Dear Graduate Student,

Welcome to AFIT and a wonderful opportunity to pursue advanced education through research topics that interest you. I'm excited that you've chosen to invest your time and energy in my research area, and I look forward to coaching and mentoring you through this fantastic experience.

I'd like to set some expectations up front so that you understand my approach.

- 1. **Graduate students are expected to develop self-learning skills.** Real world problems are messy and require an attitude and aptitude for recognizing knowledge gaps and finding ways to fill them. I'm here to help guide you to resources and answer questions that facilitate understanding, but you will need to find the drive and inquisitiveness to dig into unfamiliar territory.
- 2. **Graduate students are expected to develop higher order thinking skills.** This includes analyzing concepts by breaking down information into parts and relationships, then find evidence supporting generalizations. This also includes creating new concepts from diverse information. Finally, this includes evaluating concepts, taking a position and defending that position based on the evidence.
- 3. **Graduate students are expected to develop knowledge and skills associated with research and scholarship.** This includes a deep understanding of your subject area such as relevant publications, conferences and workshops, the current state of the art and limitations, and which schools or researchers have taken the lead. Solid oral and written communication skills are necessary, as well as strong ethics in collaboration and competition.
- 4. **Graduate students are expected to teach others.** One of the best ways to become an active learner is to teach the material. Studies have shown that those that teach have a deeper comprehension and retention of ideas as compared to those that passively learn. A significant part of your graduate experience involves teaching others about your thesis work, to include faculty and fellow students.

My teaching philosophy involves coaching and mentoring students as they explore problems, discover creative solutions, and evaluate those solutions. I emphasize sound research and collaboration skills that will empower students for a lifetime.

In addition to the expectations and teaching philosophy, let me offer some recommendations for success.

- a. **Make research and scholarship a routine and protected activity.** Read papers, take notes, form ideas, evaluate those ideas, take a position and propose evaluation techniques, and capture your methodology and results in well written documents.
- b. **Find collaborators and build partnerships, both within and outside of your research area.** Talk to people about your subject area. Those with similar interests tend to inspire and motivate, while those outside of your subject area may provide a novel perspective and cause you to see the problem in a new way. Also, don't be afraid to engage authors on the details of their work. They will be excited to find someone that shares a common interest.
- c. **Be resilient!** You will run into dead-ends, flawed data, broken equipment, busted deadlines and mediocre results. Everyone recognizes that researchers work on hard problems. If it were easy, it wouldn't be worth tackling. Be confident in the fact that your faculty wants you to succeed.

I wish you the very best as you advance your academic and military career.

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