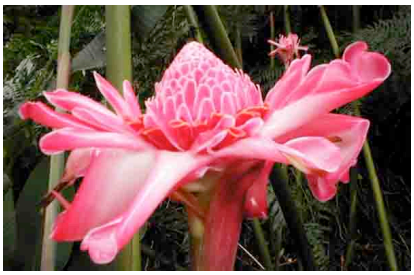
INTRODUCTORY BIOLOGY 100

WINTER 2016



Course description: This course will familiarize the student with the characteristics of life, basic biological principles, current biological technologies, and some ethical issues of biological knowledge.

TEXTS:

1. Biology Coloring Workbook (The Princeton Review) Edward Alcamo. 1998.
2. The Complete Book of Food Counts. 8th edition. Corinne Netzer. 2008.
3. Current Controversies in the Biological Sciences: Case Studies of Policy Challenges from New Technologies. Karen Grief and Jon Merz. 2007.
4. Evolution: A Very Short Introduction. Brian and Deborah Charlesworth. 2003.
5. A Field Guide to Germs. Wayne Biddle. 2002.
6. Biology 100 Lab Manual. Gordon Bielby.

RECOMMENDED: Colored pencils will be useful when using the Biology Coloring Workbook.

LAB

Your lab manual will be checked each week before you leave the lab. It is your responsibility to show me your lab book before you leave for the day. Each check is worth up to 10 points, with full credit given only for lab books that are completely filled out during lab time.

EXAMS

Lecture material, reading material as well as lab material will be on the exams. Your lowest exam score will be dropped. Exam dates are tentative, and may change as a result of 'snow days' or changes in how we move through the material. See Moodle and email updates for information between class meetings.

MAKE-UPS

Laboratory cannot be made-up. If you know you are going to miss a lab in advance, please try to make arrangements to come to another session. Contact me about arranging this. If you miss an exam for **any** reason then that is the exam score that will be dropped. A second missed exam will need to be made-up within one week, and you will only receive 85% of your score for a make-up exam.

POINTS

3 Unit Exams (100 pts each)	300
Review Day (25 points)	20
Lab Manual / Attendance (10pts each week)	130
Final Cumulative Exam	150
Various Assignments (points TBD)	

GRADING SCALE

93	4.0	73	2.0
87	3.5	67	1.5
83	3.0	60	1.0
78	2.5	< 60	0.0

CLASS SCHEDULE FOR BIOLOGY 100 WINTER 2016

Please bring the your lab manual and COLORING WORKBOOK to all class meetings.

PART I: THE CHARACTERISTICS OF LIFE

		LECTURES	LAB
JAN 16	UNIT 1	- WHAT IS LIFE? - CHEMISTRY BASICS	**INTRO LAB: Topic TBD**
JAN 23	UNIT 1	- BIOLOGICAL CELLS - DIET & NUTRITION	**LAB 1: CELLS** **LAB 2: NUTRITION** Bring Food Counts Book!
JAN 30	UNIT 1	- DNA - CELL DIVISION: Mitosis & Meiosis	**LAB 3: CELL REPRODUCTION**
FEB 6	UNIT 2	**EXAM #1** (UNIT 1) - EMBRYONIC DEVELOPMENT - TISSUES - ORGAN SYSTEMS	**LAB 4: DEVELOPMENT**
FEB 13	UNIT 2	- HEREDITY	**LAB 5: *LET'S MAKE A BABY!*** SEX & PUNNETT SQUARES
FEB 20	UNIT 2	- GENE EXPRESSION & EPIGENETICS	**LAB 6: *WHODUNNIT?*** DNA FINGERPRINTING
FEB 27	UNIT 3	**EXAM #2** (UNIT 2) - EVOLUTION	**LAB 7: EVOLUTION**

PART II. THE DIVERSITY OF LIFE

MRCH 5	UNIT 3	- CLASSIFICATION - VIRUSES	**LAB 8: CLASSIFICATION**
SPRING BREAK 3/7 – 3/13		**SPRING BREAK 3/7 – 3/13**	**SPRING BREAK 3/7 – 3/13**
MRCH 19	UNIT 3	- BACTERIA	**LAB 9: BACTERIA**

MRCH 26	UNIT 4	**EXAM #3** (UNIT 3) - PROTISTANS	**LAB 10: PROTISTANS**
APRIL 2	UNIT 4	- PLANTS	**LAB 11: PLANTS**
APRIL 9	UNIT 4	- ANIMALS	**LAB 12: ANIMALS**
APRIL 16	UNIT 4	- ANIMAL BEHAVIOR	**LAB 13: AFRICAN CICHLID DOMINANCE HIERARCHY**
APRIL 23		REVIEW EXERCISES	Required class review worth 20pts
APRIL 30		**FINAL EXAM:** Cumulative!	**NO LAB**