# 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

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### 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 guizzes 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-

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Lab Notebook. Students are required to keep a lab notebook in a "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.

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

Date	Topic	<b>Due Dates</b>
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 E.coli and restriction	Assignment 2
	with MspA11:	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