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# materials science & solid state chemistry

## end-of-term self-reflection

### INTRODUCTION

As you have probably noticed, self-directed learning is a big part of this course. Indeed, one of our course learning objectives is aimed directly at life-long learning skill building: *Demonstrate a capacity for self-directed learning, including goal-setting and selection of learning strategies, time and effort management, personal motivation, resource discovery, and self-reflection and self-assessment.*

To support this goal, I attempted to design the projects with room for you to explore and take control of your learning, within certain defined constraints. In addition, most of you specified personal learning goals at the start of the term – things that you wanted to get out of the experience.

For this assignment, I'd like you to take time to reflecting on your learning experience in matsci, and record some of your thoughts in writing. I am particularly interested in how you may have progressed as a self-directed learner, and how the course may have contributed toward your progress.

### PART 1: WRITTEN REFLECTION (REQUIRED)

Please provide a (one-page maximum) written reflection on your experiences thus far in the course. You are free to write about whatever you like, but some aspects of the course experience that you may consider reflecting upon include:

- *Your personal learning goals.* Did you make progress toward your goals? Did your goals change? How did you evaluate progress toward your goals?
- *Your attitudes, motivations, and behaviors:* What did you learn about your personal beliefs about or attitudes toward learning? What aspects of learning did you find intrinsically motivating, or personally relevant or valuable? What strategies did you use to maintain motivation and interest? How well did you manage your time and effort?
- *Your interactions with others:* How did your teaming interactions affect your engagement in the course, or your learning? Did your instructor interactions have any effects on your learning approaches or outcomes? Did you gain any new insights or skills with regard to interactions with others?

- *Your thinking, and your thinking about your thinking (cognitive and metacognitive skills):* Did you gain any insights into your own learning processes? Did you build skills in setting goals, selecting learning strategies, finding and using resources, diagnosing problems, monitoring and adapting your approaches, or self-evaluating outcomes?

**IMPORTANT: This is your reflection, so please make it work for you. Comment only on the things you feel are relevant to your experience.**

I'm thinking the length of this assignment will be about a page, but please don't get too hung up on a specific length. I won't be grading your self-reflection in the traditional sense – you'll get full credit if you submit a thoughtful written reflection. I just want to learn how this course is contributing (or not) toward your development. Send your reflection as a word document, pdf, or google document (via web link). Please email your reflection to me by **midnight on Tuesday, May 05.**

### PART 2: YOUR LETTER GRADE (OPTIONAL)

Gaining skills in self-evaluation is a huge part of lifelong learning. You just completed a written reflection, as Part 1 of this assignment. So, in the spirit of lifelong growth and educational experimentation, let's take things a step further and give this self-evaluation thing a try! **This part of the assignment is optional.**

As a reminder, the syllabus states that your grade for the course is based on the following competencies:

Competency	Percentage of Grade	Level of Achievement
Qualitative Analysis	30	Intermediate
Communication	22	Intermediate
Quantitative Analysis	18	Intermediate
Diagnosis/Experimental Design	10	Beginning
Teamwork	10	Intermediate
Lifelong Learning	10	Intermediate

Think about all that you've done this semester, both individually and as a member of a project team. Think about your learning goals and processes, and the products you delivered week-to-week and at the end of your projects. Consider the informal feedback you received from me in class, and the formal competency feedback on the exams and the project deliverables. Think about the input or feedback you received from others (Matt Neal, the NINJAs, your peers, etc.).

Once you've had sufficient time to reflect, decide what all of this means in terms of a letter grade. Assign yourself a letter grade for the materials science course, and provide some supporting rationale for your assigned grade.

You are welcome to discuss your grade with me at any time before the end of the finals period (Friday, May 8) – just let me know if you would like to meet. I reserve the right to engage you in a conversation about your course grade, if I need to gain a better understanding of the rationale you provided.

Thanks for a great semester, and have a wonderful summer!

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