

**GRADUATE POLICY COMMITTEE
MINUTES
November 2, 2015**

The following members were present: Lee Stepina, Chair; Nancy Marcus, Dean, The Graduate School; Jamila Horabin, Biomedical Science; Elwood Carlson, Sociology; Fred Huffer, Statistics; Steven Webber, Interior Design; Todd Adams, Physics; Sonja Siennick, Criminology; Gregory Gerard, Business; Linda DeBrunner, Engineering; Tomi Gomory, Social Work; Sudhir Aggarwal, Computer Science; Ronald Braddock, Film; Ulla Sypher, Communication & Information; Diana Rice, School of Teacher Education; Ron Doel, History; Jasminka Ilich-Ernst, Human Sciences; Kimberly Van Weelden, Music.

The following members were absent: Tahirih Lee, Law; Jeannine Turner, Education; Anne Barrett, Sociology; Stanley Gontarski, English; Kimberly Hires, Nursing.

Also present: James Beck, The Graduate School; Judy Devine, The Graduate School; Jennifer Buchanan, Assistant Vice President, Faculty Development and Advancement; Sam Huckaba, Dean, College of Arts and Sciences; Horst Wahl, Department Chair, Physics; Timothy Logan, Chemistry; Simon Capstick, Physics.

The meeting was called to order at 3:35 P.M. by Lee Stepina, Chair.

Previous Meeting Minutes –With no further revisions or additions in mind, the meeting minutes from October 26, 2015 were approved.

Program Review- Physics- Dr. Logan provided a brief overview of the GPC subcommittee's findings. He explained that the physics graduate program is very strong and is still improving. He reported that the GPC subcommittee found the faculty to be highly vested in the academic and professional training of their students and the students to be strongly vested in the program. These views are closely aligned with those of the external reviewer. He noted that a key aspect of the strong morale among the students that they met with was due to the Physics Graduate Student Association (PGSA). He explained that "the PGSA helps build morale for the students and gives them a voice and convenient forum for talking amongst themselves about being a physics graduate student." Other noted strengths of the program include: a significant increase in the number of women and other under-represented groups in the student body since the last GPC review, a very strong research and graduate training environment supported by facilities at the Mag Lab and the LINAC, strong external research support for the faculty, and a strong commitment by the faculty to graduate training / mentoring.

Dr. Logan highlighted a few weaknesses expressed from the students. Specifically, some graduate students voiced confusion with the requirements in passing the Qualifying Exams. Some students were under the impression that all questions on these exams should be taken from the exam bank provided by the department and any modifications should not be allowed. He noted that some students also expressed concern about the mechanism for choosing a

major professor / research group. The department is making a good effort to address this issue by having weekly research presentations by the faculty. The question was raised if such weekly research presentations should be made mandatory. Furthermore, students voiced interest in additional specialized graduate courses, especially in interdisciplinary and other supporting areas, and felt that the physical state and quality of the Keen building needs to be addressed to improve the educational / research training infrastructure.

Dr. Logan stated that the data provided by the department shows that the graduate program is expanding, graduating more PhDs in the last three years (54) than in the three years prior (~ 45). The program has currently 157 students as opposed to 136 in the 2010.

In terms of retention, Dr. Logan reported that about a third of students leave the program after 3 years. While this number seems high, it is lower than that of physics graduate programs in peer and stretch institutions. He mentioned that the program is doing a comparable, if not better, job than their peer institutions, and have taken active steps to increase their retention rates through improved mentoring and the support / development of the Physics Graduate Students Association (PGSA).

Ethnic and gender diversity of the program appears to be better than national averages. The graduate program made great strides in gender diversity since the last GPC review and currently consists of 27% women – double what was reported previously. This number is excellent considering the national average is 20% (2007-09) for incoming graduate students.

The advising process seems adequate. First-year students are assigned a faculty advisor to monitor their performance and (later) guide them towards the goal of choosing a major professor. The process of choosing a major professor is aided by encouraging (but not requiring) the students to attend a research-orientation seminar offered in the Fall semester each year. In it, various groups present their research projects to the students. Responses to this particular process by both the faculty and graduate students were positive; however, one could argue it could be made more effective if attendance to the research-orientation seminar were mandatory.

Dr. Logan noted that the department does nothing to formally address scholarly integrity or professional standards. This raised some concern among the GPC and an additional recommendation was created to address this issue (see below).

Dr. Logan reported that the size of the faculty has remained nearly constant, hovering around 42. However, this constancy hides a considerable amount of faculty turnover during this period, with 12 faculty leaving and 12 joining the department. The numerical breakdown of the faculty in the various research groups is as follows: 16 in condensed matter physics, 11 in nuclear physics, 9 in high energy physics, 5 in astrophysics and cosmology, 1 in atomic physics, and 1 in biophysics. There are anticipated retirements in the high energy physics group in the near future, and replacement faculty will be needed. The department has developed a detailed hiring plan to deal with this and other faculty needs. The department is currently recruiting to

hire (for Fall 2016) an assistant professor in experimental high energy physics, and one or more tenure-track positions (open rank) in condensed matter physics.

The typical faculty teaching load is one course per semester. Some faculty members, with less research activity, teach two courses per semester. The recent increase in the number of students has had little effect on faculty teaching loads so far, but it has affected course enrollments. The undergraduate introductory physics courses have been restructured so as to have graduate students play a more important role in these courses, but still faculty resources are stretched thin dealing with the increased numbers

The committee did not identify any issues regarding departmental governance that would adversely affect the academic quality of the graduate program.

There are several areas where the departmental budget may impact the academic quality of the graduate program, including financial support of graduate students and resources that enhance the educational and other professional training.

Student funding appears to be satisfactory. Students are supported either by teaching or research assistantships throughout their program. None are self-supported; this situation is common for graduate programs in science. The physics base stipend is \$20,900 (12 month) and the research-funded groups supplement with an additional \$3000 per year. Physics students have access to health insurance subsidies and must pay their fees out of their stipends, as in other FSU science departments. Research support for the faculty is very good, with approximately 2/3 of the students supported on research assistantships and the rest supported by teaching assistantships.

Dr. Stepina opened the floor to discussion.

Dean Huckaba stated that “the college is very proud of the physics program.” He noted that he is very much aware of the Keen building problems and has scheduled a meeting with Dr. Wahl to take a tour of the 7th floor lecture/ seminar room. Other than that, he had no further comments.

Dr. Wahl explained that it is very unlikely that the Department of Physics will move to a different building and as such, they simply “need to make-due with what they have.” He agreed with the idea of offering additional specialized graduate courses, especially in interdisciplinary and other supporting areas, but was concerned about who would teach these courses. He stated that “it is always a problem to find the appropriate instructors to teach each course.”

Dr. Capstick noted that the faculty members in the Department of Physics decided a long time ago to not publish a passing grade on the Qualifying Exam because every examination is different. Essentially, the faculty meets and evaluates the distribution of grades to determine a sufficient cutoff point. Students generally pass the Qualifying Exam if he/she achieves a score of 70% or higher. He noted that a sample “problem-bank” is available online for the written section of the Qualifying Exam. Students are warned to not memorize the answers from the

problem-bank, but apparently, there has been some confusion over this in the past and some students have failed their Qualifying Exam for having done-so. Dr. Rice was concerned that this could be an ethical issue, as students could potentially continue to memorize solutions to complex problems from the word-bank and fail their Qualifying Exam. Dr. Capstick noted that the recent incident that transpired was very rare; he does not foresee this problem occurring again. Dr. Wahl explained that “the sample problems are intended to teach students a method on how to address a certain question and are not meant to be memorized.” He stated that perhaps the Graduate Handbook needs to be updated to emphasize this point.

Dr. Stepina asked what percentage of students fail the Qualifying Exam. Dr. Capstick was unsure but noted that students have four attempts to pass the exam. Dean Marcus asked if the Qualifying Exam serves as the Preliminary Exam to enter doctoral candidacy. Dr. Capstick confirmed this. Dean Marcus advised Dr. Capstick that the university requirement allows for only two attempts, not four. Dr. Wahl was unaware of this condition.

Dr. Sypher was concerned with the entire process of physics’ Qualifying Exam. For example, a pool of sample questions (containing the answers) is published online, students only have to achieve a 70% on the written section to pass, and all students get 4 attempts. Under these conditions, Dr. Sypher questioned if any student could fail the exam.

Dr. Sypher asked if many of the graduate students come directly from their undergraduate degree or if they have a master’s degree. Dr. Capstick stated that almost all of the doctoral students come in with undergraduate degrees.

Dr. Gomory asked for more information on how doctoral students are annually evaluated. Dr. Capstick explained that the physics program has two processes: 1.) if a student has been admitted into doctoral candidacy, then he/she has to meet once a year with three members of their committee (including their doctoral advisor), provide a report, and give a short presentation, 2.) If a student has not been admitted into doctoral candidacy, then each student has to meet with his/her research advisor once a year.

Dr. Aggarwal highlighted that the subcommittee report did not go into specific detail on doctoral student placement statistics. He asked if recent doctoral graduates were going into more non-academic or academic positions. Dr. Logan stated that this information was not addressed in the GPC subcommittee report, but it was incorporated in the QER assessment. Dr. Aggarwal and Dr. Stepina recommended that the subcommittee report be revised to include this information. Dr. Logan agreed to add the material and resubmit the report.

Dr. Horabin asked if the department provides travel funds for students to attend conferences who are not supported or do not have research groups. Dr. Wahl stated that for such instances, funding is offered on a case-by-case basis and approved by an advisory committee after a request has been submitted by the student. The request is considered if funding is available and many times it is not. He noted that students are encouraged to find other sources of monetary support.

Dr. Stepina asked for discussion on recommendation 1:

To the extent to which is it consistent with the mission and priorities of the University and College, the committee recommends that the common student areas in the physics building be substantially improved, and that new chairs, desks, computers, printers and whiteboards be obtained for these areas.

Dr. Logan explained that the subcommittee found the physical state of the Keen building to be in poor condition. He stated that “the building is a perennial sore point for the physics department.” He noted that there is progress being made to identify funds to renovate and substantially improve the 7th floor lecture / seminar room, but the chairs, desks, common computers and printers in the common areas of the physics building are in desperate need of replacement and significant updating. The chalk boards in these rooms could easily (and cheaply) be updated to white boards. Common computers are necessary for the students to complete some of the graduate course homework’s because they utilize expensive software that, while covered under FSUs licenses, can’t be installed on the student’s own laptops. He noted that the cost of these improvements is substantially lower than a new physics building but are beyond what can (and should) be supported by the Physics departmental budget alone.

Dr. Sypher questioned if the recommendation should be broken-up into two parts. She stated that providing chairs, desks, computers, printers, and whiteboards falls under normal departmental upkeep responsibilities. Dr. Stepina disagreed and requested that the recommendation remain as is. He stated that some money to provide such accessories resides in the college.

Dr. DeBrunner asked if every Teaching Assistant and Research Assistant has his/her own desk. Dr. Capstick confirmed this.

With no further discussion a vote was placed. All were in favor.

PASSED

Dr. Stepina asked for discussion on recommendation 2:

The committee recommends that the Physics faculty discuss their current Qualifying Exam procedures and consider possible improvements.

Dr. Logan explained that the GPC subcommittee identified some concerns with the Qualifying Exam as it appeared that the process could start before students are even enrolled in their graduate courses. In this sense, it may be more appropriate to call these “placement” exams and use the first attempt at the exam in Fall of their first year as an advising tool – identifying particular gaps in a student’s preparation and steering them towards the appropriate coursework. The subcommittee felt that by redesigning the Qualifying exams, and modifying when they are given, Physics faculty can ask perhaps more penetrating and more integrative

questions that test the students' knowledge of physics beyond that of an advanced undergraduate.

Dr. Stepina requested that the recommendation be amended to include a notation stating that the physics Qualifying Exam adhere to university policy. The GPC unanimously agreed that two attempts should be required to pass the exam (per policy) and not four.

Dean Marcus stated that the Preliminary Examination is a major milestone in every doctoral program and noted that it is important for there to be consistency across the entire university. She suggested that the recommendation be revised to state:

The committee recommends that the Physics faculty discuss their current Qualifying Exam procedures, consider possible improvements, and ensure that it adheres to university policy.

Dr. Wahl explained that "the physics faculty has never-ending discussions about the Qualifying Exam every time it is administered." He stated that the process has been altered at least five times since he has been at FSU. He added that this recommendation is only asking for the program to continue "discussing" the current procedures for possible improvement and as such, welcomes this recommendation.

With no further discussion a vote was placed. All were in favor.

PASSED

Dr. Stepina asked for discussion on recommendation 3:

The committee recommends that the Physics faculty discuss whether additional advanced electives can be identified, and that they clarify a student's options for taking extra-departmental courses to satisfy the requirements of the Physics PhD program.

Dr. Logan explained that the subcommittee feels there may be a need for additional elective coursework in some areas. Students specifically requested courses in "Mathematical Methods in Physics" and "Computational Physics", noting that, while this material could be covered by taking courses offered by other departments, offering these courses through the physics department would allow more specific training in how these tools are used in physics. Furthermore, students expressed an interest in taking graduate courses outside of physics, (some thought this was not allowed). Dr. Logan stated that the physics department should improve their communication of what extra-departmental courses could be allowed and further communicate the process for substituting one (or more) of these courses for physics department electives. He noted this could be addressed by updating the Graduate Handbook.

Dr. Wahl stated that the issue is not in offering additional advanced electives, but rather, in finding the appropriate faculty member to teach each specific course. Again, he mentioned that

the physics faculty are currently discussing this issue and will continue to evaluate if it is a feasible option.

With no further discussion a vote was placed. All were in favor.

PASSED

Dr. Stepina asked for discussion on recommendation 4:

The committee recommends that the physics department discuss the possibility of rotating a larger pool of faculty into teaching the core graduate courses.

Dr. Logan explained that the advanced research-related courses are offered when faculty in the related research groups perceive a demand, and are taught by those same faculty. Surprisingly, however, he reported that the core graduate courses are offered by a relatively small pool of faculty, especially by comparison with the overall size of the physics faculty. He stated that “students expressed concern about a regular group of faculty doing all of the heavy-lifting, in regards to the core courses.” Dr. Logan noted that the “GPC subcommittee expressed interest in broadening this out as much as possible by requesting a rotation of a larger pool of faculty into teaching the core graduate courses.”

There was some discussion about whether this recommendation should be removed. Dr. Gomory requested to keep this recommendation because it was created from student feedback.

Dr. Wahl stated that he is comfortable with this recommendation and will discuss the possibility of this with the rest of the faculty.

With no further discussion a vote was placed. All were in favor.

PASSED

Dr. Stepina asked for discussion on recommendation 5:

The committee recommends that the department work together with the PGSA to improve professional development opportunities, especially for students not following academic career paths.

Dr. Wahl explained that two weeks ago a consultant (who has a physics doctoral degree) presented to the program about possible professional development opportunities for students interested in non-academic jobs. Dr. Stepina asked if the presentation was recorded. Dr. Wahl stated that no recordings were permitted because the consultant is about to publish a book on the presentation material. He added that a large amount of graduate students attended the colloquium, asked a variety of questions, and showed an extraordinary interest in the topic. He

added that he was quite surprised by the turnout of the event and stated that this was organized completely independent from this recommendation.

Dr. Logan noted that it is a great challenge among all big science departments to improve professional development opportunities for students interested in not following academic career paths. He clarified that “this recommendation should not be interpreted as saying that the physics program is doing nothing or isn’t doing enough.” He simply said that this is an area for improvement.

With no further discussion a vote was placed. All were in favor.

PASSED

Dr. Stepina asked for discussion on recommendation 6:

Dr. Horabin asked for clarification on how the program addresses the issue of scholarly integrity and professional standards/practices. She stated that the GPC subcommittee report mentioned that the physics program does nothing to formally address scholarly integrity (i.e., in the form of a seminar, colloquium, etc.).

Dr. Logan confirmed this. He noted that some informal professional development occurs through the department’s weekly colloquium in which FSU Physics graduates are invited by their former research advisors to describe their research and career paths. However, in general, much of these opportunities are not required. A considerable number of students (about 24%) end up pursuing careers outside of research or academia, and it is not clear what preparation (if any) these students receive for their professional roles. Furthermore, he added that some students take an FSU online ethics course, which is required for all graduate students working on NSF grant-funded projects. He explained that there could potentially be other students who are not funded or are going through DOE/NIH funding who are not required to take the NSF mandated-training. Dr. Logan stated that he does not believe this is a huge issue, but was amenable to the creation of a new recommendation to address this matter and be sure no students “fall through the cracks.” He agreed that the department should deliberate about whether all graduate students should be required to undergo such training.

Dr. Horabin requested to add the following recommendation:

The committee recommends that the department should discuss requiring training for all graduate students in scholarly integrity.

With no further discussion a vote was placed. All were in favor.

PASSED

Dr. Stepina asked for discussion on recommendation 7:

The Graduate Policy Committee recommends that the graduate program in Physics be continued.

With no further discussion a vote was placed. All were in favor.

PASSED

Discussion: Residence Policy- Dean Marcus briefly reviewed the residence policy and explained that she recently met with the Faculty Senate Steering Committee (FSSC) last week and they suggested one minor revision to recommendation # 4. She stated that the FSSC felt that the sentence highlighted in red was a bit unclear and needed to be clarified. The sentence is now broken-up into two.

The GPC approved recommendation #4 of the residence policy on 3/30/15. It reads:

Recommendation 4: Revise Faculty Handbook, Section 7: Teaching and Student/Faculty Interactions, Distance Learning - to include statement requiring GPC approval for expansion or development of online /distance learning programs.

Faculty Handbook, Section 7: Teaching and Student/Faculty Interactions

Distance Learning

Florida State University offers a wide array of courses through distance learning, some of which are part of entire degree programs available online. **Any new or existing, graduate program that will offer more than 50% of its graduate credit hours using distance learning must be approved by the Graduate Policy Committee.** Instructors developing or teaching distance learning courses can find resources at: <http://distance.fsu.edu/>.

The revision suggested by the Faculty Senate Steering Committee:

Recommendation 4: Revise Faculty Handbook, Section 7: Teaching and Student/Faculty Interactions, Distance Learning - to include statement requiring GPC approval for expansion or development of online /distance learning programs.

Faculty Handbook, Section 7: Teaching and Student/Faculty Interactions

Distance Learning

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Dr. Stepina explained that the issue that triggered this recommendation was not about new or existing graduate programs seeking to be online (as this would require GPC approval), but rather, programs that could “creep-online.” For example, a unit could have an approved face-to-face program slowly convert its courses into an online format. This recommendation was created to safeguard against this practice.

Dr. Sypher agreed that the revised language suggested by the FSSC is clearer.

Dr. Carlson requested that the language state “graduate degree program.” Dean Marcus suggested changing the word “wishes” to intends.” The revised language reads:

Recommendation 4: Revise Faculty Handbook, Section 7: Teaching and Student/Faculty Interactions, Distance Learning - to include statement requiring GPC approval for expansion or development of online /distance learning programs.

Faculty Handbook, Section 7: Teaching and Student/Faculty Interactions

Distance Learning

Florida State University offers a wide array of courses through distance learning, some of which are part of entire degree programs available online. **Any new graduate degree program that will offer more than 50% of its graduate credit hours using distance learning, and any existing graduate degree program that intends to increase its graduate credit hours using distance learning above the 50% threshold, must be approved by the Graduate Policy Committee.** Instructors developing or teaching distance learning courses can find resources at: <http://distance.fsu.edu/>.

With no further discussion a vote was placed. All were in favor.

PASSED

With no further business to be presented, Dr. Stepina adjourned the meeting at 5:10 P.M.