Biology/Geology 350: Invertebrate Paleontology Spring, 2000

TEST PROCEDURES AND RULES

Nature of the Exams

The syllabus states that exams will be essay, but I am changing that here to tests that are a *mix* of *objective computer graded questions*, and *essay questions*. I am doing this in part because most of the people in the class are not familiar with my expectations for essay tests, and I do not want anyone to be at a great disadvantage.

When I ask **ESSAY QUESTIONS** I expect text book answers, that is, answers that are so well organized, thorough, complete, quintessential, and definitive, . . . that they could be published. Rules for the essay questions are below.

The **OBJECTIVE, COMPUTER GRADED** portion of the test consists of true/false and multiple choice questions. This is the first time I have done objective testing in this class, so I do not have previous examples to show you. However, I can show you a test from another class (GenSci 102) that covers, in part, the same material as the beginning part of this class. The organization and format of your objective tests will be the same as the sample.

Procedures For All Exams

All the lecture exams are take home, and must be taken according to the *HONOR CODE* of the University, and the honor that must exist among the community of scientists. Specific procedures include:

- □ These procedures and conditions apply to all tests, lecture and lab.
- ☐ You will not write answers to all the essay questions but must be prepared to answer any of them. Indeed, you may write answers to only one or two of them.
- □ On the designated test days you may take the test any time you find convenient, but must comply with the following:
 - ✓ You may NOT peek at or open the test until right at the moment you are ready to take the test.
 - ✓ You **must** sit and work alone while taking the test.
 - ✓ You **must** take the whole test in one sitting, pit stops allowed.
 - ✓ When you sit down to take the test you may have with you **only** the following:
 - " A clean copy of the essay questions (i.e. with no hand written notes).
 - " Paper to write on.
 - " Any writing instruments, rulers, colored pencils, etc. you need to write your answers.
 - " Any drawings or other handouts specifically allowed by a question.
 - " One (and only one for all essay questions) 3 x 5 (inch!) index card containing outlines of your answers.

This is one card for all questions, not one for each question. There are to be no drawings or figures on these cards, nor prose statements. These cards are to be turned in with your tests.

- " Any refreshments required for the duration.
- □ Write your name on the back, bottom of the last page of your essay answers. I want to grade these anonymously as much as possible to insure fairness.
- Once you have taken the test you are <u>expressly forbidden</u> to talk about the test in any way, shape, or form with anyone, except me, until <u>everyone</u> has finished taking the test.

Preparing For Essay Questions

Our models in science, as well as in everything else, are of two kinds: <u>verbal</u> (written) which is essentially left brained activity, and <u>visual</u> (e.g., drawings, charts, tables, graphs, etc.) which are essentially right brained. Learning how to critically and unambiguously express yourself both verbally and visually is important, not only to formalize the models (i.e., your sensory data) for yourself, but also because other people will use your models to help build their models.

Therefore, when I am reading and grading your answers there are some specific things I look for, or that impress me. Keeping these in mind while preparing answers might help. Leaving one out when both are called for, or even doing one superbly well but the other poorly, will result in a low grade, perhaps even a lower grade than you think fair, but I will insist that you struggle and learn to express yourself well, verbally and visually. If you need help, or have questions, doubts, or problems, I will do whatever I can to aid you,...but the responsibility is ultimately yours.

<u>Illustrations</u>

- © Being able to visually express yourself is an important scientific technique...use illustrations anywhere they seem appropriate. If in doubt, do the drawing.
- © I like illustrations that are reasonably large, clear, fully labeled and completely unambiguous (unclear labels should be described as well as named). Illustrations must be realistic.
- Prepare ahead of time, and take time on the test to do a good job. A poor illustration is worse than none.
- **Answers** which need illustrations but which have none cannot receive a grade higher than a "**D**" regardless of how well written they are.
- **Answers** with illustrations which are unrealistic, sloppily done, and/or poorly labeled cannot receive a grade higher than a "**B**-" regardless of how well written they are.
- **Answers** with excellent illustrations (all present, neat, accurate, appropriate, reasonably sized, fully labeled) <u>can</u> receive an "**A**" but only if the written portion is also excellent.

Written Answers

- © The written questions are sometimes minimally stated. You are expected to fill out the details and tender a well rounded, complete exploration of the subject at hand.
- ◎ I like written answers that are so logical, thorough, well organized, unambiguous and accurate that even someone who knows little about the subject could follow it.
- © I am impressed by legibility in writing, neatness, and a sense of order.
- A's go to those questions which are not only accurate but complete, excellently organized and understandable, i.e., textbook answers. I read them as if I knew nothing about the subject but wanted to learn. When I read I specifically look both for factual content, but also for the overall quality of written presentation.
- Your written answers should be self sufficient but when illustrations are also used they should integrate into your discussions, i.e., specific references to Fig. 1, Figure below, or what ever.
- The simpler, shorter, or more specific the questions, the more nitpicking I become while grading, i.e., little errors will carry much weight.

Working Together To Prepare Essay Answers

I have mixed feelings about people working together to **prepare** essay exam answers. There are many good things to be gained if it is done right, i.e., each person does all their own reading and outlining of the answer, and then small groups get together to insure that they have covered all the relevant facts, that there are no errors in your facts or interpretations, and that you fully understand the questions and answers.

At the other extreme is letting someone else do all the reading and research, and you just memorizing <u>their</u> answer; that gets you through the test but you have not learned or gained much.

Personally, I don't know how much I would trust information which has come 4th or 5th hand, i.e., technical article, interpreted and summarized by a textbook author, blended together with readings from several sources on the same subject by me for lecture, and then reinterpreted by a non-expert (i.e., your fellow student who has prepared <u>your</u> answer) before you, another non-expert, finally reinterprets it again without the original sources to give it to me. I always like to get as close to the original source, or as close to an expert as I can, and then test my ideas out with other people.

So, do your own work, . . . but you may work together to prepare essay answers.