

HOMework 1.



PROJECT WORK

DUE DATE: Proposal due Wednesday, September 10, in class

This week, you will begin your materials research and laboratory experimentation. You'll select a consumer product, explore the product's materials and performance requirements, and start to think about the ways in which the material structure, composition, and properties relate to your product's purpose and impacts. The big goals for the first week of the project are to establish some goals for yourself and your team, develop experimental strategies that will help you attain your goals (and that are reasonable in scope), and identify some information sources to support your work. You'll also need to get to know your project team partners, and begin to figure out how you all will communicate with each other, plan schedules, use meeting times, etc.

READING

DUE DATE: Wednesday, September 10, start of class

For this week's reading assignment, I'd like you to skim your entire textbook in one hour or less. That's right – skim your *entire textbook* in an hour or less. Your textbook is a tool, so let's take a little time to get a feel for it. The goal is to quickly identify sections that might be useful in your project work. As such, you should skim your book after your team has had some time to select a modern consumer product to investigate, and after your team has had some time to discuss your project plan.

Don't get bogged down in details, unless you see something interesting and you can't help yourself. Move quickly, but with an eye toward things that are relevant to your project work. If you see a section of the book that you're fairly confident is **highly relevant** to your project, mark it with a warm colored Post-it Note (e.g., red, orange, yellow). If you see a section that you think **might** be relevant to your project, mark it with a cool colored Post-it Note (e.g., blue, green). Jot down any new ideas or questions that arise as you flip through your book.

SET YOUR OWN GOALS ACTIVITY (S-YOGA)

DUE DATE: Friday, September 12, 6 pm

One of the goals of this course is for you to further develop your self-directed learning skills. For each course project, I will ask you to set goals, identify learning strategies, manage your time and effort, etc. In this assignment, you will take the concept of student self-direction one huge step further, by setting your own learning goals for the entire course.

Read over the course syllabus and project one overview, and think about how the course is designed. Think about what you want to accomplish this term in the project-based materials science course. By Friday, September 12 at 6 pm, please submit an email to me with "personal goals" as the subject line. In this email, provide a statement or statements of your **learning goal(s)** in this course. Remember that these are *your* goals, and as such could be just about anything that is connected in some way to what we're doing in this class. You'll have a chance to reconsider and modify these goals as we progress through the course, but give it your best shot now. What do you want to learn? What do you want to improve about yourself – master some skills, gain some new knowledge, become more aware in some area, develop a new identity or sense of competency? These are *your* personal goals, not mine or anyone else's, so make them work for you.

Next, outline some **strategies** that you make take to achieve your goals. What specific things will you do? For example, if you want to develop better teaming skills, what actions can you take, or how may you adjust the ways you interact with your teammates? For this assignment you should write at least a couple sentences for each of your three goals.

This submission doesn't need to be too formal, but it should be clear enough for me to understand, and for you to revisit later in the semester. Give it some thought, and help me make the class work for you!