



Proposition: Advice from Graduate Students

Start early! This is not the kind of project that you want to leave until the last minute. You will be writing an in depth paper and presentation on a research collaboration with your advisor. In order to produce the best results you should perform a very thorough literature review so that there are not any holes in your research proposition. Visual aids will help get your point across where words simply cannot. Remember, not everyone you are presenting to knows the topic like you do so you have to speak at an appropriate level that reaches your whole audience.

- David Latshaw II

For the international students, start AS SOON AS POSSIBLE. When you finish writing, let a native English speaker read and correct any English problems. - Qian Zhou

Choose a topic that truly interests you. If at all possible, choose one close to your field of research for your degree so that all of the literature that you review will be useful to you during your preliminary exam. Do not procrastinate. The more you get done in the first semester, the easier and less stressful it will be in the spring. Relax. Before you present take a couple of deep breaths and realize that your committee is not out to get you or humiliate you. Yes, they want to be sure you know what you are talking about and that you did the research you were supposed to do, but they are not purposefully out to humiliate you. - Erin Phelps

Proposition is an opportunity for students to learn how to develop an idea, conceive a way to test the idea and write a proposal for funding. Though the proposal is not officially submitted for funding (in most cases), this gives the students a chance to see exactly how research professors are able to develop a novel idea and formulate a method to test their hypotheses. The student is asked to write a 15 page paper in a subject that is closely related to their field of study (advisors will have been assigned at this time). Since the subject of the research proposal is closely related to your field of study, proposition allows you to spend an entire semester studying the technical language, previous research, scientific methods and techniques that are important to your area. After submission of your paper, you are allowed to present/defend your idea to an audience including 4 faculty members. It's very important to include your advisor in the proposal process as they are experts in the field and can clear-up most of your confusions. It's typically difficult to familiarize yourself with technical jargon, but your advisor and senior group members can usually provide helpful insight. - Joshua Allen

Proposition is required of all students in their first year for admittance to the Ph.D program. Furthermore, proposition is a time for new graduate students to extensively search the literature/experiment with ideas to generate a new proposal for a field of interest. In other words, a new graduate student is required to develop ideas that they believe will help/improve the current field of interest. This is not an easy task, and requires extensive literature reviews and course-work so that the interest aligns well with the proposal/field of interest. - Joshua McClure

This paper and the preparation for it can be very helpful for getting started on your research. It is also nice to be able to have your advisor review the paper and get direct input on the work as you create it. I personally had never written anything meant to be a proposal of work so turning a technical paper into a more argumentative piece was something new. I would recommend writing your proposition about work as closely related to what you will actually be doing since it

lets you get familiar with the field. The presentation/oral exam at the end of your proposition can be quite nerve racking for many students, especially if you are not fond of public speaking. I have never thought of myself as a good public speaker, but practice especially in front of peers or your research group helps immensely. As far as the oral exam part, it is hard, if not impossible, to predict the questions that you will be asked so don't focus too much on what will be asked. It is far more helpful to focus on ensuring that you are prepared with a broad knowledge of your proposal field. - Phillip Schoch

Proposition is something to be taken seriously, but not to stress over. Understand why the work is to be done first and foremost: read the proposal, look up additional articles, read a few relevant chapters from text books on the main principles (diffusion, kinetics, cell motility...). You aren't expected to know everything, but know what you do with some thoroughness. Let engineering principles guide you on where you want to take the project and what you write the proposal on. For ideas, read papers that aren't relevant as well, to get the creative juices flowing. - Sara Arvidson

Fall proposition is basically a stepping stone to spring semester proposition in that you learn the format for writing a proposal and constructing a presentation for the class. No one will fail proposition if you actually read the papers that you cite and do the work on time. When studying for your Q&A session for proposition in the spring semester, if you do not understand the concepts in your proposal, talk to your advisor or get help from a fellow group member. If you need extra help on the writing front, you can ask Dr. Ollis, who teaches the class, or a friend to read over a draft in between due dates and suggest ways to improve your writing style or grammar. - Stephanie Lam

At its core, writing the proposition is like writing a really long laboratory report with a lot of references. Try to write the proposal in sections instead of writing the entire document in one sitting to avoid feeling overwhelmed and intimidated. Give your presentation to anyone who will listen to gain more practice speaking and answering questions confidently. Give your presentation to students outside of your laboratory group – they will ask different types of questions than your group members. If you do not know an answer to a question, admit it, postulate an answer, and move on – you are not expected to know everything. - Jessica Jenkins