Beth Newborg (10:00, Budny) (bateman@pitt.edu)
Marianne Trale (10:00, Lund) **(trale@pitt.edu)**
Janine Carlock (1:00, Bursic) (carlockian1@gmail.com)
Deb Galle (2:00, Miller) (dgalle@pitt.edu)
Bill Kirchner (4:00, Vasko (wfkst1@pitt.edu)
Diane Kerr (dianekerr@mindspring.com)
Amy Murray (murraytwyning@gmail.com)

FRESHMAN CONFERENCE PAPER, SPRING , 2007
STEP #1: PROPOSAL/ABSTRACT

Compose a 300-450 word proposal/abstract clarifying the topic and significance of the paper you will submit to and present at the Seventh Annual University of Pittsburgh Freshman Engineering Conference. Proposals must be submitted by 8:00 p.m., Tuesday, January 16, 2007 online at http://fie.engrng.pitt.edu/eng12/Abstract/. All papers must provide considerable technical descriptions and clarifications relevant to the topic as well as analyses of the importance of the topic/technologies to engineering and to contemporary society. Proposals must clearly indicate what technologies will be described and how such technologies are significant to your audience. A minimum of 3 resources must be consulted for the proposal. Further content and submission requirements and advice appear below.

WRITING AN EFFECTIVE PROPOSAL/ABSTRACT

In most situations in which one would be writing a proposal or an abstract, the proposal or abstract functions as an advertisement for the paper to come. A strong proposal is meant to convey enough information about the paper to enable its readers – usually, a panel of judges for a journal or a conference – to know what they will be getting when they see the paper itself, but the proposal should also be of a quality that makes the readers feel like there is or will be more to the paper than what they have read in the proposal. An effective proposal/abstract requires a balance between general overview, (including how this topic/paper is significant) and specific detail.

A General Overview

A good overview gives a clear, **coherent** total picture of the paper-to-come. An overview includes the paper's topic and the areas of information and significance the paper will address**.** A well-written overview is **not** simply a "step by step" plan of the project (see **"The LEAST EFFECTIVE way to communicate . . . " below).** Rather, an engaging, clarifying overview articulates the paper's topic, the interrelationship among all areas of the topic, and the significance of that topic to the paper's immediate and potential audiences

- A proposal must state the topic as specifically as possible –e.g. ". . .the current technologies and significance of global positioning systems in the United States military. . . " instead of "global positioning systems."
- A proposal must indicate the kind of research that will be done and/or the sources to be used – e.g., journals on the cutting edge of electronics, surveillance and/or GPS technology; analyses of the short and long term future of the GPS use; analyses that consider the effect of GPS systems on saving lives and resources.
- A proposal must communicate the value, interest, or significance – the "so what?" – of such a topic to your audience.

Enough Specific Detail

The proposal must convey enough information about the paper for the panel of evaluators to know what they will be getting if they accept the paper. If the panel of evaluators does not know enough about **the focus, content, and direction of the paper, the proposal will be rejected (which**

translates into your proposal will receive a low grade). Accepting a paper for publication of any kind is a huge investment for the panel of evaluators and for the publication or conference; those making the decision will be discerning about which proposals are sufficiently excellent for acceptance.

- Provide enough detail to show that you have thought about the topic and know what issues and areas will be important **when researching and presenting research and analyses on this topic**.
- Be sure to include information on the kinds of research you'll be using. This may include information regarding specific sources (a mention of a particular article in a 2005 issue of *Discover* or *Prism*, for example), and/or communication of the *kinds* of resources you'll be using (articles from mass market and trade magazines, information from absolutely current aeronautics web sites, and standard, authoritative textbooks, for example).
- One way to decide what kinds of specifics to include is to keep in mind your audience of immediate and eventual readers. The evaluators of your proposal are looking for a strong indication that the proposal's authors have a relevant, intelligent, significant topic; that the topic arises from careful preliminary research; that the authors know in what directions they will be taking that topic; and that the paper will be of interest and importance to the conference audience**.**

Include Significant, Relevant Specifics

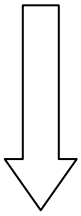
Your proposal must make clear the significance of your proposed research and analyses. As stated earlier, a good proposal needs to indicate the value–the "so what?--of the information you will be presenting in your paper. As you decide how to articulate this "so what?" issue, think about why it is a good use of your time to do the research, analyses, and writing for this paper and why it is a good use of the audience's time to read your paper.

- Keep in mind that cohesion is maintained when interconnections among all aspects of a paper are well established and maintained. Do not simply "tack on" an "extra" statement of the significance of your topic; present your topic in a way that clarifies, for your audience, the significance of the paper they will be reading.

The Least Effective Way

to communicate all information and intentions is to set up the proposal as a step-by-step or **one- mass-of- information- after- another** account. A series of "first. . . , …and then…, …and thirdly…," plus another example. . . "does NOT effectively communicate what your paper will accomplish or what the readers/conference evaluators are looking for. **The evaluators are looking for strong evidence of a cohesive paper with a significant, clearly articulated topic**.

Scroll Down For Formatting and Referencing Requirements



WORD COUNT, FORMAT, RESOURCES, REFERENCES

Present your 300-450 word proposal as required at the Submit Your Abstract link (basically in paragraph form; no two-column formatting at this point in the writing process)

Word Count:
300-450 words. You must meet the minimum 300 words. You cannot exceed 450 words. These requirements will aid you in including sufficient detail without being unnecessarily general, wordy, or imprecise

Format—Author's names/sections
Be sure to include your names and 0012 sections in upper right corner of the text box with your proposal. For example

Caitlin Brilliant, Budny, 10:00
Chris Incredible, Bursic, 1:00

Be sure to fill in all fields of the electronic submission, including your names and 0012 sections. **In other words, <u>your names/sections must appear with your text in the text box and in the appropriate fields on the electronic submission form</u>.**

Format—Title and Body

- Font/Size Title: 14 Pt. Times New Roman all caps bold centered (**CONFERENCE PAPER PROPOSAL is NOT an acceptable title!)**
- Font/Size: Body: 10 pt. Times New Roman, fully justified

Content and Format--Resources Consulted:

- You should consult a <u>minimum</u> of 3 resources to develop your paper topic. Of course, as you continue with your work on this paper, you'll be required to consult more resources, but, for now, readers will look for evidence that you did some preliminary research to help form and inform your topic.
- Your proposal must include a **RESOURCES CONSULTED** section. This section should provide full bibliographic information for resources consulted in preparing your proposal. You will have consulted at least 3 resources, so you will list at least 3 resources in this section..
- **Format, Font, Size for Resources Consulted**: Double space after body of your proposal. Title the section **RESOURCES CONSULTED** (title in 12 pt. Times New Roman, bold, centered, small caps). Present your resources in 10 pt. Times New Roman. List resources in alphabetical order. Double-space between each resource. Order the bibliographical information for each resource as you did for your References last semester (though, again, not in two column format, and you will not need a page number). For example:

RESOURCES CONSULTED

Arnow, Grace M. 2004. *Who Orbits There?* Reading, Massachusetts: Addison-Wesley.

"Champions of Innovation." 2007. Pfizer.com.
http://www.pfizer.com/pfizer/help/mn_research_champions.jsp. Accessed: 7 January 2007.

Feldmann, Michel and Jeannine Henaff. 1989. *Surface Acoustic Waves for Signal Processing.* Boston and London: Artech House.

Lu, Sandra Z. March 2006. "I Spy: Who Controls GPS*?"* *Popular Science* Vol. 252 (3).

Markhoff, John. 16 January 2006. “Michael Dell Should Eat His Words, Apple Chief Suggests.” *New York Times.* http://www.nytimes.com/2006/01/16/technology/16apple.html.
Accessed: 7 January 2007.

Nussbaum, Robert L., Kristin Greene. February 2005. “What is Special about the ‘Human’ in Human Genetics.” *American Journal of Human Genetics*. http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1196361. Accessed: 7 January 2007.

Welcher, Frank J., Ph.D. ed. 2003. *Standard Methods of Chemical Analysis* . Ninth ed. Vol. II, Part A: *Industrial and Natural Products and Noninstrumental Methods.* Princeton, New Jersey: D. Van Nostrand Company, Inc.

Zola, Christine H. June 1998. "A Case for Protected Bandwidth." *IEEE Transactions on Computers.* Vol. 43.

Content and Format--References

- If, in your proposal, you quote or paraphrase from or make specific reference to another author’s work, you must providean in text reference (in brackets, with your first in-text reference being [1], as you did last semester) and you must provide a **REFERENCES** section in addition to a **RESOURCES CONSULTED** section.
- As always, quoting or paraphrasing without proper reference = plagiarism, and a Proposal/Abstract that is nothing but quotes and paraphrases (even if properly referenced) will not fulfill the analytical requirements of the assignment.
- **Format, Font, Size for References:** Double space after **RESOURCES CONSULTED** section. Title the section **REFERENCES** (title in 12 pt. Times New Roman, bold, centered, small caps); present your References in 10 pt. Times New Roman. List references with corresponding in-text bracketed numbers, beginning with [1]. Double-space between each reference. Order the bibliographical information for each reference as you did for your references last semester (though, again, not in two column format) For example:

REFERENCES

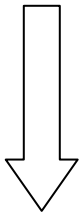
[1] Dribin, Daniel M. 2003. *Elements of Pre-CalculusMathematics* . Reading, Massachusetts: Addison-Wesley, p.78 .

[2] Vaidya, Nitin H. June 1998. "A Case for Two-Level Recovery Schemes." *IEEE Transactions on Computers.* Vol. 47, pp. 6-7. .

[3] Sandin, Jo. 18 July 1998. "As Devastating Beetle Munches Toward Wisconsin, Experts Put Out An Alert." *Milwaukee Journal Sentinel,* p. A5.

[4] Nussbaum, Robert L., Kristin Greene. February 2005. “What is Special about the ‘Human’ in Human Genetics.” *American Journal of Human Genetics*. http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1196361. Accessed: 7 January 2007.

Scroll down for more examples of how to present resource/reference specifics



ENGINEERING 0012
PRESENTING REFERENCES

For a book by a single author
[1] Dribin, Daniel M. 2003. *Elements of Pre-CalculusMathematics* . Reading, Massachusetts: Addison-Wesley, p.78 .

For a book by two authors
[1] Feldmann, Michel and Jeannine Henaff. 1989. *Surface Acoustic Waves for Signal Processing.* Boston and London: Artech House, pp.45-47.

For a book by more than two authors
[1] Misner, Charles W., Kip S. Thorne, and John Archibald Wheeler. 1973. *Gravitation* . San Franciso: W.H. Freeman and Company, pp.140-141.

For a chapter or other titled part of a book
[1] Wigner, Eugene P. "The Unreasonable Effectiveness of Mathematics in the Natural Sciences." In Jefferson, Hane, Weaver (ed.). 1987. *The World of Physics: A Small Library of the Literature of Physics from Antiquity to the Present* . New York: Simon and Schuster, pp.306-316.

For a book with an editor rather than an author
[1] Welcher, Frank J., Ph.D. ed. 2003. *Standard Methods of Chemical Analysis* . Ninth ed. Vol. II, Part A: *Industrial and Natural Products and Noninstrumental Methods.* Princeton, New Jersey: D. Van Nostrand Company, Inc., p.16.

For articles from professional and academic journals
[1] Vaidya, Nitin H. June 1998. "A Case for Two-Level Recovery Schemes." *IEEE Transactions on Computers.* Vol. 47, pp 6-7. .

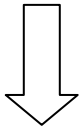
For articles from popular magazines
[1] O'Malley, Chris. March 1998. "Computing's Outer Limits." *Popular Science* Vol. 252 (3), p 56. .

For newspaper articles
[1] Sandin, Jo. 18 July 1998. "As Devastating Beetle Munches Toward Wisconsin, Experts Put Out An Alert." *Milwaukee Journal Sentinel*, p. A5. .

For an article without an author
[1] "Database Marketing Demystified." June 1993. *Target Marketing* Vol. 12 (4), p. 3. .

For papers published (often called "proceedings") from professional conferences or workshops
[1] Chien, Kuei-Yuan. "Application of Nonlinear-Transformation Technique to Perturbation Solutions in Fluid Mechanics." In Midwestern Mechanics Conference. 24-26 March 1975. *Developments In Mechanics. Proceedings of the 14th Midwestern Mechanics Conference* . Vol. 8. Norman, Oklahoma: University of Oklahoma Press, p. 17.

[2] Eggers, K. "On Free Waves." In Office of Naval Research, National Science Foundation, and The University of Michigan. 19-23 August 1963. *Proceedings of the International Seminar on Theoretical Wave-Resistance*. Vol. 1. Ann Arbor, Michigan: University of Michigan.



Keep going; more on the next page

For downloaded PDF articles
[1] Graham, David P. September 30, 2004. Risk of Acute Myocardial Infarction and Sudden Cardiac Death in Patients Treated with COX-2 Selective and Non-Selective NSAIDs," . **http://www.fda.gov/cder/drug/infopage/vioxx/vioxxgraham.pdf.** Accessed: 1 October 2006.

For journal articles accessed via the web
[1] Nussbaum, Robert L., Kristin Greene. February 2005. "What is Special about the 'Human' in Human Genetics." *American Journal of Human Genetics*. http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1196361.Accessed 16 October 2006.

For newspaper articles accessed via the web
[1] Markhoff, John. 16 January 2006. "Michael Dell Should Eat His Words, Apple Chief Suggests." *New York Times.* http://www.nytimes.com/2006/01/16/technology/16apple.html. Accessed: 17 October 2006.

For information from a website
[1]"Champions of Innovation." 2006. Pfizer.com. http://www.pfizer.com/pfizer/help/mn_research_champions.jsp. Accessed: 15 February 2006.

For United States government, state government, and other public documents
[1] Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce. House of Representatives. Ninety-Eighth Congress. *Air Quality Standards.* 1 October 1984. Serial No. 98-189. Washington: U.S.
[2] U.S. Department of Commerce. Economics and Statistics Administration. Bureau of the Census. 1992. *Statistical Abstract of the United States: The National Data Book* . Lanham, MD: Bernan Press.

For a personal conversation
[1] Krieg, John. Vice-President of Technology, American Database Systems. 24 April 1997. Conversation with the author, Provo, UT.

For personal correspondence/email
[1] Jensen, Paul. Chief Executive Officer, Millennium Wi-Fi . 28 January 2006. Email from author.

For manuals
[1] Digital Equipment Corporation. 1997. *AlphaServer 800 User's Guide* . Order Number: EK-ASV80-UG. B01. Maynard, Massachusetts: Digital Equipment Corporation,.

For brochures
[1] University of Pittsburgh. School of Engineering. 2005. "Freshmen Programs." Published brochure.

For class notes
[1] Your Name. 6 October 2005. *Fluids and Convection.* Class notes from *Physics 0116: Advanced Physics*. Dr. Peter Koehler. University of Pittsburgh, Pittsburgh, PA.