

BIOLOGY 412H  
Honors Lab Final Examination  
Prof. John Burger

### Honors Laboratory

Your final exam will be a review by the class of what you have learned in lab, with an emphasis on a coherent and integrated overview of specific concepts across the kingdoms and phyla. The class can present the material in any format or style that you think will make it memorable and riveting. Plan the content in terms of presenting what you think a scientifically literate person should know. Your presentation will include all the kingdoms and phyla studied this semester in lab. The exam is scheduled for the last regularly scheduled lab period, May 5, but it can also be scheduled for any time prior to the beginning of final exams, including the reading days.

You will have as much time as is required for your presentation. One half hour must be reserved at the end for questions/comments. It is entirely up to you how to organize yourselves; you can work in one large group or divide into smaller groups. However, even if you work in smaller groups, the final presentation should be unified and integrated so that the major evolutionary trends emphasized in lab are presented, and, at the end of the presentation, there is a clear picture of the origin, evolution and diversification of life on earth.

We will provide any equipment (video, recording, materials) you need, but plan ahead so that you are not requesting them at the last minute. The April 15 and April 23 labs will be an opportunity for you to use some of the lab time for a group meeting and for planning. Your instructors will be available during the lab period for consultation. Feel free to call on them for advice or information. We also can discuss as a group possible strategies.

You will be graded not only on how well you cover the lab review, but also on how coherent and unified the presentation is. We do not want to see each of you getting up and giving a five minute summary of some small part of the semester; you are presenting as a class, and thus must work together as a group to develop the presentation. If you decide to divide into smaller groups, you must still make sure the entire presentation "hangs together" and each group's contribution is part of the whole. You do not all have to do the same thing; some of you may present information; others may do research, coordinate presentations, or develop materials to be used in presentations.

You must know and have practiced whatever you are going to say and do well enough that extensive notes are not needed; you will lose points for reading material from a prepared text. Part of your grade will be based on how smoothly and professionally you present the material.

You will be graded as a class, unless you request, with good reasoning, otherwise. Also, if the majority of you present evidence that one or more of the group have not adequately participated in the planning and development of the presentation. You can vote to "exclude" them, and they will be given a rigorous lab final exam separately.

Finally, the whole point of this is to provide you an opportunity to have fun with the material and to bring together for the entire class the major concepts learned during the course of the semester. Let your imaginations go and try to come up with not only an informative and entertaining presentation, but one that it is fun for you to do. Be creative and make this a memorable experience.

#### Grade Distribution:

50%= how well the important material from this semester's lab is organized, integrated, and presented.

15% = the quality of the presentation. Have you worked on your presentation enough to present it smoothly and confidently, without reading it!

15% = how well everyone's contribution enhances and meshes with the whole.

20% = the originality, cleverness, creativeness of how you decide to present the material, i.e. the format and design of the presentation.

**FINAL REMINDER:** This is not to be a summary of every detail covered this semester. You need to extract the important concepts, think of good specific examples to illustrate the important concepts, and integrate the concepts. Use the questions for thought to help organize major concepts. As you are planning, think about what a scientifically literate person should know about the material we covered this semester for understanding and evaluating issues of importance to human society and policy decisions dealing with these issues.