

ACS 597 – Research and writing for acousticians

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One (1) credit; For On-campus and Distance Education students

Office Hours – TBD

Course description: Have you ever found yourself in this situation: you need to assemble a great deal of information – background literature, theories, large sets of data and plots, and perhaps some exciting new findings (the elements of a thesis, M. Eng. Paper, or journal article, for example) – but find yourself overwhelmed, not knowing where or how to start? This course will help you organize and outline your information, and provide guidance on how to communicate it effectively to your audience. We'll discuss how to conduct research using internet resources (including Penn State's LIAS system¹), outline your topic, write effective introductions, write about technical theories and data in an informative and grammatically correct manner, write conclusions and abstracts, and finally, how to be a tough, but fair editor – of both your own and other people's writing.

At the end of the course, your final product will be a quality draft of the introduction of your thesis or M.Eng. paper. The introduction will explain your topic and its importance, and include a short literature review. Throughout the semester, we will have group virtual meetings via Macromedia Breeze to review your work. Your classmates and I will act as reviewers of the intermediate assignments.

Prerequisites: This course is intended for students who have completed or nearly completed their coursework, and are ready to start, or have already begun the research for their M.S., Ph.D., or M.Eng. papers. Enrollment will be limited, so priority will be given to those furthest along in their studies.

Textbook: (price approximate)

Style for Students, by Joe Schall

Price: \$13.65

Grading criteria: If all assignments (drafts and final documents) are completed on time and show good effort, I'll assign you an 'A' course grade. For each assignment not completed (or for a response to an assignment which shows poor effort²), I'll deduct one 'level' from your grade, e.g., A to A-, A- to B+, etc. There will be no final exam.

Discussion: Technical writing is very different from 'soft' writing. You may have received high grades for papers written in English classes, and then found that your technical writing was considered poor by your advisor or Acoustics professors. *This is not uncommon.* Writing technically correct documents is quite difficult. Writing technically correct documents that are a pleasure to read can be extremely difficult.

- Technical correctness and pleasing writing styles are not always mutually exclusive, although they are sometimes hard to reconcile!

¹ LIAS provides you electronic access to all the journals that Penn State subscribes to, giving you a great opportunity to assemble journal articles in your field(s) of interest.

² One warning will be given if I feel you are putting forth poor effort before grade deductions will be applied.