Abstract

The needs of graduate students change as they progress through their programs:

- Prospective students deserve frank and private insight from current graduate students before accepting an offer of admission.
- First-year students need mentoring from faculty until they find a permanent advisor and a definitive description of degree requirements and the prerequisites for advancement towards graduation.
- Students in their thesis research years need frequent interaction with their advisor and an environment free enough for the student to perform independent work while close enough not to be effectively abandoned.
- Finally, the end stage student needs support in completing and defending their dissertation while searching for their next professional position.

Graduate students also deserve to have well defined, written statements as to the treatment they can expect from the faculty and administration (that are enforced), adequate health care, consideration for family and maternity leave, and encouragement to participate in the professional community through conferences and serving on committees.

Ultimately, graduate students deserve respect from the faculty and administration as future colleagues and should be valued for the support to the undergraduate programs they provide.

Extracurricular Expectations

Participation in the professional community at large gives graduate students valuable experience with colleagues and allows them potential service and networking opportunities.

Inclusion and participation in committees

Graduate students should be represented on committees that make policies pertaining to them. These include: climate & diversity, curriculum/reaching, general policy, graduate program, etc. at both the departmental and college level. Their service not only proves to other graduate students that the department/college values their opinions, but also provides experience for the graduate representative for a future as an academic.

Attendance at professional conferences

Attending conferences gives graduate students an opportunity to interact with the large scientific community to which they belong. Even if the student is not presenting work, attendance provides invaluable learning and networking opportunities.

Membership in professional societies

Through professional societies, graduate students are exposed to the larger scheme in which academic research is conducted (including being abreast of the political climate that affects their research). They may also become involved in the society through participation in interest groups (like the Forum on Graduate Student Affairs or other forums, topical groups and divisions within APS). Many professional societies offer reduced membership rates for students (including the APS).

Through the Stages of Matriculation…

As students progress through their graduate program, their needs change as do their expectations:

Prospective (-1 yr to 0 yr)

Prospective graduate students should have frank, off-the-record discussions with current graduate students. Not all programs are a good fit for all students and vice-versa.

First Year (0 yr to ~2 yr)

- During a graduate student’s first year, their time is often predominantly occupied with course work and TA duties. Therefore, well defined requirements to proceed to the research stage of the program need to be made known to the student and the student must also be given proper training for their TA work including policies regarding academic dishonesty, sexual harassment, fraternization, etc. Reasonable levels of TA responsibility need to be defined and enforced.
- Incoming students need to be looked over by the department until a permanent advisor is found. Regardless of how this is done, it is the department’s responsibility to insure that students do not feel ‘abandoned.’

Research Years (~1 yr to ~6 yr)

- Once a student has a permanent advisor and reaches the part of the program that is predominantly research, topic selection for their dissertation is of utmost importance. Starting at the stage of topic selection, the student and advisor should have an agreed upon set of questions that are to be addressed by their research to prevent unneeded side investigations that will delay the student’s progress.
- The student’s committee should play an active role in the student’s progress during this time. While the advisor is the direct supervisor of the student, the committee (as well as department chairs, and other administrators) should serve as a third party to oversee both the student’s progress and advising.

End Stage (~5+ yr)

- During this time, it is critical that the student be allowed time to properly treat their research in their dissertation. To do this, research beyond the scope of the dissertation should be kept to an absolute minimum. It is also important for the advisor to give prompt and honest criticism of the dissertation. Proper advising for the defense of the dissertation should also be given.
- While preparing their dissertation and defense, the student is seeking their first professional position. It is important that they receive guidance from their advisor and committee as to the composition of research statements, etc. and to what positions they may be best suited. Timely delivery of requested recommendations is also of utmost importance.

Administrative Expectations

Although not directly related to attaining a graduate degree, practical issues can complicate and interfere with a student’s progress.

Policies on the treatment of graduate students

Graduate students should have clearly written statements from the department and/or college regarding the treatment they can expect from the faculty and administration. Therein should be detailed the procedures for students to voice their concerns. It is also the responsibility of the department/college to enforce these policies.

Health Care

Graduate students deserve to have affordable health coverage at a level comparable to that of faculty and staff. To those ends, many students are the providers for their families and extending coverage to a student’s dependents should also be affordable.

Family Considerations

Since many students have families of their own, the department/college should be sensitive to the external demands placed on the student. Therefore, within the policy on the treatment of graduate students should be a statement regarding what options are available to a student needing to take family/maternity leave.

Compensation

Seeking a graduate degree is much less lucrative than seeking employment directly after they receive their baccalaureate degree. The recruitment and retention of high quality students may be aided by compensation that is sufficient for their cost of living and comparable (within a factor of 2 or so) to the income they could be earning in the general workforce.

About the Author:

Amber did her graduate work at Penn State University earning an M.Ed. in physics (focusing on the physics curriculum in higher education) in 2001 and a Ph.D. in physics in 2006. She has been active in advocating issues pertaining to graduate students as a Member-at-Large for the FGSA (2005-2006) as well as serving on numerous committees at both the departmental and college level as a graduate student. She is currently a postdoc for Caltech working at the LIGO Livingston Observatory in Louisiana. She can be contacted at stuver@mailaps.org.