

Geobotany Portfolio Requirements

This portfolio is intended to help you assess your understanding of the course material. It is an opportunity to reflect upon what you are learning and analyze the impact of this knowledge upon previously acquired concepts and opinions about geologic and biologic content and the scientific process. It is also meant to encourage you to think about learning strategies that are effective for you and how you might incorporate your newfound knowledge and skills into your teaching. The completed portfolio should provide you with a permanent, meaningful record of your experience in this course.

I. Course Notes

You will take notes in your journal/field notebook to record new information as well as to make sense of your ideas and observations. This writing is a *main event* in the learning process used in this course. The evolution of your learning is recorded in your historical diary. It contains new information and ideas, data you collect, what you believed, why you thought it reasonable, ideas you abandon, and why these ideas are left behind. Next year, you should be able to pick up your notes, remember what you did, and get a good sense of course content, discussions, and activities.

II. Daily Reflective Writing

This assignment is extremely important; it helps your instructor evaluate your needs in this course, may be used to make mid-course corrections, and will provide important information for your final paper. The following section is the assignment; you will get a copy to tape into your journal.

End of the Day Reflective Writing

At the end of each day, please take a few minutes and reflect on the activities of the day and your comfort-level with them. Please write neatly and clearly delineate your course/field notes from your daily reflective writing in your journal/field notebook, perhaps by writing in different colored ink.

- Describe the main points you learned today providing specific examples. Consider making a visual illustration of the content you learned today, such as a flow chart or concept map.
- Describe if what you learned today addressed any previous misconceptions that you held about the content.
- Write any questions you have at the end of the day.
- Describe those activities you found most and least effective in terms of your learning of the course material and why.
- When did you feel uncomfortable and/or unprepared? Why?
- Brainstorm and record how you might use or modify today's content or activities for your students.

Journal Evaluation (to include course notes/field notes and daily reflective writing)

This qualitative evaluation of your journal will be based on:

- *completeness* – whether you have done the work and
- *conscientiousness* – whether you have demonstrated care, seriousness, and an investment of time as you put down your own ideas and thoughts

III. Final Essay (points in parentheses are the maximum for each category)

This end-of-the-course essay will require your review of the facts, concepts, and skills stressed in the course. Your journal, which includes class and field notes as well as daily reflective writing assignments, will be the most important resource in writing this paper. You will want to show what you know, how that knowledge affects your understanding of the specific course material and science in general, and how you plan to incorporate this new knowledge into your teaching.

Format (10 points): The essay should be around 10 pages long, typed, and double-spaced using 12-point Times with one-inch margins. We are more interested in a complete essay than one that is exactly 10 pages long.

Content (30 points): The content of the essay should focus on 1) new content and old misconceptions, 2) activities that were particularly effective for you as a learner, and 3) how skills acquired or honed during this course have affected your thought processes.

- **Content and misconceptions:** This section summarizes what you learned in this course and how your views of the topic have changed. Please comment on how this course has increased your awareness and the personal relevance of geology or biology or science in general.
- **Effective Activities:** Provide specific examples of how the activities in this course have increased your knowledge of the subject area or the process of science. Describe the activities that were particularly effective for you as a learner and why.
- **New skills:** Describe how your new and/or improved skills have affected your thinking and your ability to communicate scientific information effectively.

Classroom Applications (20 points): This section should describe how the content and skills you've acquired in this course will affect your teaching of the course-specific content or science in general.

Portfolio Assignment Evaluation (10 points): Please provide a constructive evaluation of this portfolio assignment and suggestions for improvement. Would you consider using or have you used this type of assessment? If so, why?

Writing Quality (15 points): We are looking for well-organized, factually accurate essays that are interesting to read and have a minimum of spelling or grammatical errors.

New Mexico Science Standards (15 points): List science standards addressed during this course and describe how they were addressed. Use the grades 5-8 set of standards if you teach middle school and the grades 9-12 standards if you teach high school. This section is best handled as an appendix (in addition to the 7-10 pages of text). You can download the science standards at <http://www.nmlites.org/standards/science/index.html>