

University of California, Merced  
Applied Mathematics Graduate Studies  
Policies and Procedures  
Fall 2007 – Fall 2011

Last Approved by GRC on December 18, 2007.

Revisions Submitted to GRC on September 23, 2011:

1. Section 2: Removed Affiliate Faculty (discontinued).
2. Section 8.2: Updated Table 1 (stipends).

## 1 Scope of Research

Applied Mathematics Graduate Studies (AMGS) at UC Merced explores the applications of mathematics in the development of natural sciences, engineering and social sciences. The Applied Mathematics Graduate Group offers a multidisciplinary research and training program for Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) students who want to study applied mathematics. Research projects are available on topics ranging from atomic and optical physics, fluid dynamics, coronal mass explosions, math finance, and optimization. Course work provides a background in the fundamental tools of applied mathematics, including ordinary and partial differential equations, asymptotics and perturbation methods, numerical analysis and scientific computing. The graduate group offers opportunities for students interested in multidisciplinary mathematics projects at the interface between life sciences, physical sciences, engineering and social sciences.

## 2 Core Faculty - (revision: removed Affiliate Faculty)

AMGS faculty is composed of Core Faculty Members, who are responsible for the administration of AMGS and instruction of the Core Courses. Admission of a faculty member to the AMGS as a core member is decided by a vote of the Executive Committee. To remain in good standing, AMGS core faculty members are expected to teach at least 2 core AMGS courses every three years.

## 3 Required Core Courses

AMGS M.S. and Ph.D. students are required to complete the following five core courses (20 units total) with a grade of B or better:

- Partial Differential Equations I and II (MATH 221 & MATH 222);
- Numerical Analysis (MATH 231);
- Numerical Analysis of Partial Differential Equations (MATH 232);
- Asymptotics and Perturbation Methods (MATH 223).

These courses constitute training in the techniques and theories that are considered fundamental in an applied mathematics graduate education.

## 4 Graduate Admissions

All persons seeking admission to graduate standing must make formal application for admission. Applicants are required to use the on-line application. Applications are reviewed by the Admissions Committee, which makes recommendations on admission to Graduate Studies; the Dean of Graduate Studies makes final decisions on admission.

## 4.1 Application Deadlines for Admission

The deadline for receipt of applications is January 15. Normally applications will be accepted for Fall semester only, enrollment in other semesters will be considered on an individual basis, with applications due no later than seven months prior to the beginning of the semester when the student would like to begin graduate studies. Applicants are encouraged to contact individual faculty members to discuss their research interests before applying for graduate study.

## 4.2 Materials to be Submitted

- The complete official application form;
- The application fee;
- All official university/college/junior college transcripts;
- An official Graduate Record Exam (GRE) score report; only the general tests are required;
- Applicants are encouraged to submit an GRE official score report for either the Math Subject Test or Physics Subject test if one or more of the following applies:
  - Applicant does not have an undergraduate degree in pure or applied mathematics;
  - Applicant does not meet the minimum GPA requirement;
  - Applicant is concerned about the strength of his/her application in terms of the other required materials;
- Three letters of recommendation from instructors or supervisors who can comment on the applicant's scholarly ability and potential as a researcher;
- Official score reports from the Test of English as a Foreign Language (TOEFL) and the Test of Spoken English (TSE) if the applicant's native language or language of instruction is other than English.

Applicants are encouraged to contact individual faculty members to discuss their research interests before submitting a full application.

## 4.3 Admission Criteria

The minimum requirement for graduate admission to UCM is a bachelor's degree with an undergraduate grade point average no lower than 3.0 on a 4.0 scale. This minimum will be waived only under circumstances where the applicant has demonstrated strong academic skills subsequent to their undergraduate studies. Performance on the GRE, accomplishments in undergraduate research, and letters of recommendation are also important determinants of an applicant's potential for success in graduate education and will be evaluated by the admissions committee. Foreign students from non-English speaking countries are required to attain a minimum score of 580 on the

TOEFL exam (paper version) or 230 (computer-based version), as well as a score of at least 45 on the TSE. Each academically qualified student will also have a telephone or in-person interview with one or more AMGS faculty members. Finally, the match of the candidate's skills and interests to AMGS research programs will be considered for M.S.-thesis and Ph.D. applicants. For this reason applicants are encouraged to contact AMGS faculty before applying.

## 5 General Requirements for Advanced Degrees

### 5.1 Residency

In accordance with Senate Regulation 682 and 686, the minimum residency requirement for any advanced degree is two semesters. The minimum residency requirement for the Ph.D. degree is four semesters. Before advancement to candidacy, Ph.D. students must be registered in regular University courses as a full-time student for at least two semesters. For the purposes of determining residency, only the Fall and Spring semester will be counted; however, the summer semester may be counted in evaluating students on academic probation. Residency is established by satisfactory completion of at least 12 units of graduate or upper-division course work (including research) per term. Ordinarily, a graduate student shall not receive credit for more than 12 units of graduate courses in any semester. AMGS only accepts full-time students. Exceptions will be only granted for students in the non-thesis M.S. degree program (Section 7.2) with the permission of the graduate group Chair, in consultation with the Executive Committee.

### 5.2 Scholarship

Graduate students must maintain at least a 3.0 grade-point average to be considered in good academic standing or to be awarded an academic graduate degree. A student whose cumulative graduate grade-point average falls below 3.0, or who is judged not to be making satisfactory progress toward the degree by his or her graduate advisor or faculty committee, will be placed on academic probation. The student will then be allowed a maximum of one semester to make up the deficiencies and be returned to good academic standing (beyond the semester they go on probation). Otherwise, the student will be dismissed from the graduate program.

Specific scholarship requirements are as follows:

1. Only courses in the 100 or 200 series and MATH 399 (*University Teaching*) in which the student receives grades of *A*, *B*, or *S* may be counted in satisfaction of the requirements for advanced degrees. A course in which a student receives a *B-* or lower cannot be used to satisfy the unit requirement for the degree but will count in determining the grade point average.
2. Candidates must maintain an average of at least three grade points per unit in all upper division and graduate courses elected during their residence as graduate students at the University of California.

3. Courses graded  $S/U$  will not be counted in determining grade point averages.
4. Students must make satisfactory progress on their programs of study as determined by their graduate research advisor.

### 5.3 Faculty Committees for Advanced Degrees

All Ph.D. and M.S.-thesis students in AMGS must have a graduate research advisor and committee. The student's graduate research advisor (see Section 6.3), normally in consultation with the student, the graduate group and other faculty, recommend appointment of faculty members to advise on and to supervise the student's dissertation research, to serve on examination committees, and to review and to pass upon the merits of the doctoral dissertation. Final approval of the membership on these committees rests with the Dean of Graduate Studies.

Advanced degree committees in AMGS typically consist of three members, although additional committee members are permitted if warranted by the student's research project. The committee chair is the student's research advisor, and the three members must be UC Merced faculty members in AMGS. Under some circumstances one of the committee members can be a UC Merced faculty member from outside the group or a regular or adjunct faculty member from any UC campus or an individual from outside the University of California who has special expertise and qualifications. In this case, the graduate research advisor should submit a brief statement indicating the appointee's affiliation and title and how the prospective appointee has special expertise or qualifications that are not represented on the campus. In addition to the justification letter from the graduate advisor, a curriculum vita and a letter from the proposed appointee indicating a willingness to serve must be submitted to the Chair of the Applied Mathematics graduate group for review and approval by the Executive Committee.

All members of the committee must be in attendance for Ph.D. qualifying examinations and thesis defense. If a committee member's absence from campus for an extended period of time makes scheduling of examinations unreasonably difficult, the student may request that the committee be reconstituted. Reconstitution of the committee may also be justified by a substantial change in the student's thesis topic or may be required by the departure of a committee member from the university. When membership changes must be made, the graduate advisor in consultation with the student should recommend a new committee member, giving the reason for the change. The change must be approved by the Chair of the Applied Mathematics graduate group with consultation from the Executive Committee.

### 5.4 Preliminary Exams

Preliminary examinations are offered at the beginning and end of the Spring semester each year. These are four closed-book written examinations in (i) differential equations, (ii) advanced calculus, (iii) complex variables and (iv) linear algebra. The examinations are given at the advanced-undergraduate/beginning-graduate level. For each of the four exams, students receive a score of 1, 2 or 3, as determined by the faculty committee in charge of the examination.

All students in AMGS are required to take the preliminary exams in the beginning of the Spring semester in the first year of graduate studies. All students must obtain a score of at least 2 on all four exams. A student may retake from one to four of the exams, but exams must be re-taken at the end of the same Spring semester. If the student does not obtain a score of at least 2 on all four exams after two attempts, he or she will be disqualified from further study in AMGS.

## 6 Doctor of Philosophy Degree

### 6.1 Significance

The Doctor of Philosophy degree is granted to students who demonstrate a thorough knowledge of a broad field of learning and have given evidence of distinguished accomplishment in that field. The degree also signifies that the recipient has critical ability and powers of imaginative synthesis as demonstrated by a doctoral dissertation containing an original contribution to knowledge in his or her chosen field of study.

### 6.2 Requirements

AMGS has established the following requirements for the Ph.D. degree. Students must:

- Obtain a score of 3 on at least three of the four written preliminary exams and 2 on the remaining exam (Sections 5.4);
- Complete at least four semesters of full-time academic residence (12 units minimum per semester) at UC Merced;
- Complete the five required core courses with a grade point average of 3.25 and with a grade of at least *B* in each (Section 3);
- Complete at least two special topics courses with grade of at least *B* (Section 6.4);
- Produce at least one paper that is deemed publishable in an appropriate peer-reviewed journal (Section 6.5);
- Complete the Applied Mathematics Seminar for at least two semesters with grade of *S*; students are expected to attend all seminars in the Applied Mathematics Seminar Series when possible (MATH 291, Section 6.6);
- Serve as a half-time Teaching Assistant (TA) for at least two semesters (or equivalent) (Section 9);
- Complete MATH 201 *Teaching & Learning in the Sciences* (or equivalent) and MATH 399 *University Teaching*;
- Pass a qualifying exam composed of two parts: (i) a written research proposal (Section 6.7.1) and (ii) an oral examination (Section 6.7.2);

- Present at least one open technical seminar while in residence (Section 6.9);
- Present and successfully defend a doctoral dissertation containing an original contribution to knowledge in the field (Section 6.10).

### **6.3 Selection of a Graduate Research Advisor**

The heart of the Applied Mathematics Ph.D. program is the completion of a piece of original scientific research leading to the preparation and defense of a Ph.D. thesis. To this end, each student should discuss research interests and possible Ph.D. projects with all of the faculty in the group as early as possible, and select a graduate research advisor by the second year of study. Selection of a graduate research advisor must be approved by the graduate group and must occur before the student's faculty committee can be constituted. The student and the graduate research advisor together will develop a research topic, and research will normally occupy a majority of the student's time after the first year of residence. Interdisciplinary projects are highly encouraged, as are research collaborations with faculty or senior scientists outside UC Merced. However, the graduate research advisor must be a member of AMGS. Students will be assigned an initial advisor when they first enroll, unless the student has already chosen an advisor.

### **6.4 Special Topics Course Work**

All students in the group must also successfully complete (grade of B or better) at least two additional graduate courses (courses numbered 200-299 and worth at least three units each) exclusive of research (MATH 295) that are appropriate to the student's research area. Suggested courses include linear and nonlinear wave propagation, integral equations, dynamical systems, waves in random media, and fluid dynamics. Other graduate-level courses appropriate to the student's specific field of research, including Directed Independent Study (MATH 299) may be used to meet the two-course minimum requirement with consent of the student's faculty committee. Courses numbered 100-199 offered outside MATH will be considered by petition. Normally Special Topics courses should be taken during the second year of graduate study. Requirements for formal course work beyond the minimum are flexible and are determined by the individual student's background and research topic in consultation with the student's graduate research advisor.

### **6.5 Publication Requirement**

The final confirmation of the quality of a Ph.D. dissertation is the ability to publish the research results in a peer-reviewed journal. The research field may influence the timing and work required to publish research results, making it difficult to define the number of publications required for each dissertation. For this reason, whether a student has made sufficient progress for the Ph.D. will ultimately be determined by the student's advisor and thesis committee. However, it is expected that the research project should be sufficiently complete to support publication of at least one full manuscript. AMGS Executive Committee may determine if having simply submitted a manuscript is sufficient to warrant completion of the Ph.D. requirements, although in most cases, acceptance

of the manuscript by the journal will be expected (i.e. manuscript “in press” or “in print”). The publication requirement should encourage the student to view submission of manuscripts as the ultimate goal of any research project, and to teach the student how to organize research projects and write scientific manuscripts. The process of writing the manuscript will be undertaken with the assistance and guidance of the student’s research adviser. Manuscripts should be presented to the graduate committee for examination and approval at the time of the student’s thesis defense.

## **6.6 Applied Mathematics Seminar Series**

The Applied Mathematics Seminar Series runs in the Spring and Fall semesters, with talks held nearly each week. Talks cover a broad spectrum of mathematical problems and novel applications. All students are required to enroll in MATH 291 *Applied Mathematics Seminar* for at least two semesters, where attendance in the Seminar Series is required. Regardless of enrollment in MATH 291, AMGS students are expected to attend all seminars in the series whenever possible.

## **6.7 Qualifying Exam**

All students in the Applied Mathematics Ph.D. program are required to pass a qualifying examination before advancement to candidacy for the Ph.D. degree. Students are expected to take and pass the qualifying examination during their second or third year of graduate study unless they successfully petition the graduate group chair to take it a different year. The examination committee is the same as the student’s faculty committee. The dates for the examination are arranged between the student and the examination committee.

### **6.7.1 Part 1: Written Research Proposal**

Before the oral portion of the qualifying exam, the student will provide to the degree committee a written document (typically five to ten pages) that describes his or her dissertation research topic, summarizes progress to date, outlines what he or she proposes to do, why it is relevant, and what will be learned. The committee will review this document with the student and determine if the student has outlined a project that is appropriate for a Ph.D. If not, the student is given one month to rewrite the research plan. Once the research plan is approved, the student may take the oral portion of the Qualifying Examination.

### **6.7.2 Part 2: Proposal Presentation & Oral Exam**

The oral component of the qualifying exam is comprised of two parts. The first part is a presentation of the research proposal (see Section 6.7.1). This part is open to the public. At least one week prior to the examination date, the student will provide to the committee his or her research proposal. The second part is an oral exam to ascertain the breadth of a student’s comprehension of fundamental facts and principles from his or her graduate course work. This part is closed to the public – only the student and the committee are present.



### **6.7.3 Assessment**

The committee will assess the two parts of this exam and notify the student. The result will be determined by a vote of the examination committee. The committee conducts the examination, and immediately thereafter submits the result of the examination to Graduate Studies. Possible outcomes are:

1. PASS (conditions may not be appended to a pass decision)
2. NOT PASS with an option to retake the examination within a specified time period, or to satisfy specific requirements
3. FAIL

The committee members should include in their evaluations of the student such factors as relevant portions of the previous academic record, performance on the examination, and an overall evaluation of the student's performance and potential for scholarly research as indicated during the examination. The committee should strive to reach a unanimous decision. If a unanimous decision is reached, the committee shall inform the student of its decision in one of the forms listed above. If the decision is NOT PASS or FAIL, the chairperson of the committee must include in a report a specific statement, which may include a minority report, explaining its decision and must inform the student of its decision. In the case of a NOT PASS decision, the committee must include in its report a further statement of its terms and inform the student of those terms. In those cases when it is not possible for the members to resolve their differences, the student should be informed of the nature of those differences and each member should submit a detailed assessment of the student's performance to the Chair of the graduate group. The Chair, in consultation with other members of the graduate group, will use these individual reports to adjudicate the result.

Upon recommendation of the examination committee, a student who has not passed the examination may repeat the qualifying examination after a preparation time of no more than six months. The examination must be held by the same committee except that members may be replaced, with the approval of the graduate advisor, for cause such as extended absence from the campus. Failure to pass the examination on the second attempt means that the student is subject to disqualification from further study for the doctoral degree. After a second examination, a vote of NOT PASS is unacceptable; only PASS or FAIL is recognized by the Dean of Graduate Studies.

### **6.8 Advancement to Candidacy**

Upon successful completion of the examinations and approval of a research plan, the student is given an application for advancement to candidacy by the examining committee chair. When it is filled out and signed by the graduate research, the student pays a candidacy fee and submits the form to Graduate Studies. Upon advancement to candidacy for the degree, the faculty committee is then charged to guide the student in research and in the preparation of the dissertation.

## 6.9 Seminars

All Ph.D. students in AMGS are required to present an open technical seminar in the Applied Mathematics Seminar Series during their residence. The topic of the seminar may be the student's own research or it may be any other topic that falls within the areas of study spanned by the group, broadly defined. The open presentations given as part of the Ph.D. qualifying examination and dissertation defense may not be counted as one of the required seminars. Each student will be provided feedback on his/her presentation written by one or more AMGS faculty members, where at least one is not the student's advisor.

## 6.10 Dissertation and Final Examination

The Ph.D. dissertation must be creative and independent work that can stand the test of peer review. The expectation is that the material will serve as the basis for publication(s) in a peer-reviewed journal. The work must be the student's, and it must be original and defensible. The student is encouraged to discuss with members of the faculty committee both the substance and the preparation of the dissertation well in advance of the planned defense date. Detailed instructions on the form of the dissertation and abstract may be obtained from the Graduate Studies office.

The student must provide a copy of the dissertation to each member of the faculty committee, after which each committee member is allowed four weeks to read and comment on it. If one or more committee members believe that there are significant errors or shortcomings in the dissertation or that the scope or nature of the work are not adequate, the student must address these shortcomings before scheduling a defense. Once the committee members are in agreement that the dissertation is ready to be defended (although minor errors or matters of controversy may still exist), the final examination date may be scheduled by the student in consultation with the committee. The date must be reported to the Dean of Graduate Studies no later than one week before the proposed date of the final examination. One copy of the final dissertation must be filed no later than four weeks after the examination date.

The Ph.D. final examination consists of an open seminar on the dissertation work followed by a closed examination by the faculty committee. During the examination, the student is expected to explain the significance of the dissertation research, justify the methods employed, and defend the conclusions reached. At the conclusion of the examination, the committee shall vote on whether both the written dissertation and the student's performance on the exam are of satisfactory quality to earn a University of California Ph.D. degree. A simple majority is required for a pass. Members of the committee may vote to make passing the exam contingent on corrections and/or revisions to the dissertation. In this case, the committee will select one member, normally the graduate research advisor, who will be responsible for approving the final version of the dissertation that is submitted to Graduate Studies. At least two members of the degree committee must sign the final dissertation.

## 6.11 Transfer from Ph.D. to M.S. Program

Students in good academic standing and who obtained scores of at least 2 on all preliminary exams may petition to move from the Ph.D. to M.S. program and pursue a terminal M.S. degree.

# 7 Master of Science Degree

## 7.1 Significance

Students may be admitted to the graduate program in Applied Mathematics to work towards a Master of Science (M.S.) Degree. A student working towards a Ph.D. who completes M.S. requirements may petition to be awarded a M.S. Degree. Additionally, a Ph.D. student who has been in residence for at least two semesters, is in good academic standing, and has completed at least three of the core courses may petition the Admissions Committee to pursue a terminal M.S. degree. The recipient of a M.S. degree is understood to possess knowledge of a broad field of learning that extends well beyond that attained at the undergraduate level, but is not necessarily expected to have made a significant original contribution to knowledge in that field.

## 7.2 Requirements

The Applied Mathematics group has established the following requirements for the M.S. degree. Two different degree plans are recognized:

### PLAN I

- Obtain a score of at least 2 on each of the four written preliminary exams (Sections 5.4);
- Complete at least two semesters of full-time academic residence (12 units minimum per semester) at UC Merced;
- Complete the five required core courses with grade of at least *B* (Section 3);
- Prepare an acceptable thesis describing original research in the field under the guidance of an AMGS faculty research advisor. The student must successfully defend the thesis to a committee chaired by the research advisor that is composed of at least two additional members from AMGS faculty (see Section 5.3);
- Serve as a half-time Teaching Assistant (TA) for at least one semester (or equivalent) (Section 9);
- Complete MATH 201 *Teaching & Learning in the Sciences* (or equivalent) and MATH 399 *University Teaching*;

## PLAN II

- Obtain a score of at least 2 on each of the four written preliminary exams (Sections 5.4);
- Complete at least two semesters of full-time academic residence (12 units minimum per semester) at UC Merced;
- Complete the five required core courses with grade of at least  $B$  (Section 3);
- Complete at least two special topics courses with grade of at least  $B$  (Section 6.4);
- Complete the capstone requirement, which is the preparation of an acceptable written document presenting research accomplished under a faculty advisor (Section 7.3);
- Serve as a half-time Teaching Assistant (TA) for at least one semester (or equivalent) (Section 9);
- Complete MATH 201 *Teaching & Learning in the Sciences* (or equivalent) and MATH 399 *University Teaching*;

### 7.3 M.S. Plan II Capstone Requirement

Plan II M.S. Degree students are required to complete an acceptable written document presenting research accomplished under an AMGS faculty advisor. Examples of such research projects include a literature review, a series of numerical simulations, or a data analysis. The research project should be considerably shorter than that expected of a M.S. Thesis project; a single semester should be sufficient for project completion. The document must be signed by any two AMGS faculty members who deem it to be acceptable work.

### 7.4 Transfer from M.S. to Ph.D. Program

A student admitted to the M.S. program may petition the Executive Committee to join the Ph.D. program if he/she is in good academic standing and has obtained a score of 3 on at least three of the four preliminary exams, and a score of 2 on the remaining exam. The decision to accept or deny the petition is based on the original graduate application, performance in UC Merced graduate coursework, and match of the student's research interests to faculty interests.

## 8 Time to Degree and Annual Evaluation of Graduate Student Progress

The Applied Mathematics Graduate Group places a nominal time limit of two years from entrance to completion of the M.S. and five years for completion of the Ph.D. Extensions beyond these limits can be permitted by the Chair of the Applied Mathematics Graduate Group in consultation with

the Executive Committee. Ph.D. students entering with a M.S. degree have a nominal time limit of four years.

In order to ensure satisfactory progress toward the degree, each student must meet with his or her faculty committee for an annual review of progress at a mutually agreeable time prior to the first day of each Fall semester. For Ph.D. students these meetings occur each year after advancing to candidacy. At least two members of the committee must be present. The committee will review the student's progress toward the degree during the past year and develop a time table, mutually agreeable among student, graduate research advisor, and faculty committee, for completion of the remaining requirements. The annual report of the committee will become part of the student's record.

Should the committee conclude that the student is not making satisfactory progress toward the degree, the student may be placed on academic probation as described under "Scholarship" above (Section 5.2).

## 9 Graduate Assistantships & Stipends

Graduate students in Applied Mathematics are normally offered stipend support through appointment either as a Teaching Assistant (TA), Teaching Fellow (TF), and/or Graduate Student Researcher (GSR). Students in their first semester of residence usually serve as TAs for appropriate courses in the schools of Natural Sciences or Engineering. After the first semester, support may be offered through either funding as a TA or a GSR in the graduate research adviser's laboratory. Graduate students with external fellowships are still required to satisfy the one- or two-semester teaching requirement and will be paid by the school for teaching. While every effort will be made to provide employment as a TA, Teaching Fellow, or GSR for all graduate students in residence, admission to graduate studies carries no guarantee of financial support beyond that specified in the initial letter of commitment of financial support. During the academic year, appointments are limited to 49.9% time. During academic breaks and summer months, students may be appointed at 100% time when research funds to support additional GSR support are available.

### 9.1 Appointments for Students Not Admitted To PhD Candidacy

Students not admitted to PhD Candidacy with teaching appointments will be recommended for appointment as Teaching Assistants. Students appointed as GSRs will be paid at a step level such that pay is as close as possible to that for a TA with the same percentage-time appointment. For example, at the 2007 stipend scales (see Table 1), a student not yet admitted to candidacy would be appointed as GSR Step 5. In the summer, an appointment percentage-time would be decided between the student and the student's research advisor, but the GSR appointment would still be Step 5. Under this plan, a student who is expected to work full time should receive a 100% appointment. This also applies during academic breaks in the academic year.

## 9.2 Appointments of Students Admitted To PhD Candidacy

Students admitted to PhD Candidacy with teaching appointments who have demonstrated excellence in teaching will be recommended for appointment as Teaching Fellows rather than TAs. The Lead Dean is responsible for deciding to appoint a student as a TA or TF. Students appointed as GSRs will be paid at a step level such that pay is as close as possible to that for a Teaching Fellow with the same percentage-time appointment. For example, at the 2009 stipend scales (see Table 1), a student admitted to candidacy would be appointed as GSR Step 7. In the summer, an appointment percentage-time would be decided between the student and the student's research advisor, but the GSR appointment would still be Step 7. Under this plan, a student who is expected to work full time should receive a 100% appointment. This also applies during academic breaks in the academic year. When a student advances to candidacy, the step increase will apply at the beginning of the next period (start of semester or start of summer).

Appointment	Monthly Stipend – (revised)
GSR Step 4	\$3,488
GSR Step 5	\$3,720
GSR Step 6	\$3,893
GSR Step 7	\$4,205
GSR Step 8	\$4,540
Teaching Assistant	\$3,697
Teaching Fellow	\$3,697

Table 1: TA, TF, and GSR monthly stipend amounts at 49.9% 9-month appointments. Amounts are current as of October 2009 and are subject to change.

## 10 Changes to Policies & Procedures

A student entering AMGS is bound under the Policies and Procedures in place in the student's first semester. If Policies and Procedures change, a student may petition the Executive Committee to work under the new requirements.