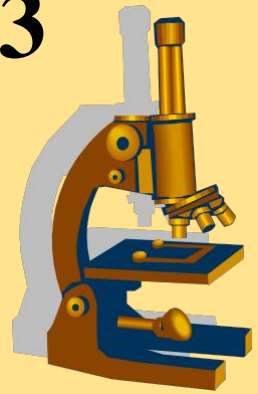


BIOL 1090

Department Wide Final

Exam Assessment

Spring Semester 2013



941 Students

38 Lecture Sections

**2 Full-time Faculty
Members**

17 Adjunct Faculty Members



Step Ahead.



Assessment Results listed by Course Objective

BIOL 1090 Departmental Final Exam Spring 2013			
Question#	Course Objective	Proficiency	St Deviation
1.0	Distinguish between a hypothesis and a theory	Average	Standard
2.0	Illustrate the difference between anecdotal evidence and credible evidence.	68.89%	0.11
3.0	List the commonalities shared by living organisms.	77.82%	0.16
4.0	State the four biological macromolecules and explain the function of each.	47.88%	0.18
5.0	Describe the basic concept of pH and the pH scale.	58.81%	0.21
6.0	Differentiate between the major cell components by explaining the function of	77.85%	0.17
7.0	Compare and contrast diffusion, osmosis, and active transport.	61.46%	0.13
8.0	Illustrate the role of enzymes in metabolism.	91.46%	0.11
9.0	Describe the basic steps of cellular respiration.	79.95%	0.17
10.0	Describe where cellular respiration occurs and explain the role of oxygen.	77.51%	0.19
11.0	Use the greenhouse effect to show the relationship between rising CO ₂ and	63.05%	0.12
12.0	Define a mutation and explain why mutations can result in genetic disease.	29.57%	0.29
13.0	Explain how mutations can lead to the formation of cancer cells.	59.49%	0.10
14.0	Describe mitotic cell division (mitosis) as the process that generates the vast	39.50%	0.19
15.0	Describe the cellular and chromosomal ramifications of mitosis and meiosis.	56.33%	0.16
16.0	Identify and explain the main processes that contribute to genetic diversity.	57.31%	0.14
17.0	Use examples to contrast genotype and phenotype.	75.71%	0.12
18.0	Define heritability.	69.69%	0.12
19.0	Define codominance and incomplete dominance.	50.03%	0.09
20.0	Define sex-linked traits and explain why recessive sex-linked traits	52.92%	0.09
21.0	Diagram the flow of information from DNA to protein.	70.76%	0.12
22.0	Define the term genetically modified organism, dihybrids.	51.43%	0.19
23.0	Define natural selection.	33.13%	0.24
24.0	Give examples of the five sources of evidence that support the theory of evolution.	81.19%	0.20
25.0	Illustrate the role of natural selection in the rise of antibiotic-resistant bacteria.	32.66%	0.22
26.0	Summarize the concept of human races and the effects of cultural influence.	74.74%	0.25
27.0	Describe in detail the biological classification of human beings.	82.22%	0.18
28.0	State the basic functions of the four different types of tissues, and name major	69.75%	0.16
29.0	Diagram the path of food as it passes through the digestive system	74.90%	0.20
30.0	Explain the important interaction between the digestive and circulatory systems for	67.77%	0.14
31.0	Describe the order, and basic structure and function of the respiratory tract	75.13%	0.19
32.0	Describe the structure and function of alveoli, including their relationship with	76.04%	0.16
33.0	Describe the basic structure and function of the heart.	75.21%	0.13
34.0	Describe the systemic circuit and pulmonary circuit of the cardiovascular system.	53.67%	0.12
35.0	Name the major arteries, and the body regions they supply:	82.41%	0.22
36.0	Describe the basic structure and function of the urinary system.	46.24%	0.26
37.0	Explain the difference between genetic and infectious disease.	72.10%	0.21
38.0	Name and define the components of the three lines of defense and illustrate the functions of each.	41.64%	0.23
39.0	Describe the basic structure and function of the endocrine system.	47.53%	0.13
40.0	Describe the basic structure and function of the musculoskeletal system	53.73%	0.20
41.0	Name the functions of the major axial muscles of the body.	26.95%	0.22
42.0	Name the functions of the major appendicular muscles of the upper limbs.	67.54%	0.23
43.0	Name the functions of the major appendicular muscles of the lower limbs.	86.39%	0.09
44.0	Locate the major bones of the body.	56.51%	0.13
45.0	Label a diagram of the male and female reproductive structures and describe the	74.37%	0.17
46.0	Summarize the key stages of development from zygote to	65.86%	0.14
47.0	Describe how neurotransmitters are the chemical signals that Cross the synaptic gap between neurons and their target cells.	68.56%	0.15
48.0	Describe the overall plan of the nervous system.	34.04%	0.20
49.0	Describe the basic functions of the lobes of the cerebral cortex, the thalamus and	46.71%	0.17
50.0	Describe the basic functions of the brainstem, the cerebellum and the spinal cord.	55.88%	0.09

