Biology 3201 June 2019 Public Exam Outcome Report

Units 1 - Maintaining Dynamic Equilibrium

3 - Genetic Continuity

2 - Reproduction and Development

4 - Evolution, Change and Diversity

Item	Curriculum Guide Page(s)	Outcome	Cognitive Level	Outcome Description
1	28	116-7	L1	Identify a part of the brain, given its function.
2	28	116-7	L2	Demonstrate an understanding of the sympathetic/parasympathetic nervous
	2 20			systems when given a specific situational response.
3	28	116-7	L2	Identify a part of the brain given its function and a diagram.
4	30	317-1	L1	Recall the events that occur as an impulse is transmitted along the length of a
•				neuron.
5	30	317-1	L2	Given a diagram of a neuron, identify the function of one of its parts.
6	42	317-1	L1	Identify a specific part of the ear, given its function.
7	32	317-1	L2	Distinguish between an inhibitory and an excitatory response.
8	44	317-1	L2	Given a diagram, identify which endocrine gland is responsible for a specific function.
9	40	317-1	L1	Identify a part of the eye, given a diagram and the function of one of its parts.
10	44	317-1	L3	Recognize the functions of the hormones released from the endocrine glands as
10				a part of the negative feedback loop.
11	34	317-4	L1	Identify a specific nervous system disorder, given its cause.
12	48, 50	317-4	L2	Identify a specific endocrine system disorder, given its symptoms.
13	46	314-3	L2	Identify the symptoms exhibited when an individual experiences a change in
13				specific hormone levels.
14	48	317-2	L2	Recognize the functions of the hormones released from the endocrine glands.
15	48	317-4	L1	Identify which solution was used to produce a certain test result.
10		212-6	LT	
16	48,68	317-2	L3	Demonstrate knowledge of the roles/functions of the female reproductive
10		313-4		system.

Item	Curriculum Guide Page(s)	Outcome	Cognitive Level	Outcome Description
17	(Unit 2) 58	313-2	L2	Recall the events that occur during the stages of mitosis/meiosis when given a diagram
18	58	313-2 213-3	L2	Given a diagram, identify the cell type and the stage of mitosis.
19	60	313-2	L1	Recall the stage of meiosis described by specific events.
20	60	313-2	L3	Determine the resulting DNA content during specific stages of meiosis.
21	62	116-3 213-7	L2	Given a diagram, recall the processes involved in stem cell collection.
22	64	116-7	L1	Recall the definition for a specific type of asexual reproduction.
23	68	313-3	L1	Demonstrate an understanding of spermatogenesis.
24	66	313-2	L2	Given the diagram of a flower, identify the function of one of its structures.
25	70	313-3	L1	Demonstrate an understanding of the parts/functions of the female reproductive system.
26	68	313-4	L1	Recall the functions of and interactions among hormones of the male reproductive system.
27	68	313-3	L3	Given diagrams, compare structure and function of the male and female reproductive systems.
28	72	313-4	L1	Identify the STI that produces a specific symptom.
29	70, 72	313-5	L2	Given the graph of a female reproductive hormone, interpret the graph and identify the events that occurred.
30	74	313-5 313-6	L2	Identify the cause of infertility given a specific scenario.
31	74	313-6	L1	Demonstrate an understanding of the technologies used for reproductive success after cancer treatment.
32	76	118-4	L1	Recall characteristics of various birth control methods.
33	78	313-4	L1	Identify the correct pathway a sperm must travel to successfully fertilize an egg.
34	78	313-4	L2	Demonstrate an understanding of the differences between fraternal and identical twins.
35	78	313-4	L2	Given a diagram, identify a stage of embryonic development.
36	78, 80	313-4	L3	Demonstrate an understanding of the functions of the primary membranes during embryonic development.
37	80	313-4	L2	Identify the hormone released and the reflex that occurs during lactation.

Item	Curriculum Guide Page(s)	Outcome	Cognitive Level	Outcome Description
38	80	116-2	L2	Demonstrate an understanding of the technologies used to monitor embryo development.
39	86	315-3	L1	Identify examples of genotype vs phenotype.
40	86	315-3	L3	Interpret patterns and trends in genetics using the product rule.
41	88	212-4	L1	Identify which of Mendel's laws represents a given description.
42	88	315-3	L1	Demonstrate an understanding of a dihybrid cross.
43	88	212-4	L2	Interpret patterns and trends in a monohybrid cross governed by multiple alleles.
44	90	214-5	L2	Interpret patterns and trends in a monohybrid cross.
45	88	212-4	L2	Interpret patterns and trends in a monohybrid cross.
46	96, 98	114-2 314-3	L2	Demonstrate an understanding of Chargaff's Rule.
47	94, 104	315-1	L1	Identify a disorder that is caused by sex-linked inheritance.
48	100	315-7	L2	Identify a mutation type when given a change in the mRNA sequence.
49	98	315-5	L3	Use a codon table to identify a DNA/amino acid sequence.
50	94	214-5	L2	Identify the parental genotypes when given the phenotypes of the offspring.
51	90	214-5	L1	Identify a specific inheritance pattern given a description.
52	94	315-1	L1	Recall the significance of a test cross.
53	98	314-3	L1	Recall the structure/ function of a RNA molecule.
54	96	114-2	L1	Identify the contributions of a scientist in the field of genetics.
55	98	314-3	L1	Recall the enzymatic functions during the four stages of DNA replication.
56	98	315-4	L1	Recall the events that occur during transcription and translation.
57	98	315-4	L2	Determine the DNA sequence from an unknown tRNA anticodon sequence.
58	100	315-7	L2	Identify a mutation type given an unseen example.
59	102	317-4 215-5	L2	Determine a chromosome mutation using a karyotype.
60	102	317-4 215-5	L2	Identify the function of specific enzymes during the DNA replication process.
61	102	315-6	L1	Identify a specific gene mutation given a description.

Item	Curriculum Guide Page(s)	Outcome	Cognitive Level	Outcome Description
		315-8		
62	104, 106	317-4	L3	Identify a genetic disorder that is represented from a pedigree given.
		214-5		
63	108	315-9	L1	Recall the function of a specific tool used in genetic engineering.
64	110	118-2	L1	Identify an example of a genetically modified food/organism.
65	108	315-9	L2	Analyze gel electrophoresis samples to identify similar samples.
66	112	118-2	L2	Demonstrate an understanding of the steps involved in reproductive cloning.
67	112	118-2	L2	Demonstrate an understanding of the purpose for therapeutic cloning.
68	108, 112	315-9	L3	Demonstrate an understanding of the tools and techniques used in genetic
00	100, 112	118-2		engineering process in the context of a GMO.
69	120	114-2	L2	Demonstrate an understanding of Lamarck's theory of inheritance of acquired
09	120	114-2		characteristics.
70	124	212-1	L2	Calculate the age of a fossil, given the half-life and fraction remaining.
71	118	316-3	L1	Recall the difference between artificial and natural selection.
72	118	115-7	L1	Identify terminology used in evolution theories.
73	128	316-3	L1	Recall the various methods of speciation.
74	122	114-2	L2	Demonstrate an understanding of particular evidence that supports the modern
14				theory of evolution.
75	126	316-3	L3	Demonstrate an understanding of conditions that have the potential to disrupt a
13				given Hardy-Weinberg equilibrium.
76	124	116-2	L2	Calculate the percentage of individuals in Hardy-Weinberg equilibrium that have
10				a particular trait.
77	126	316-3	L2	Given a specific example, identify the type of natural selection.
78	128	316-3	L1	Demonstrate an understanding of pre-zygotic and post-zygotic barriers.
79	128	316-3	L3	Demonstrate an understanding of the speciation process.
80	130	316-4	L1	Recall characteristics of various theories pertaining to the origin of life on Earth.