

Schedule

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Date	Week	Scenario (for readings see http://bioweb-cfs.cas.okstate.edu/info/requiredreadings)	Lab Topic
Aug 15	1	1. Psychics and Scientists: A series of short scenarios will center on measurement of psychic phenomena, a faculty research question, a breath holding experiment, analysis of class score data, and what is a theory?	Introduction to Lab
Aug 22	M	Last day to add and last day to drop with no grade	
Aug 22	2	2. Surviving Fire and Ice: The scenario focuses on surviving in desert and tundra and adaptations for thermoregulation and water retention.	Investigation 1: Research in the Institute of Comparative Respiratory Research
Aug 29	3	3. Out of the Rain Forest: An aboriginal fishing expedition in the rain forest is explored in terms of the action of a toxin produced by plants. Pesticides, coevolution, cell membrane function and cell respiration will be discussed.	Investigation 1: Continued research
Sept 5	M	University Holiday (Labor Day) – No Class	
Sept 6/7	4	Out of the Rain Forest continued.	Investigation 1: Final analysis & Submission
Sept. 12	M	EXAM #1 at 5:30 pm in [ROOM]–Topics for exams will be those from Scenarios 1-3	
Sept 12	5	4. Chemical Defenses: A Nigerian child eats a poisonous bean, which requires extraordinary treatment by the local physician, framing investigation of cell membrane structure, secretion, intercellular communication, and neurons.	Investigation 2: Research in the Acme Brewing and Baking Company
Sept 19	6	5. Marooned in the Galapagos: This trip raises questions about what makes a species or organism successful. Attention to the physical character of these desert islands and animals living there highlights natural selection in action.	Investigation 2: Continued research
Sept 26	7	6. Rainbow Connection: A scuba diving botanist is sent by the Smithsonian to collect algae. Blood is spilled and the biological uses of colored light, including photosynthesis, are explored.	Investigation 2: Final analysis & Submission
Oct 3	8	Rainbow Connection - continued.	Investigation 3: Research in the Biofuels Research and Aquatic Quality Collaborative - Water Quality Division Focus
Oct 10	M	EXAM #2 at 5:30 pm. in [ROOM]- Topics for exams will be those from Scenarios 1-6	
Oct 10	9	7. Emerging Diseases: On the Amazon we meet the Yanomami amidst a breaking TB epidemic, raising the roles of symbiosis, population dynamics and evolution in development of epidemics.	No Lab
Oct 14	F	University Holiday (Fall Break) – No Class	
Oct 17	10	Emerging Diseases continued	Investigation 3: Continued research
Oct 24	11	8. Family Reunion: A family reunion opens the door to talk about cancer, DNA, protein synthesis, genetically determined diseases and biotechnology.	Investigation 3: Final analysis & Submission
Oct 31	12	Family Reunion - continued.	Investigation 4: Research in the Center for the Study of Sexual Selection in Fishes
Nov 4	F	Last day to drop	
Nov 7	13	9. Hogs & Chickens: Statistics about concentrated animal feeding operations raise questions about nutrients in biogeochemical cycles, the effects of livestock and people on aquatic systems.	Investigation 4: Continued research
Nov 14	M	EXAM #3 at 5:30 pm in [ROOM]- Topics for exams will be those from Scenarios 1-8	
Nov 14	14	Hogs & Chickens Continued	Investigation 4: Final analysis & Submission
Nov 21	15	10. Why We Care about Fat: our contemporary preoccupation with fat sets the scene for a discussion of fat metabolism, its genetic, nervous and hormonal control, and behavioral implications.	No Lab
Nov 23-25	W-F	University Holiday (Thanksgiving Break) – No Class	
Nov 28	16	Why We Care about Fat continued.	Laboratory Final
Dec 8	Thur	FINAL EXAM at 4:00 – 5:50 pm in [ROOM] Topics for exams will be those from All Scenarios	Note the Exam time!!!