

SUMMER AP BIOLOGY INSTITUTE 2008

AP Coordinator:

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Instructors:

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This institute is designed for teachers with no experience teaching Advanced Placement Biology. During the institute, we will emphasize the laboratory component of the AP Biology curriculum with versions of all 12 labs completed by the institute participants. Alternatives to the laboratory exercises will be discussed as well as ways to modify the exercises to fit a variety of class schedules. Most of the learning will be done interactively, with less of an emphasis on lecture format. We will also focus on the AP exam and spend some time on curriculum issues.

Grading:

Grades will be based on 3 criteria: attendance/participation, quiz questions authored by participants, and performance on quizzes.

Q & Q (Quizzes and Questions):

Quizzes will take up the first 30 minutes of each day beginning Tuesday AM and will cover all labs **completed** the previous day. The quiz for Friday's material will be held Friday afternoon prior to completing evaluation forms.

Questions will be turned in each morning prior to taking the quiz. Questions for Friday's labs will be turned in prior to taking the quiz that afternoon.

Evaluations:

The last thing to do at the institute is to fill out evaluations. Please be thinking during the course about which things were helpful/unhelpful so that you can give feedback.

Syllabus:

Monday:

- Introduction, discussion of syllabus, AP Biology course format, AP grading procedures, general questions.
- Practice Test (to be graded on your own for personal benefit)
- Introduction to Fastplants, planting Fastplants
- Lunch
- Lab #1 – Diffusion and Osmosis
- Lab 6, – prepare plates
- Lab #11 – Animal Behavior

Tuesday:

- Turn in questions (labs 1, 11)/take Quiz #1
- Lab #2 – Enzyme Catalysis (traditional, disc, Vernier)
- Lunch
- Lab #3 – Mitosis and Meiosis
- Lab #4 – Plant Pigments and Photosynthesis

Wednesday:

- Turn in questions(labs 2-4)/take Quiz #2
- Lab #6A – Molecular Biology “Transformation” – Part 1
- Lab#7 – Genetics of Organisms – Fastplants, Drosophila CDs, etc.
- Lunch
- Lab #5 – Cell Respiration

Thursday:

- Turn in questions(labs 5,7,8)/take Quiz #3
- Lab #6B – Molecular Biology “DNA Fingerprinting”
- Lunch
- Lab #6A – Molecular Biology “Transformation” – Part 2
- Lab #10 – Physiology of the Circulatory System
- Lab #12 – Dissolved Oxygen and Aquatic Primary Productivity – Part 1

Friday:

- Turn in questions (labs 6B, 10)/take Quiz #4
- Lab #6A – Molecular Biology “Transformation” – Part 3
- Lab #12 – Dissolved Oxygen and Aquatic Primary Productivity – Part 2
- Lunch
- Lab #9 – Transpiration
- Lab #8 – Population Genetics and Evolution
- Turn in questions(labs 6A, 9,12)/take Quiz #5
- Fill out evaluations