OVERVIEW

A significant part of the Materials Science and Solid State Chemistry course is the development of skills and attitudes that help you attain success in open-ended, project-based learning experiences. The Project 3 experience you just completed was designed in part to provide you with a self-directed learning experience with minimal instructor constraints.

To emphasize the importance of this aspect of the course, 10 percent of your grade comes from assessment of your competency in life-long learning skills that may have developed as part of your self-directed experiences in materials science. One of the course learning objectives is aimed directly at life-long learning skill building. This learning objective appears in the syllabus as follows:

Demonstrate a capacity for self-directed learning, including goal-setting and selection of learning strategies, time and effort management, motivation management, resource discovery, and self-reflection and self-assessment (Lifelong Learning).

LLL ASSIGNMENT

This assignment has two components: an online survey, and a written reflection. Please complete these by midnight on Tuesday, May 05. Submit your LLL written reflection in pdf format to Jon via email. Please include your first and last name in the filename. Thanks!

1. Survey

Please complete this online survey:
http://www.surveymonkey.com/s.aspx?sm=xGBCucNiMTsbrROOzrS1Aw_3d_3d.

This is the same self-directed learning self-rating scale that you completed at the beginning of the semester. It takes about 15 minutes to complete.

2. Written Reflection

I would very much like each of you to provide some written comments on the role this course has played in your development of life-long learning skills. Please provide a one-page maximum reflection about your self-directed learning engagement and development this semester. Some aspects of the course experience that you may consider reflecting upon include the following:

- Personal attributes and social interactions: This relates to your learning style, interactions with your peers and instructors, perseverance, motivation, interest, time and effort management skills, relating learning to your values or personal goals, etc.

- Cognitive and metacognitive development: You were asked to design, initiate, and manage a relatively large project in this part of the course. You were given control over your project content and much of your learning process. You diagnosed issues, you identified learning needs, you established goals, and you planned, monitored, and modified learning strategies. You may have synthesized different concepts in order to overcome or avoid problems. You likely reflected on your experiences and adjusted your thinking, behaviors, or processes in response to your self-evaluations.

- Identification, use, and evaluation of information resources and tools: For our projects, you needed to locate relevant information sources, assess the quality and relevance of the information, and demonstrate the ability to work with this information by contextualizing it and adding your own interpretation. You also determined effective ways to communicate your information resources with your instructors and peers. In addition, you selected tools (equipment, software, etc.) that were appropriate for your project goals. In some cases, you may have taught yourself how to use new tools or techniques.

Have you learned anything about your learning style or learning needs through this course experience? In what ways do you feel effective or successful as a self-directed learner? In what ways could you improve your self-directed learning approaches, skills, behaviors, or attitudes? Please comment. Thanks!