Hello Future FIG Student!

Welcome to the Science of Design FIG! We hope you are enjoying your summer and spending the time relaxing before school begins in September 😊 Hopefully, you are thrilled to begin your journey at the University of Oregon! Here on campus, the activities, clubs, and sports you can get involved in are limitless. The connections you can make with faculty and other adults are empowering, the relationships you will make with peers in your classes and in this FIG might be everlasting, and the opportunity to learn vast amounts of information will set you up for a bright future. With that said, we are excited to welcome you to the University of Oregon!

First, I’ll tell you a bit about myself. My name is Carly Celebrezze and I am your FIG Assistant for the Science of Design FIG. I am from Moscow, Idaho, home of the University of Idaho, and a town of about 20,000 people. I am a senior at the University of Oregon and am majoring in human physiology and minoring in Spanish. I am working to build a competitive application for medical school, where I can then excel to become a pediatric surgeon. As an involved student, I spend many hours weekly in the Cardiopulmonary and Respiratory Physiology Laboratory on campus. Furthermore, I have volunteered in the Pediatric, Post-Operation, and Emergency Room departments of the local hospitals and taught Religious Education to second graders. I have also served as a participant in two Alternative Break trips. I traveled to the Dominican Republic to provide health care to the less fortunate and to Peru to build toilets for families lacking them. This past spring, I studied abroad in Argentina, improving in the Spanish language and learning a lot about the Argentine culture.

Now that you know about me, here is some information about your College Connections professors. With their vast background in the chemistry and product design fields, they will be a great resource for you as you enter the academically stimulating classes involved in both fields.

Julie is an outdoor enthusiast (running, hiking, skiing) and is passionate about giving future citizens the tools and experience to design a more sustainable future. Her work focuses on developing courses that connect green chemistry and product design, communication and business. Green chemistry is the redesign of chemical transformations and processes to reduce or eliminate the use of materials that are hazardous to human health and the environment. Integrating different types of design (e.g., molecular, product, communications, etc.) gives us an unprecedented opportunity for sustainable innovation.

Kiersten has been a design engineer for the coolest companies she could find, including Ford, IDEO, Walt Disney Imagineering, the Long Now Foundation, and her own company Parapluie. Now, the coolest company she can find is the University of Oregon, where she particularly enjoys teaching about the intersection of materials, manufacturing, and design. She is now working on designing the most sustainable drinking cups possible as well as an indoor/outdoor chair for Battery Park at the southern tip of the island of Manhattan.
The Science of Design FIG connects the chemistry course and the product design introductory course in the typical manner: through athletic shoes! We will be examining, discussing, creating, analyzing and presenting the materials that are used for performance footwear. There will be a large number of activities and opportunities presented to you during this FIG course. For instance, there will be social events, study sessions, fun projects, and possibly a field trip! Though the FIG will be extremely fun and well worth your time, it is still a course at the University of Oregon. Therefore, you do have a \textit{summer assignment} for this course! The summer assignment is following this letter, titled \textit{Athletic Shoe, Deconstructed}. Please complete this assignment before the first FIG class session on Monday, September 24, 2012.

The FIG will be meeting on \textbf{Friday, September 21, 2012 at 11:00 AM} in Columbia 150. Please be on time to this meeting, as we will be moving to another classroom after a brief introduction. Also, remember to bring your Student Handbook to this meeting. Then, on \textbf{Sunday, September 23, 2012}, the FIG will be attending the University Convocation together.

We are all extremely excited to meet you, to get to know you, and to be university resources for you to consult at any time! If possible, send me an email introducing yourself and telling me a bit about yourself before our first meeting on September 21. Also, feel free to contact me with any questions that you have about the FIG, the summer assignment, the University of Oregon, or anything for that matter. Enjoy the rest of your summer!

See you in the fall,

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Kiersten Muenchinger  

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Title: Athletic Shoe, Deconstructed

Goal
The goal of this assignment is to practice recording analytical observations using the materials that make up an athletic shoe. You’re practicing being Leonardo Da Vinci.

Due
September 24, 2012.

Steps
Step 1: Find a pair of used athletic shoes that you can take apart. They could be yours, or from a Goodwill or other second-hand store.
Step 2: Take these shoes apart. Try to deconstruct them as much as possible along the joints between different materials and/or parts. Use scissors, an x-acto knife, or any other tool you find appropriate. Be careful.
Step 3: Photograph each of the individual parts and stick the photos into your notebook, or draw each part in your notebook.
Step 4: Make observational notes about each of the parts, including for each your perceptions and descriptive analysis of the materials’:
   * strength
   * flexibility
   * air permeability
   * moisture permeability
   * how it’s constructed, or manufactured, into the final shoe

Submission
Bring your notebook, including this assignment to the first class.
   • Required Notebook: Chemistry Lab Notebook 50 Carbonless Duplicating Sets [Spiral-Bound]
   • Available from Amazon.com: http://www.amazon.com/Chemistry-Notebook-Carbonless-Duplicating-Sets/dp/B000MQTUK8
   • Cost: $12

Grading
Follow the guide below to receive the grade you desire.

0 (zero): Do nothing.
F: Bring a notebook to the first class, but with no assignment in it.
D: Bring your notebook to the first class, and some pieces of a deconstructed shoe.
C: Bring a notebook to the first class, with a few photos and observational notes of your deconstructed shoe.
B: Bring a notebook to the first class, with photos that show good detail, and some observational notes of your deconstructed shoe.
A: Bring your notebook to the first class, with photos and observational notes of
your deconstructed shoe and it is well-observed in text, well-documented with photos, and shows your insight into why specific materials may have been selected for this shoe.