
	cellular organization; Independent microscopy lab proposals discussed.	
Feb. 12	Exercise 5: Cellular Water Relations	
Feb. 19	Exercise 4: Independent Microscopy Projects; Project proposal lab; how to	
	collect useful data (Lab Assignment 1)	
Feb. 26	Exercise 4: Independent Microscopy Projects: Distribution of microscopic	
	flora and fauna; Data collection lab (Lab Assignment 1)	
March 5	Exercise 6 : Protein extraction from biological tissues and determination of	
	total protein, Spectrophotometry and Standard Curves	
March 12	Exercise 7: Enzymology Lab: basics of a-amylase activity;	Assignment 1 due by 5 pm
March 19	Spring Break	
Mar. 26	Exercise 8: Enzyme Regulation: "Investigation of the effects of temperature and pH on enzyme activity"	
April 2	Exercise 9: Photosynthesis	
Apr. 9	Exercise 11: Start: Isolation of plasmid DNA from <i>E.coli</i> and restriction	Assignment 2
	with MspA1I:	due by 5 pm
Apr. 16	Exercise 12: PCR-based VNTR Human DNA typing OR GMOs in food.	
Apr. 23	Exercise 14: Transformation of the pGLO plasmid into bacteria.	
Apr. 30	Analyze transformation experiment.	Turn-in
	Exercise 10: Mitosis and Meiosis	Notebooks