## Lecture 9

**Date:** September 27, 2011

**Today:** … **Writing**

More on writing & other questions

The dimensions of engineering

The Ram Rod [UAV Drones]

**Assignments & reading:**

**Assign 3:** Myths on Eng. Management due 10/13

**Other:** complete ONE MINUTE PAPER
# Final Schedule of Team Presentations

<table>
<thead>
<tr>
<th>Group Name</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td><strong>The Alphas</strong></td>
<td>15-Sep</td>
<td>20-Oct</td>
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<tr>
<td><strong>Team Hoof-Hearted</strong></td>
<td>20-Sep</td>
<td>25-Oct</td>
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<tr>
<td><strong>Team RamRod</strong></td>
<td>27-Sep</td>
<td>1-Nov</td>
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<td><strong>Prestige World Wide</strong></td>
<td>4-Oct</td>
<td>8-Nov</td>
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<td><strong>Dynamics</strong></td>
<td>11-Oct</td>
<td>15-Nov</td>
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<td><strong>Globogym</strong></td>
<td>13-Oct</td>
<td>29-Nov</td>
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<tr>
<td><strong>Lobster Golf</strong></td>
<td>18-Oct</td>
<td>1-Dec</td>
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**FIRM**

*Please e-mail title of presentation before lecture time*

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**Fall 2011**
<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker/Company</th>
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<tr>
<td>Sept 13 (T)</td>
<td>Ash Maruyama (Sulzer Turbo)</td>
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<tr>
<td>Sept 22 (R)</td>
<td>Melissa Wilcox &amp; Chris Kulhanek (SWRI)</td>
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<tr>
<td>Sep 29 (R)</td>
<td>Shanna Simmons (Shell)</td>
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<td>Oct 6 (R)</td>
<td>Chad Baker, Randy Williams, Arian Vistamehr (UTGS)</td>
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<td>Oct 18 (T)</td>
<td>Sungtae Shin (class TA)</td>
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<td>Oct 27 (R)</td>
<td>Jeff Moore &amp; Dave Ransom (SWRI)</td>
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<td>Nov 3 (R)</td>
<td>Murali Chinta (FMCT)</td>
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<td>Nov 10 (R)</td>
<td>Karl Wygnant (Samsung)</td>
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<tr>
<td>Nov 17 (R)</td>
<td>Dustin Pavelek (Kelm Engineering, LLC)</td>
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<tr>
<td>Nov 22 (T)</td>
<td>Bugra Ertas (Bearings +)</td>
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All confirmed
Comments on last lecture and group presentation
In 404, prof said that first person was becoming somewhat acceptable and 3rd person was “old school.” And the prof, Lalk, is old. Any thoughts?

The 404 class teaches that both 3rd person and 1st person are acceptable, it just needs to be kept uniform throughout the paper, thoughts?

Scientific writing is impersonal – it stresses facts and findings, avoiding “personal” feelings and biases.
Is it a MUST to avoid first person? Why does ASME get to control how we write?

Technical writing continuously evolves while stressing the importance of separating the OBJECT from the SUBJECT. All professional societies have standards – ASME recommendations are quite homogeneous, serving well all members of the society.
If every field or professional has different opinions on how a paper should be written, how do you know if the paper is completely correctly written?

Not true. All professional societies have very similar rules and recommendations.

ONLY the readers (costumers) can judge the correctness (writing) of a paper, report, etc.
About writing

If writing technical reports, how would you make dry or technically oriented topics interesting without writing “fluff” pieces?

Interesting means holding the attention of the reader. Deliver (write) content that is straightforward, addressing to the need or the problem, show expertise – past work, avoid speculation, quantify conclusions (findings) to make it + valuable, anticipate needs, and provide sound recommendations.
I greatly dislike writing. Is there a way to force myself to practice writing skill? Any tips for getting started?

The more you read the better you write. Begin writing a journal for classes: is a few complete sentences write what you learned today (synthesis).

Write well emails. Make an effort to use full sentences and a spell checker.

Join a research group – document your work
More questions

What do you think makes a leader?

Passion and ability to inspire others.

How can humor not be awkward in a presentation?

Light humor is always welcome to release tension. Most good presenters usually begin their talk with a colorful anecdote.
Resources for writing

The Elements of Style
W. Strunk Jr. and E.B. White

Technical books, archival journals, and science and engineering magazines, etc

Your textbook for ENG XXX
(Technical Writing Course)
More questions

What is a good GPA for engineers?

GPA = 4.00 – X. The X \(\rightarrow 1.60\) with demonstrated practical experience and personal attributes (character, maturity, etc).

How to work with another employee when you both have different bosses and different skills and do NOT know who is responsible for the work?

Communication! Do not expect the other to figure out what you are supposed to do. Both are responsible if working together.
What kind of salary one expects starting in a consulting company such as SWRI?

Very competitive. SWRI is highly selective
http://www.swri.org

See also SWRI Engine, Emissions and Vehicle Research Division
http://www.swri.org/4org/d03/d03home.htm for information on projects and opportunities
More questions

As an engineer, are we expected to know exactly how to analyze different projects – like the torsion analysis and what formulas to use?

As a practicing engineer you are expected to KNOW the fundamentals of any project (problem). There is not a recipe to solve tough problems. You must find adequate information and develop a strategy to find a solution or to make a recommendation.
More Questions

How important is a Master’s really? Is an MBA needed or a MS in MEEN?

What about if I move to another Eng. Field to get a M.S.?

How can I more up in management faster now that there are less management positions?

Read/work Assignment 3

Five Myths on Engineering Management

5 Myths

*When it comes to selecting managers, there are common assumptions that doom many to failure*

February 2009 Issue

To a Higher Degree

*How do you decide which advanced course of study is the best option for your career?*

March 2008 Issue

Write a 500 word essay in reply to

"Is management just another engineering skill?"

“What do I need to learn to become an effective manager?”
A Foot in the Door

*Tips on how to interview and to succeed in your first job*
2008 web exclusive

Nixing Engineerese

*Communication with Non-Engineers. The etiquette for e-mails*
August 2009

Please read - short articles address several of your queries

RESOURCES: posted on Class URL site
Questions?

Next lecture

About ethics & professional integrity in academia and engineering practice