THE ASTRONOMY GRADUATE PROGRAM: FROM A TO Z (Revised July 13, 2023)

The University of Texas at Austin
Department of Astronomy

Master of Arts in Astronomy (M.A.) Doctor of Philosophy in Astronomy (Ph.D.)

2023-24

THE ASTRONOMY GRADUATE PROGRAM: FROM A TO Z (Revised July 13, 2023)

Table of Contents: Read A and B if you read nothing else!

A. General	3
B. Overview of the UT Astronomy Graduate Program	5
C. Requirements and Application Process for the MA Degree	9
D. Requirements and Application Process for the PhD Degree	10
E. Flexibility in a Graduate Student's Program	13
F. Teaching Opportunities	14
G. Advising and Supervising a Graduate Student	16
H. Graduate Student Evaluation	16
I. Committee Meetings and Evaluation Forms	17
J. General Explanation of Course Terms	19
K. Required Courses for the MA or PhD degree	19
L. Seminar Courses and Oral Presentations	21
M. Individual Instruction Courses	23
N. Registration	23
O. Starting Research	24
P. The Research Presentation and the Second-Year Assessment	26
Q. Application for PhD Candidacy	29
R. Research and Dissertation Committees	30
S. Dissertation Proposal	33
T. Final Oral Examination or Defense of Dissertation	34
U. Financial Aid to Graduate Students	35
V. Student Educational Records	37
W. Sources of Information concerning the Graduate Program	37
X. English Proficiency Requirement	38
Y. Scholastic Integrity and the Honor Code	39
7 Withdrawal or Dismissal from the Program	40

A. General

Note: Additional information is contained in sections indicated in parentheses, e.g. (E).

- 1. These instructions and regulations combine material given in the Graduate School Catalogue, the Graduate School Policy Manual, and issued as departmental and graduate School memoranda, announcements, or instruction sheets. It is your responsibility to inform yourself of pertinent instructions and regulations, both of the Graduate School and of the astronomy program. Towards this end, these instructions and regulations are presented in a reference format.
- 2. Although the Astronomy Student Office will assist you in matters of registration and other required procedures, it is doing so as your agent. It is your responsibility to see that you are properly registered for the proper courses each semester.
- 3. Whereas these instructions and regulations should contain most of the information you will need while pursuing your graduate degrees, they do not include all details given in the catalogues, Graduate School Policy Manual, memoranda, announcements, and instructions from which they are extracted. Sections B, C and D constitute summaries of the MA and PhD degree programs. Sections F through U provide more complete information about specific aspects of these programs. In particular, section O provides valuable orientation to the main thrust of these programs.
- 4. The regulations are current as of January 2023 and subject to subsequent changes made by the Graduate School or the Astronomy Graduate Studies Committee (GSC). Students entering before this date may elect to abide by regulations for the astronomy program in effect at the time they entered the program or by any subsequent set of astronomy program regulations, but they must declare which set they are choosing. If no declaration is made, they will be assumed to be using the most recent regulations. Written notice should be given to the Graduate Coordinator to be placed in your permanent file if you choose to use an earlier set of rules and policies.
- 5. Degree time limits imposed by the department are for full-time graduate students, who may have a half-time assistantship but carry a normal load of courses. For the occasional part-time student, appropriate deadlines will be set by the Graduate Studies Committee or by the student's supervisory committee. For students using the CNS academic accommodation policy for graduate student parents, appropriate extensions for academic responsibilities will be granted (E).

6. Under the Fourteen-Semester Rule on Student Employment, graduate students may only be employed as Graduate Research Assistant, Teaching Assistant, and other titles for a maximum of 14 long semesters. For more information, see http://www.utexas.edu/ogs/employment/14_semester_rule.html

Exceptions to the fourteen-semester rule are made only under very special circumstances.

- 7. Incoming students should study at least sections A-R and U, Y, and Z. Other sections should be studied at the appropriate times in the graduate student program.
- 8. Definition of terms used in this document:

Graduate Studies Committee (GSC): The GSC members decide on departmental policy regarding the graduate program. This committee is made up of all assistant, associate, and full professors who are active participants in the Astronomy Graduate Program. Research Professors may be appointed as GSC members if the Dean of Graduate Studies approves the relevant petition, which includes a letter of support from the GSC Chair. Emeritus and Emeritus-elect Professors may continue GSC membership with approval of the Dean of Graduate Studies. Research Scientists co-supervising students attend GSC meetings but are not members of the GSC and do not have voting privileges.

Graduate Studies Executive Committee (GSEC): This committee consists of the GSC Chairperson, Graduate Advisor, Assistant Graduate Advisor, and usually one other GSC member. The Department Chair and Associate Chair are ex officio members. The GSEC decides whether to grant petitions from students, but may refer questions to the full GSC. The GSEC is authorized by the GSC to act on the latter's behalf on occasions when prompt action is urgently required.

Graduate Advisor: The Graduate Advisor is the faculty member who officially represents the Graduate Dean. He or she monitors student progress and advises students. The Graduate Advisor petitions the Graduate School for any exemptions to university regulations. The signature of the Graduate Advisor is needed on many official forms.

Graduate Coordinator: This staff person assists the Graduate Advisor, maintains student records, can clarify rules and regulations set by the Graduate School, and is a general source of information relating to the program. Copies of all forms submitted to the Graduate School should be given to the Graduate Coordinator to be placed in your departmental file. Departmental forms described throughout this document as going to the Graduate Advisor are generally routed through the Graduate Coordinator.

Undergraduate Studies Committee (UGSCOM): This committee consists of all faculty members.

99 Hour Rule: If you have earned more than 99 semester hours of credit at the doctoral level you will have to pay the nonresident tuition rate without regard to residency status or any work appointment that would normally entitle you to pay resident tuition. (N)

Doctoral Hours: Any coursework undertaken by you if you are seeking a doctoral degree after the completion of thirty semester hours of graduate credit. All hours undertaken once you meet this definition are considered doctoral hours EXCEPT undergraduate courses and Master's thesis courses (AST 698A, B).

Formula Funding: The State of Texas gives the University a set amount of money for each credit hour for which a student is enrolled on the 12th day of class. The amount varies for undergraduate, masters, and doctoral hours. The State cuts off formula funding to the University after a certain number of hours has been accumulated by a student in each category of hours.

Research Advisor, Research Committee, and Research Project: See section R for definitions.

Dissertation Advisor, Dissertation Committee, and Dissertation Project: See section R for definitions.

The term "Advisor" or "Supervisor" refers to either the Research Advisor or the Dissertation Advisor, as appropriate.

Good Standing: A student is "in good standing" if they have satisfied all requirements, met all past and current deadlines, and completed all necessary milestones for their respective stage in the program. This includes requirements for coursework, holding Research Committee meetings at the required times, and submission of all necessary forms and reports to the Graduate Advisor and their Committee. Students who are not "in good standing" may be ineligible for financial support in the form of GRA or TA appointments, fellowships, or departmental awards, depending on the specific circumstances.

B. Overview of the UT Astronomy Graduate Program

1. First Year

Take courses that count towards the nine required courses for the PhD degree (unless exempted); each of these courses must be passed with a grade of B- or better. (K)

Attend the Seminar for First-Year Astronomy Graduate Students if it is offered. (K, L)

Take additional courses and seminars to complete 9 semester hours of registration each Fall and Spring term and 3 semester hours during each summer term if employed. (K)

Regularly attend one of the two primary research seminars (Ast 390F or Ast 390G) every semester, even if you are not registered for credit. Give at least one oral presentation at a research seminar once a year. (L)

Choose a Research Advisor and form a Research Committee by March 1 of the Spring semester. (D, O) The Committee must include at least 3 GSC members but may include other scientific personnel as appropriate to the research plan. At this stage it is not necessary to include an external (to the UT Astronomy program) member.

Hold an initial meeting with the Research Committee by the end of May. (I) Develop a written proposal (5 pages or less) describing the research to be carried out by the end of the spring of the second year (the "Research Project") and its importance, Have the proposal approved by the committee and submit it to the Graduate Advisor by the end of May, together with a completed *Committee Agreement Form*. (D, O, R)

Begin research by the beginning of summer semester. (D, O)

Performance in courses, research and (if relevant) teaching assistant duties (see B.3 below) will be evaluated. Course performance is documented by a rubric-based evaluation form in addition to letter grades. Research progress is documented by the Graduate Research Committee Meeting Progress Form that is completed after each meeting of the student's supervisory Research Committee. (H)

Pass English Proficiency exam by beginning of second year (non-native English speakers). (X)

2. Second Year

Meet with the Graduate Advisor at the beginning of the fall semester to make sure the student is comfortable with the chosen Research Advisor and that the Research Project is progressing.

Take courses that count towards meeting the required course minimum (unless exempted); each of these courses must be passed with a grade of B- or better. (K)

Take additional courses and seminars to complete 9 semester hours of registration each Fall and Spring term and 3 semester hours each summer term if employed). (K)

Regularly attend one of the two primary research seminars (AST 390F or AST 390G) every semester. Give at least one oral presentation at a research seminar once a year. During the second year this requirement is met by the research presentation in the spring semester. (L)

Hold a meeting of the Research Committee in the fall of the second year; such meetings may be scheduled during a specified block of time late in the semester.

In preparation for the Second Year Research Assessment, prepare a written Research Report describing the research carried out in the first two years of the program. Submit the report to the Research Committee for review at least 3 weeks before the scheduled Research Presentation (below). Submit the approved report to the Graduate Advisor at least one week before the Presentation. If you have completed a peer-reviewed paper that is in print, in press, submitted, or in the form of a substantial draft, you may submit that in lieu of a report; in fact, this is **strongly preferred**. (D, O)

Give a Research Presentation – a full (50-minute) seminar – during the spring of the second year. This public presentation is followed by a closed-door oral exam of up to approximately one hour based on the student's Research Project and relevant research context. At the end of the oral exam, the examining panel completes a rubric-based Research Evaluation form on the student's seminar, oral exam, and their progression in research over the full two years in the program. (H, P, O)

The GSEC utilizes the Course Evaluations to assess the student's mastery of the physics of astrophysics (general knowledge); and the Research Meeting Progress forms and Research Evaluation form to assess the student's research achievements and potential. Based on the overall record, the GSEC makes a holistic Second Year Assessment regarding the student's future in the UT Astronomy Program. There are four possible outcomes: "Full Pass", "Terminal Pass", "Re-Examine" or "Fail." (H, P, O)

If the outcome of the Second-Year Assessment is "Full Pass," apply for PhD candidacy by the end of fall semester of the third year by following the steps in section Q.

Submit a paper based on your research to a refereed journal for publication as soon as possible, ideally by August 15 of your second year. If your goal is to have a successful career in research, it is desirable to publish at least one refereed paper per year.

If the outcome of the Second Year Assessment is "Full Pass" or "Terminal Pass" and you decide to apply for the **optional** MA degree, please follow the guidelines in section C. In particular, we strongly recommend that you produce a Master's thesis primarily based on the refereed paper you submit for publication, rather than writing a Master's thesis from scratch (C). Both receipt of a Master's degree or advancement to PhD candidacy require completion of the nine required courses with satisfactory grades and GPA.

If the outcome of the Second Year Assessment is "Re-Examine," the Research Presentation and research-based oral exam or only the latter), is to be scheduled within three months of the initial presentation (by the end of the summer term).

If there is significant disagreement regarding the outcome between the Research Committee and the GSEC, or among members of one of these panels, the case may be taken up for discussion and reconsideration by the full GSC.

3. Third and Subsequent Years (for students pursuing the PhD degree)

By the end of the fall semester of the third year, you should apply for PhD candidacy via the following steps. Select a PhD advisor and constitute a Dissertation Committee that includes an external (to the UT Astronomy program) member. Prepare a Dissertation proposal of 5 pages or less that meets with the approval of all members of the Dissertation Committee, and submit it to the Graduate Advisor. (Q, R, S)

Official advancement to PhD candidacy requires completion of an online form to be submitted to the Graduate School, who will review the qualifications of the proposed external member and obtain endorsements of the appropriate faculty officials. The Graduate School will notify you and officers of the graduate program when you have been approved for advancement to candidacy.

Meet with the Graduate Advisor at the beginning of the fall semester to make sure the student is comfortable with the chosen PhD Advisor and that the Dissertation Research Project is progressing.

Take dissertation classes (AST x99W, where x may be 3, 6, or 9 depending on the situation). If x<9, the remaining hours will be seminar, organized courses and/or AST 391. (J, K, L, M)

Regularly attend one of the two primary research seminars (AST 390F or AST 390G) every semester. Give at least one oral presentation at a research seminar once a year. (L) These may count towards the requirement of giving the equivalent of two 50-minute scientific talks as colloquia or seminars before applying for PhD graduation. (L)

Serve as a Graduate Teaching Assistant (T.A.) for a minimum of two semesters during their time in the Ph.D. program. Exceptions can be made to waive one semester in specific cases (e.g., students who are on an external fellowship for their final three years or whose research requires residency outside the Austin area).

Continue to submit papers for publication in peer-reviewed journals.

Follow the requirements for committee meetings outlined in section I.

The GSEC will review your progress and status if you have not completed your PhD by the end of two years from your initial admission to PhD candidacy, and again after every subsequent year. (Q) Furthermore, tuition will increase dramatically after 99 doctoral hours. (The Graduate Coordinator can give you information on how many doctoral hours you have accumulated). (A, N)

4. Upon Completion of Dissertation Research

Submit a complete draft of the dissertation to the Dissertation Committee (T).

Oral Examination: Defense of Dissertation. (T)

Upload the final draft of the dissertation, approved by the Dissertation Committee, to the Graduate School. (D, T). You now have achieved your goal of earning a Ph.D.!

C. Requirements and Application Process for the MA Degree

1. Students who pass their Second Year Assessment with an outcome of "Terminal Pass" or "Full Pass" are eligible to apply for the optional MA degree. (Q)

Students with a "Full Pass" are also eligible to pursue admission to PhD candidacy. We strongly recommend that after passing the Second Year Assessment, students first focus on the following key steps:

- a) Apply for PhD candidacy by the fall of the second year by following the steps in section Q. This includes setting up a Dissertation Committee and developing a Dissertation proposal. (D, Q)
- b) Submit a paper based on the initial Research Project to a refereed journal for publication as soon as is feasible.

After completing (a) and (b), a student can apply for the optional MA degree by producing a Master's thesis primarily based on the submitted paper rather than writing a Master's thesis from scratch.

In contrast, students with a "Terminal Pass" are not eligible to pursue admission to PhD Candidacy. They may find it beneficial to apply for the optional MA degree before they leave the graduate program.

- 2. If an eligible student wishes to obtain a Master's Degree, we recommend that it be completed within three calendar years of entry to the astronomy program, while bearing in mind the priorities outlined in (1). In case of a "Terminal Pass" on the second-year qualifying exam, the student should complete all requirements for the MA degree by the last class day of the following fall semester. In rare and exceptional cases, modification of this timeline may be granted if the GSEC considers and approves a petition from a student requesting an extension.
- 3. Students applying for the MA degree must satisfy the following requirements:
 - a) Spend at least two semesters, or the equivalent, in residence as a full-time student and complete the major portion of the degree program at the University of Texas at Austin. (K) (Note that this sets a limit on how many courses can be waived due to transferred credits from another institution.)
 - b) Satisfy the requirements in section K and complete the nine required courses for the MA degree with a grade of B- or better. (K)
 - c) Maintain a 3.0 (B) or better Grade Point Average for all on-campus graduate-level or upper-division courses taken while a graduate student, excluding thesis or report

courses. Credit-noncredit (CR/NC) courses are not counted in determining the grade average. In addition, a 3.0 average (B or higher) or better must be maintained for courses counted towards the degree if different from the preceding set of courses, both those in astronomy (excluding thesis) and in other departments. (K)

- d) Regularly attend one of the primary graduate seminars (AST 390F or 390G) every semester and give one oral presentation at a research seminar each year. (L)
- e) Follow the requirements for committee meetings outlined in section I.
- f) Meet the deadlines for the second-year Research Proposal in the first year (B, R)
- g) Give a Research Presentation in the spring of the second year, and pass the Second Year Assessment process with an outcome of "Terminal Pass" or "Full Pass."
- 4. You may elect to turn your early research into a thesis project. In this case, you must register for AST 698 A and B (Thesis) to obtain an MA with thesis degree. You may take longer than 12 months to finish the thesis but the timing of the Research Presentation and Second Year Assessment are unchanged. If the thesis is not completed by the end of the second semester, you will continue to register for AST 698B until the thesis is completed. Make sure you are registered for the appropriate final semester course!
- 5 When applying for an MA degree, please note the following:
 - a) The Master's application affords the Graduate Dean the opportunity for detailed examination of your record, for maintaining Graduate School standards, and for enforcement of Graduate School regulations. A correct and proper application will prevent delays and additional effort.
 - b) The format for a thesis submitted to the Graduate School for the MA degree is explained in instructions that are obtained from your Graduate Coordinator or from the Graduate School webpages. You will need the approval of your committee to certify that the thesis is acceptable.
 - c) When your MA thesis is approved by your committee, you will submit it to the Graduate School along with other supporting information.

D. Requirements and Application Process for the PhD Degree

The expectations for a PhD in Astronomy from the University of Texas at Austin (UT) are that you will fulfill the academic and course requirements of the program, and create a substantive body of work consisting of publications based on original research conducted while in the graduate program of the Department of Astronomy at UT. Students should work with their committees to craft a dissertation proposal which will satisfy the requirements. A typical substantive body of work would consist of at least 3 first-author scientific papers in relevant peer-reviewed journals, with most students having 3-5 such papers. We acknowledge that not all PhD theses are alike, and thus

exceptions and substitutions can be made if approved by the student's Dissertation Committee and the Graduate Studies Executive Committee (GSEC). Examples of qualifying alternate contributions that may replace a subset of the first-author scientific papers, given required approvals, include first-author papers on instrumentation in venues such as SPIE Proceedings, or research tools or analysis techniques including those associated with releases of scientific software.

Students working toward the PhD degree are expected to satisfy the requirements below:

- Students must spend at least two semesters, or the equivalent, in residence as a fulltime student and complete the major portion of the degree program at the University of Texas at Austin. (K) (This is why the number of transferred courses for credit is limited.)
- 2 Students must follow the requirements in section K and complete the nine required courses for the PhD degree with a grade of B- or better. If a course is not passed with a grade of B- or better, it will not count toward the requirement of nine courses. (K)
- 3. Students must maintain a Grade Point Average (GPA) of 3.0 or better for all on-campus graduate- level or upper-division courses taken as a graduate student excluding dissertation and thesis courses. Credit-noncredit (CR/NC) courses are not counted in determining the GPA. (K)
- 4. Students must meet the deadlines for their second-year Research Proposal: Select a Research Advisor and form a Research Committee by March 1. Hold a meeting of this Committee and develop a written Research Proposal (5 pages or less) describing the research to be carried out and its importance during March May. A Research Proposal that has been approved by the Committee is due to the Graduate Advisor by the end of May of the first year. Failure to meet this deadline (unless a petition for an extension has been approved by the Graduate Advisor) will be considered a lack of progress, possibly subjecting the student to dismissal from the program (Z). The proposal should describe the importance and methodology of the project and give a timeline of expected progress milestones. R)
- 5. Students must follow the requirements for committee meetings outlined in section I.
- 6. Students must write the Research Report for their initial Research Project and send it to the Research Committee at least three weeks before the oral exam; the report should be approved by the Research Committee and submitted to the Graduate Advisor no later than a week before the scheduled Research Presentation and oral exam, which should take place before the end of May. Instead of the report, it is strongly preferred, if available, that students submit a peer-reviewed paper that is in print, in press, submitted, or in the form of a substantial draft. (P)
- 7. A holistic Second Year Assessment is made by the GSEC by considering the overall record of the student in terms of basic astrophysical knowledge (based on grades and the Course Evaluations) and research (based on the Committee Progress Reports, the

- Research Presentation and oral exam). The possible outcomes are: "Full Pass", "Terminal Pass", "Re-Examine" or "Fail". (P, O)
- 8. Students who are assigned an outcome of "Full Pass" are eligible to pursue admission to PhD candidacy and should do so by the fall of the third year. (Q)
- 9. Upon becoming a candidate for the PhD degree, student must register for the dissertation course (AST399W, 699W, or AST999W). (Q)
- 10. In the ensuing years leading to their final oral examination (defense of dissertation) students are expected to make significant progress on their Dissertation Project and to have regular committee meetings as outlined in section I.
- 11. Students must regularly attend one of the primary Graduate Seminars (AST 390F or 390G) every semester and give one oral presentation at a research seminar each year. Before applying for PhD graduation, they must present the equivalent of two 50-minute scientific talks as colloquia or seminars. (L)
- 12. Students must fulfill the two-semester minimum Teaching Assistant requirement (B, F) during their time in the program.
- 13. Students must provide their Dissertation Committee with a <u>complete</u> draft of the dissertation <u>no less than two weeks</u> before the signatures of committee members are requested on the form scheduling the final oral examination (Request for Final Oral Examination form). The final complete draft must be submitted to each committee member <u>no less than four weeks</u> prior to the date on which students intend to defend the dissertation. (T)
- 14. Student must pass the final oral examination (defense of dissertation) in order to be eligible for the PhD degree (T)
- 15. After passing the final oral examination, student must upload to the Graduate School a final draft of the dissertation incorporating any revisions required by the committee and bearing the approval signatures of committee members (Report of Dissertation Committee form). (T)
- 16. The Graduate Dean suggests that all PhD students obtain their degree within three calendar years of becoming a candidate. Additional time will be allowed only if the Graduate Studies Committee recommends with justification such an extension. This process may be repeated annually, but each time the committee must address the questions of possible termination of candidacy or conditions for continuation. (T)
- 17. All graduate students must pay out-of-state tuition rates after they have accumulated 99 doctoral hours (see definition of 99-hour rule and doctoral hours in section A). You can check with the Graduate Coordinator to track the number of doctoral hours you have accumulated. (A, L)

E. Flexibility in a Graduate Student's Program

- 1. You may petition for an exception to or modification of any departmental regulation. In particular, you may petition to replace an organized course with a course taken at another institution or in another department. You may also petition to take a class by examination. The petition is presented to the Graduate Advisor for consideration and decision by the GSEC. You should discuss the matter first with the Graduate Advisor. A similar procedure exists for petitions to the Graduate Dean concerning Graduate School regulations (which are routed through the Graduate Advisor).
- 2. In exceptional cases, you may wish to pursue an interdisciplinary PhD program. This must be approved by the Graduate Dean, and will be supervised and administered by an interdisciplinary faculty committee appointed by the Dean. Until such a committee is appointed, you will be advised by the Graduate Advisor.
- 3. The Graduate Dean will approve an interdisciplinary PhD program only if strong and compelling reasons are presented for such a program, as distinct from a program in an established graduate studies area. The Graduate Advisor will assist you if you wish to pursue such a program with the mechanics of obtaining the Dean's approval. Guidelines and an application for such programs may be obtained from the Graduate School.
- 4. The College of Natural Sciences has the following academic accommodation policy for graduate student parents: "In the cases of childbirth or adoption, graduate students in the College of Natural Sciences are allowed a one-semester extension in the completion of academic responsibilities required for their degree. Academic responsibilities include coursework, qualifying exams, committee meetings, presentations, or any other required academic milestones. These responsibilities may be postponed either during or immediately following the semester in which the student's child is born or adopted. "
 - The GSC chair acts as the Astronomy department's contact for graduate parental academic accommodation policy. Graduate students should inform their supervising professor, departmental contact, and graduate advisor of their need for the academic accommodation at least one month prior to the start of the semester during which the accommodation is needed.
- 5. Students who have earned a "Full Pass" in the Second Year Assessment may wish to pursue the subsequent PhD research in a department other than Astronomy (but see point 3 above for the option of an interdisciplinary PhD program). In exceptional circumstances, a student can petition the GSEC to consider such an arrangement with another UT department. If approved, the GSEC will decide on the boundary conditions in accordance with the policies of both departments and the Graduate School.

F. Teaching Opportunities

1. You may be appointed as a Teaching Assistant (TA) or an Assistant Instructor (AI). The primary functional difference between a TA and an AI is that, with GSC and UGSCOM approval, Ais may conduct regular classroom instruction. Appointment to the AI job title does not guarantee that you will be assigned to teach a class. Two other steps are required: a) On behalf of the GSC, the Graduate Advisor must certify that you are formally qualified for AI status; b) the UGSCOM must determine that you are qualified to teach and then select you to teach a particular class. Class size for courses taught be Ais shall be limited to 50 students in the absence of special permission by the UGSCOM.

All astronomy graduate students must serve as a Graduate Teaching Assistant (T.A.) for a minimum of two semesters while in the Ph.D. program. Exceptions can be made to waive one semester in specific cases (e.g., students on an external fellowship for their final three years or whose research requires residency outside the Austin area).

T.A. Workloads for Undergraduate Astronomy Courses: (approved by the Astronomy GSC and the College of Natural Sciences in 2019)

- Attend class meetings as needed, up to 3 hours per week.
- Approximately 4 outside-of-class student contact hours per week, including help sessions and office hours.
- Approximately 2 hours of course management tasks, including managing the class website and gradebook on Canvas, sending announcements, and answering student email queries.
- Approximately 4 hours of grading student work, including essays, papers, in- class activities, group projects, quizzes, and exams; duplicating materials; and interacting with the Disability and Access Center (formerly SSD, Services for Students with Disabilities).
- Adjustments may be made to the above amounts and distributions of effort depending on considerations such as course design, class size, laboratory components, and requirements for courses with flags (QR, writing, etc.).
- Total hours up to 20 per week, but actual time spent in a particular week may vary depending on that week's assignment load for the undergraduates enrolled in the course.
- 2. <u>TA for Signature Courses</u>: Being a TA for a signature course provides a valuable teaching experience and is useful in developing credentials for faculty positions at institutions where teaching experience is necessary. In addition to class time, office hours and grading, the TA duties for the signature courses also include attending mandatory training sessions required by the College, holding one or several discussion sections each week, developing class exercises for the discussion sections, and sometimes grading essays to fulfill the writing component flag.

Only students who meet the eligibility requirements set by the College and of the instructor teaching the course may be assigned as a signature TA. The requirements may

involve past teaching experience and English skills required to lead discussion sections and grade essays.

Given that the TA workload for many signature courses is significantly higher than that of non-signature courses, students may request not to be assigned to signature courses in two successive semesters. Attempts will be made to accommodate these requests, but this may not always be possible, given the multiple constraints involved in TA assignments.

- 3. Eligibility Criteria to Become a Teaching AI:
 - a) Obtain the certification of the Graduate Advisor that you:
 - Satisfy the formal University criteria to be an AI:
 - 1) Have a Master's Degree or equivalent
 - 2) Have credit for 398T (AST398T or an equivalent such as PHY398T)
 - 3) Have one semester as a TA or have one year of teaching experience at an accredited institution
 - Have the support of your academic advisor to become a teaching AI
 - Be in "good standing" in the sense of meeting deadlines for committee meetings and progress through the astronomy program.
 - b) Obtain the certification of UGSCOM that you have appropriate teaching credentials.

Among the prerequisites to teach are:

- Excellent 398T and TA evaluations
- Excellent spoken and written English
- Broad TA experience (i.e. have worked for more than just one instructor; duties broader than only having graded papers/exams)
- Strong general record of performance at UT (academic coursework and research progress)
- Good knowledge of astronomy
- 4. Application process to become a Teaching AI:
 - a) Send a formal request to the Graduate Advisor by submitting the AI application (available from the Student Office) and a brief statement of purpose. The statement of purpose should include a course description and preliminary syllabus as well as the name of a faculty supervisor and a supervision plan. This statement should be submitted at the beginning of the long semester that precedes the semester in which you want to be a teaching AI (beginning of fall for the spring semester, beginning of spring for the fall semester).
 - b) The Graduate Advisor (in consultation, if necessary, with other members of the GSC) will approve those requests that seem appropriate as part of the student's graduate school endeavors and pass these on to the UGSCOM.
 - c) The UGSCOM Executive Committee will evaluate the qualifications of the candidate using the criteria presented in Section 3 and other appropriate standards and will decide

how many and which Ais to recommend to teach classes on the basis of departmental and undergraduate student needs each semester.

d) These recommendations will be given to the Department Chair, who will make the final decision.

G. Advising and Supervising a Graduate Student

- 1. Until you become a candidate for the PhD degree, you are advised by your Research Advisor, Research Committee (R), and the Graduate Advisor. In particular:
 - a) The Research Advisor can provide advice on the choice of courses to take. If you do not have an Advisor (typically students in their first semester), the Graduate Advisor can provide advice.
 - b) All aspects of the MA thesis (AST 698A, B) are under the supervision of your Research Committee, chaired by your Research Advisor. The application for MA degree candidacy, however, will be carried out with the assistance of the Graduate Coordinator. (C)
- 2. A PhD candidate's program is under the supervision of the Dissertation Committee, chaired by the Dissertation Advisor, with oversight by the Graduate Advisor and the GSEC. (R, D)

H. Graduate Student Evaluation

- 1. To remain in the Graduate School and earn an MA degree or continue for a PhD, you must maintain at least a 3.0 Grade Point Average (GPA) for all on-campus graduate-level or upper-division courses taken as a graduate student, excluding dissertation, thesis or report courses. Credit-noncredit (CR/NC) courses are not counted in determining the GPA. If you fail to maintain at least a 3.0 GPA during any semester, the Graduate Dean will warn you that your status in the Graduate School is in jeopardy and you will not be eligible for academic employment the following semester (i.e., you will lose financial support for a full semester). Failure to achieve an overall GPA of 3.0 by the following semester or session (with the restriction that you are not allowed to drop a course or to withdraw from the University during that semester or session) will lead to dismissal by the Graduate Dean. A reprieve may be granted if the GSC recommends continuation. (K)
- 2. Coursework will be used to track and assess a student's knowledge of the physics of astrophysics. Letter grades will be supplemented by rubric-based evaluations completed by the instructor of each astronomy graduate course taken by a student. These should be cumulative assessments based on overall performance in the course, including such

- items as homework, projects, presentations, exams, and oral exams (which are encouraged) if given. Students will receive copies of these evaluations.
- 3. The GSEC will review coursework evaluations at the end of each semester to assess whether early corrective actions, such as providing supplemental support and resources, should be taken in order to ensure the best outcome for the student. These evaluations, which will include strengths and mitigating factors, will serve as additional indicators of basic astrophysics knowledge for the Second-Year Assessment, beyond grades.
- 4. You will be evaluated on your research progress during periodic meetings of your Research Committee. Follow the guidelines in section I to schedule committee meetings at the required frequency and provide your committee well ahead of the committee meeting with all relevant material. (I) In the first two years, your level of performance in research, coursework, and other activities is reviewed by your Research Committee and the GSEC. The evaluation of first- and second-year students is comprehensive (course work, assistantship, etc.), but normally emphasizes research progress, particularly for second-year students. You must pass the Second Year Assessment with an outcome of "Full Pass" in order to pursue admission to PhD candidacy. This holistic and comprehensive evaluation is based on both research and coursework, but greater weight is given to research. (D, P, Q)
- 5. Once students are admitted to PhD candidacy, their progress in research will be monitored through regular committee meetings by the Dissertation Committee, which will report assessment of progress to the Graduate Advisor, through submitting committee reports to the Graduate Coordinator. (I, R)

I. Committee Meetings and Evaluation Forms

Committee meetings enable Research/Dissertation Committees to assess the progress of students and provide them with feedback and guidance. The Graduate Research Committee Meeting Progress Report form serves several important purposes. It is used to assess the standing of all students in the graduate program and their eligibility for awards, prizes, and nominations for fellowships. It is used to identify and help students facing difficulties in a timely manner, and for renewals of PhD Candidacy. It is also used as a metric for assessing our graduate program as mandated by the University's Office of Institutional Accreditation and Program Assessment.

In order to remain in good standing, students must schedule their committee meetings at the requisite frequency and add their signatures to the completed Research Committee Meeting Progress reports after reviewing them with their Advisor and the Chair of the oral examination panel (who is a GSEC member). We require committee meetings to be scheduled at a frequency that depends on the student's stage in the graduate program, as follows:

- a) <u>First-Year Students</u> are required to form a Research Committee by the end of March of their first year, and to hold a meeting with the Committee during the March May period, at which they can discuss and receive advice on the design of their initial Research Project. They must then submit a Committee-approved written Research Proposal of 5 pages or less to the Graduate Advisor by the end of May.
- b) <u>Students in their Second Year and Beyond</u> must schedule a mandatory committee meeting **in the Fall semester** of each year. When the committee completes the Graduate Research Committee Progress Report form at the end of each such meeting, they may indicate that an additional committee meeting be held in the spring of that academic year as opposed to waiting until the following fall semester.
 - The purpose of this second optional Spring committee meeting is to provide additional guidance for students who are facing challenges or who are making changes to their research plan based on evolving research interests or contexts (such as new developments in their field or new directions based on their research results).
- 3. **At least one week before their committee meeting**, students must do the following:
 - a) Fill in the first part of the Progress Report form to indicate their presentations, publications, other professional contributions (such as teaching, mentoring, outreach, and other service) and, crucially, their research **goals and timeline.** Send this form to all members of their Research or Dissertation Committee.
 - b) Send the Committee a short (less than 4 pages) report, approved by their Advisor, Committee summarizing their progress. Drafts of papers in preparation or recently submitted publications should also be sent, if appropriate.
- 4. The student should plan to address their progress since the previous meeting primarily through informal discussion of the written report (3b above). They may prepare a brief power point presentation (e.g. 10 slides or fewer), but this review should be limited to a small fraction of an hour: committee meetings are more productive if they emphasize discussion rather than a formal presentation. NOTE: If a student is scheduled to give a talk in one of the seminar series, they should inform all Committee members well in advance of the scheduled date and encourage them to attend if possible. (L) (This helps ensure that committee members remain up to date on the student's progress.)
- 5. Towards the end of the committee meeting, the student's Advisor will leave the meeting for few minutes, to provide an opportunity for the student to talk to the other members of the Committee without the Advisor being present.
- 6. During the last approximately 20 minutes of the committee meeting, the committee members should reach a consensus and jointly complete the second part of the progress report, which assesses the student's progress and outlines future expectations. The Committee should be sure to answer questions (2, 3) and (2, 4) on whether the overall

- progress is satisfactory and whether an additional committee meeting should be held the following spring.
- 7. The Advisor should separately meet with the student and discuss the completed report, which both should sign. The student should email the signed progress report form to the Graduate Coordinator no later than one week after the meeting. If the Graduate Coordinator has not received the report within a week after the committee meeting, they will request that the student work with the Research/Dissertation Advisor and Graduate Advisor to ensure a prompt resolution.
- 8. A copy of the finalized Committee Meeting Progress Report should be circulated to all members of the Committee, including the outside member if there is one. (R)
- 9. If a committee decides progress is unsatisfactory (question 2, 3 on the form) in a regular Fall meeting, a follow-up committee meeting in the subsequent spring semester is mandatory. The advisor and committee will work with the student to develop a plan to reach the target benchmarks and help the student access any resources deemed necessary. If the overall progress has not improved in the spring, the student has a final opportunity to make satisfactory progress by the next fall. If the student has still not met appropriate progress benchmarks, the GSEC will consider termination of the student's tenure in the program, in close communication with the student's Advisor and Committee, and possibly in consultation with the full GSC.

J. General Explanation of Course Terms

There are three general kinds of courses referred to herein: organized courses, seminar courses, and individual instruction courses.

- 1. Organized courses meet in a classroom, cover specific subject matter, have regular assignments, and generally consist of lectures or other class activities. (K)
- 2. Seminars meet weekly, need not have regular assignments, and often consist of lectures by faculty, research scientists, visiting experts, and students. (L)
- 3. Individual Instruction courses have no regular meeting times. These include supervision during the MA (AST 698A/B) and PhD (x99R/W) period. The teacher of these courses will explain the time and manner of interaction. (M)

K. Required Courses for the MA or PhD Degree

1. Astronomy graduate courses taught by the department are listed under categories A through D. Courses in categories A through C are typically offered at least once every

two years and may be taught by different faculty in different years. Courses in category D are more specialized and are typically offered at intervals longer than two years.

Students working toward the MA or PhD degree are required to take nine courses for a grade. In this document, we refer to these courses as the "nine required courses for the MA or Ph degree." (These constitute the student's "Program of Work," a UT term.)

- a) Of these nine required courses, seven must be drawn from categories A to C.
- b) The remaining two courses can be drawn from categories A to D, or may be elective graduate courses in Astronomy or related areas (e.g., Physics, Computer Science, Computational Engineering and Sciences, Statistics and Data Science, Aerospace Engineering, or Geosciences), with the stipulation that courses outside Astronomy require approval of the Graduate Advisor and your Research Advisor.
- c) Students are encouraged to work with their Research Advisor to determine which courses will best fit their research interests.

AST 381 is a generic label used for new or rarely taught courses)

A. Fundamental Astrophysics

AST 380E/Radiative Processes and Radiative Transfer

AST 381C/Gravitational Dynamics

AST 382C/Astrophysical Gas Dynamics

B. Astronomy Main Subfields

AST 383C/Stellar Atmospheres

AST 383D/Stellar Structure and Evolution

AST 386C/Properties of Galaxies

AST 392J/Astronomical Instrumentation

AST 393F/Survey of the ISM

AST 394F/Formation of Galaxies and Large-Scale Structure (previously was AST 381*)

AST 394P/Planetary Astrophysics

AST 396C/Elements of Cosmology

C. Applied Methods

AST 382D/Astronomical Data Analysis

AST 384C/Computational Astrophysics (previously was AST 381*)

D. Specialized Topics

AST 381/Star Formation (will be renamed in the future)

AST 381/Physics of Compact Objects

AST 381/High Energy Astrophysics

AST 383/Nucleosynthesis

AST 383/Asteroseismology

AST 392D/Mathematical Methods for Astronomy

AST 392D/Order-of-Magnitude Astrophysics (currently taught as 392D, will be renamed)

AST 394H/High-Redshift Galaxies (previously was AST 381*) AST 398T/Supervised Teaching in Astronomy

- 2. You must pass each of the nine required courses for the MA or PhD degree with a grade of B- or better to become a PhD candidate. You may petition to replace a required course with a course taken at another institution or in another department, or to take a course by examination. See E.1 for more information.
- 3. Supervised Teaching in Astronomy (AST 398T) is required before you may apply for an Assistant Instructor position and is highly recommended if you are planning a career that includes teaching. Since it is offered infrequently within the Astronomy department, you may take 398T for credit in another department (e.g. Physics).
- 4. During their first year, students are required to attend the Seminar for First-Year Astronomy Graduate Students that may be led by the Graduate Advisor(s) if the seminar is offered. (L)
- 5. Courses taken in other departments on a CR/NC basis can be counted as elective courses, but do not count toward the nine required courses for the MA or PhD degree.
- 6. As preparation for your initial registration, you should examine your background in physics and in astronomy in detail to determine the degree of preparation for the required courses. If such background seems to be deficient, you are advised to remove such deficiencies by self-study or by taking undergraduate courses.
- 7. AST 391 is an organized course that covers individual Research Projects or assistantships but involves regular meetings with a GSC member who may or may not be your Advisor. Such courses are credit-noncredit (CR/NC) and are not counted in computing grade averages. AST 391 does not count towards the nine required courses for an MA or PhD.
- 8. If you wish to take courses outside of the department that are unrelated to your degree, you may do so with the permission of your Advisor and the Graduate Advisor.

L. Seminar Courses and Oral Presentations

- 1. <u>Seminar for First-Year Astronomy Graduate Students</u>: During their first year, students are required to attend the Seminar for First-Year Astronomy Graduate Students if the seminar is offered. This seminar currently focuses on navigating graduate school in Astronomy at UT, including professional expectations and practices, useful skills, and career planning. It meets once per week and is not taken for credit or a grade.
- 2. Graduate students are **strongly encouraged** to attend <u>Departmental Colloquia</u>, which are held in the Astronomy Classroom (PMA 15.216B) on Tuesdays from 3:30 4:30 PM. These talks are usually delivered by external speakers who are invited to present new

and exciting developments in their fields. Students may suggest potential speakers to the Colloquium organizer (a faculty member). A reception (with free cookies and drinks) is held from 3:00-3:30 PM before each colloquium, and the speaker accompanies a group of graduate students for lunch on Colloquium days; in some cases they may also attend dinners with the colloquium speaker (these events are limited in the number of attendees but enthusiastic students can usually access some events).

3. Research Seminars: The Department and McDonald Observatory is organized into five research groups: Extragalactic Astronomy, Interstellar Medium, Planetary Systems, Stars, and Theory. Every member of the department, including graduate students, can choose to be affiliated with one or two of these groups. Currently (as of 2020) there are two "primary" Graduate Research Seminars that meet weekly and combine sets of research groups that have significant overlap. These two seminars are formal courses in which students may register. They are:

AST 390G: Galaxies and Cosmology Seminar (meets Mondays, 12 noon – 1 PM) AST 390F: Stars, Planets, and Interstellar Matter Seminar (Wednesdays, 12-1)

Additionally, there is a Cosmos Seminar, held on Thursdays at the time corresponding to colloquia on Thursdays (3:30 – 4:30 PM). The Cosmos seminar features interdisciplinary talks and serves as an alternative slot for special colloquia that cannot be scheduled on a Tuesday. Because the Cosmos Seminar meets only intermittently, it does not satisfy the seminar requirement as AST 390F and 390G do. However, the Cosmos Seminar can be used by graduate students as an alternative opportunity to give required seminar presentations (see next item).

- 4. Students are required to give an oral presentation at a research seminar once a year.
- 5. Students are required to regularly attend either AST 390G or 390F each semester. In some cases, they may also be registered for credit for these courses, which are graded on a CR/NCR basis only. However, students must attend one of these seminar series regardless of whether they are registered. This is typically the seminar in which students choose to give their annual required oral presentation.
- 6. Before applying for PhD graduation, students must present the equivalent of two 50-minute scientific talks as colloquia or seminars. (D)
- 7. Students who take a research seminar for course credit will receive course credit if they meet the course requirements set by the instructor and attend the seminar regularly, except for absences cleared in advance by the instructor. Valid reasons for absences include research-related travel such as conferences and observing runs, as well as arrangements for the student to attend another seminar more closely related to their research interests.
- 8. Since they are graded only on a CR/NCR basis, research seminars taken for course credit are not counted in computing the GPA.

M. Individual Instruction Courses

1. These courses include dissertation (ASTx99W), thesis (AST 698 A and B, with A being the first registration and B all subsequent registrations, and conference courses (AST 385 and 391). Individual Instruction Courses are CR/NC courses. AST 385 is a CR/NC course unless the student has made arrangements for a special project on a letter grade basis. AST 391 is generally taken once you have obtained an MA but have not yet been admitted to PhD candidacy. Except when AST 385 is taken for a letter grade, these courses are not counted in computing grade averages, and when more than one registration is involved, the grade "in progress" is recorded until the last registration, when a grade is given for the last 398R (if applicable), 698A and the last 698B, and X99W.

N. Registration

- 1. Detailed instructions for registration are given in the course schedule. The Graduate Coordinator will assist you with registration. A few of the general features of these procedures are worth noting.
- 2. <u>Full-time</u> students <u>in residence</u> and <u>classified as paying state resident tuition</u> must register for 9 semester hours for the fall and spring terms of the first two years. You must register for 9 semester hours thereafter and for three semester hours for summer terms. <u>Full-time</u> students <u>in residence</u> and <u>classified as paying state nonresident tuition</u>, or <u>part-time</u> students <u>in or not in residence</u> may, with the Graduate Advisor's permission, register for fewer semester hours, but <u>not less than three</u>.

Students registered for less than 9 hours are considered part-time and may not work for the department as a Teaching or Graduate Research Assistant. Students working twenty or more hours a week for the university (e.g. as research or teaching assistants) are classified as residents until they have accumulated 99 doctoral hours. After 99 doctoral hours, students are subject to non-resident classification for tuition purposes, even if employed by the department. Other, complex, legal criteria for resident status, and procedures for changing from nonresident to resident status are discussed in Appendix A of the University Catalogue: General Information.

- 3. The Graduate School requires that MA or PhD candidates register each semester until they have obtained their degree. In particular, you must be registered the semester or session in which you receive your degree. (C, D)
- 4. Graduate-level courses (other than individual instruction) with enrollments less than five require special permission. Since last-minute cancellation of a course involves great inconvenience to students and faculty, you <u>must</u> pre-register, which involves selecting

- your courses. Consult the Graduate Coordinator for details about pre-registration and registration.
- 5. Your Advisor can provide advice about selection of courses to take. If the student does not have a Research Advisor (typically students in their first semester), the Graduate Advisor can provide this advice. (G, K)
- 6. General guidelines for scheduling course registration in a student's program are
 - a) Removal of deficiencies first year; (K)
 - b) Required courses first two years or as soon as possible; (K)
 - c) Required conference course first year; (L)
 - d) Seminar courses (L)
- 7. Astronomy graduate-course descriptions listed in the Graduate School Catalogue or in the course schedule are brief. More complete course descriptions may be available from the Graduate Advisor or Coordinator.

O. Starting Research

- 1. Research is an essential part of the graduate education. You should begin research as soon as possible, consistent with your course work. Work on a Research Project should begin no later than the spring of the first year. It is often desirable to begin sooner, perhaps in the first semester, but the research must be balanced against the need to achieve excellence in course work.
- 2. Research is normally accomplished under the supervision of a member of the GSC as defined in § A. Research Scientists may also supervise research, but the official Advisor must be a GSC member, with the Research Scientist serving as Co-advisor.
 - The choice of Advisor for these projects is of paramount importance to your career. You will need strong letters of recommendation from the advisor to obtain employment. It is common for advisors to be asked for letters of recommendation many times through the course of an ex-student's career. In addition to the field of research of the advisor, you should consider factors that may affect your ability to work with the advisor in a productive way. (R) (Note that it is possible to change advisors and committees later.)
- 3. The choice of research is coupled to, but not identical to, the issue of support. Some advisors will be able to support their students with research assistantships. In other cases, you will have to be a teaching assistant or a research assistant for someone other than your advisor. The latter case provides an opportunity to broaden the student's research background and potential employment options, but it may also be more demanding of time. Such arrangements should be discussed with your Advisor. (U)
- 4. During the first year, you will make a choice of a field of research and begin research. In early Spring of your first year, you must choose a Research Advisor, form a Research

- Committee and develop a written proposal (5 pages or less) of research to be carried out during the Research Project. This proposal must be approved by your Research Committee and submitted to the Graduate Advisor by the end of May, R)
- 5. Research during the first two years is supervised by the Research Committee. (R)
 Your progress on research will be evaluated during committee meetings. Follow section
 H to schedule committee meetings at the required frequency. (H)
- 6. Schedule your Research Presentation and accompanying closed-door oral exam on your research during the Spring Semester of your second year (no later than late May). If your Research Committee does not include a GSEC member or the GSEC member is the Research Advisor, arrange for a GSEC member to participate in the oral examination.
- 7. The report from the Research Committee, performance in the Research Presentation, oral exam, and overall research progress will be considered as part of your holistic Second Year Assessment by the GSEC. Previous Research Committee Progress Reports (from the two previous meetings) will also be considered, along with coursework performance as assessed by both grades and the Course Evaluations. The outcome of this assessment determines whether you are allowed to pursue admission to PhD candidacy and whether you will be eligible for an optional Master's degree. The possible outcomes are: "Full Pass," "Terminal Pass," "Re-Examine," or "Fail". (P)
- 7. If the outcome of the Second Year Assessment is a Full Pass, you are eligible to pursue admission to PhD candidacy. You should apply for PhD candidacy by the fall of the third year, following the steps in section Q. The first step in this process involves the selection of a Dissertation Advisor and Dissertation Committee, as outlined in section R.
- 8. The PhD dissertation is explicitly recognized to be the sum total of research done by you at UT. Given the need for published papers in the job market, the dissertation should be organized as a series of papers that are published at a rate of about one/year and then bundled into the dissertation format. This fact has been recognized by the Graduate School, which has the following rules for papers with multiple authors: "Dissertations consisting of multiple-authored papers or articles must include a detailed description of the contribution of the dissertator to each. Supervising committee members will sign the signature page only when they are satisfied that the contribution of the dissertator to the multiple-authored papers or articles is sufficient to represent a dissertation."

Much of the time spent turning the traditional dissertation into papers, which often occurs after the student graduates, can be eliminated if this approach is taken seriously by all students and advisors. We recognize that there will be variability in the degree to which Research Projects can be modularized into several paper-length portions, but we still recommend that all advisors and committees devote effort to organizing the research so that such a goal can be met. In general, we recommend that a dissertation comprise at least 3 published or publishable papers. (D, R, S, T)

- 9. Observational research usually requires that the student obtain telescope time. Learning how to write successful observing proposals is an important part of an observational astronomer's education. Students in our program obtain their observations on a wide variety of telescopes, including both ground and space-based telescopes, as well as national and international facilities. Many students obtain time at telescopes that guarantee time to members of the University of Texas department, with the understanding that access to these facilities still requires formal application and acceptance by a telescope allocation committee. These facilities include the optical telescopes at Mt. Locke, Texas and the 10 m Hobby-Eberly Telescope. Proposals for time on these telescopes are usually developed in concert with the Advisor, but students may apply for time on their own. Information about observing at Mt. Locke can be obtained from the McDonald Observatory staff.
- 10. The Department and McDonald Observatory are comprised of five research groups, with the following areas of interest: Extragalactic Astronomy, Interstellar Medium, Planetary Systems, Stars, and Theory (astronomy.utexas.edu/Research/Research Areas). Each student should affiliate with whichever of these groups most closely matches their research interests; it is also possible to be affiliated with (a maximum of) 2 groups. The research groups hold weekly seminars or combined seminars (L) that the student is expected to attend, and manage a small amount of funds. These funds often support research or travel needs of students. There are also small amounts of money for travel available through the graduate school. Students wishing support for conference travel should fill out the online travel funds request form, which will be routed to the approach Research Group Chair(s) and the Graduate Advisor. Students will be considered for all suitable funding. (U)

P. The Research Presentation and the Second Year Assessment

- 1. The late spring of the second year is a critical time. This is when a decision is made as to whether or not a student is approved to continue in the graduate program and to seek to earn a PhD. (Such timing is typical for U.S. graduate programs in astronomy.)

 According to policies adopted by the Astronomy GSC in December 2022, this important decision is based on a holistic assessment of the student's overall work in the program, and follows an oral presentation and defense of their research to date (the Research Presentation), held between March and May of the second year. While each student has their own particular Research Advisor, Research Committee, and record of course work, the same body (the GSEC) will review each case and determine the outcome for all graduate students.
- 2. The Research Presentation consists of an hour-long seminar (format is a 50-minute lecture plus 10 minutes for questions), followed by a closed-door oral exam administered by an examining committee. It is required of all students and should be taken before the end of the Spring semester (unless an exception is granted by the

- GSEC). A student should schedule their Research Presentation well in advance of the actual date, in order to ensure that all members of the Examining Committee can be present (at least remotely). It is preferred and highly desirable that the Presentation is scheduled in one of the weekly seminar time slots, since that facilitates having a significant audience, but if this is not possible it can be scheduled at another time and/or location than the Astronomy Classroom (PMA 15.216B).
- 3. Students should set up their Examining Committee at least a month before the Research Presentation. The Examining Committee will consist of the members of your Research Committee plus one ex-officio member. The ex-officio member ensures uniform standards and must be a member of the GSEC. If your Research Committee includes a GSEC member who is not your Advisor, this individual can serve in both capacities. However, if the GSEC member is not also on your Research Committee, they should only preside, and not ask questions.
- 4. You must prepare a written report on the Research Project and submit it to the Research Committee no later than **three weeks** before the scheduled Research Presentation. The Research Committee may request changes, but the process must lead to a report acceptable to the Committee by **one** week before the presentation. In lieu of a report, you may circulate a peer-reviewed paper that is published, in press, submitted, or in the form of a substantial draft. This latter option is strongly favored.
- 5. In order to provide guidance and transparency on the scope of the oral exam that follows the public seminar, the following items should be discussed and planned no later than **two weeks** before the Presentation date:
 - (a) A "research-area pyramid" should be settled upon and circulated to the Examining Committee. This component consists of three areas of increasing breadth, relevant to your Research Project, in which you will be expected to be knowledgeable. These should be identified by you together with your Research Advisor. They should include a research area closely tied to your project, a more general research subfield, and the "big picture" basic knowledge of the field. (Note that even the narrowest of these must be broader than the specific research project.) This is because excellence in research includes a robust understanding of the background, research methods, astrophysical context, and potential implications of the research. There is flexibility in designing the research pyramid, since in some cases relevant background knowledge does not lend itself to a nested structure. In such cases, parallel or overlapping areas can be specified (e.g., instrumentation or computational approaches accompanying an observational project).
 - (b) Each of the Examining Committee members who will be asking questions during the closed-door oral exam should designate **a key paper** in the literature relating to the student's research on which the student is expected to be knowledgeable and communicate this to the student no less than **two weeks** before the exam (as long as the student has delivered the Research Report or article draft on time).

- 6. If you have obtained an MA in Astronomy at another institution, you may petition (E) to substitute your MA thesis for the research leading up to the Research Presentation. If the MA from the other institution is approved as a substitute, you will still have to give a public presentation and take an oral exam on the research topic, followed by the broader Second Year Assessment.
- 7. After the public presentation of the Research Project, the closed-door oral exam is administered by the Examining Committee, according to the following protocols.
 - a) During the oral exam, you will be expected to demonstrate knowledge outside the narrow confines of the specific research project that you have undertaken. The committee will examine your understanding of the key papers identified by members of the Research Committee as well as knowledge included within the research pyramid (or alternate three research areas) specified earlier. The committee is not constrained to ask questions only in these areas, but can expect a higher level of understanding of them. If time permits, the Presiding Examiner may ask the Research Advisor to ask a question on the research.
 - b) A member of the GSEC who is not the Research Advisor will preside, in order to ensure uniformity of standards. The Research Advisor cannot help students answer questions and should remain silent unless called upon by the presiding examiner. (H, R)
 - c) The Examining Committee completes the Research Assessment Form, a rubric that includes a narrative assessment of the student's overall research trajectory and progress, knowledge of their subfield, and oral/written communication skills. All committee members, including the Research Advisor, must contribute to this discussion and consensus, either in person or remotely. (If the committee does not reach consensus, dissenting opinions should be included in the report.) This evaluation will be a major component of the Second Year Assessment, and serves as the main assessment of the student's research ability and achievement.
 - d) The Advisor or the Committee Chair will meet with the student promptly after finalization of the Research Assessment Evaluation and discuss it with the student, with the understanding that there may be a moderate delay in determination of the overall outcome of the Second Year Assessment by the GSEC (due to the fact that the GSEC will need to consider the outcomes for multiple students in a given year). The student may also meet with the Presiding Examiner (a GSEC member) to discuss the report.
- 8. The final step in the Second Year Assessment will usually be the review undertaken by the GSEC, which will consider each student's general knowledge of astrophysics as documented by course grades and instructor-provided evaluations, and research record as conveyed by the (two) Research Committee Progress Reports, the public seminar, and the Research Assessment Evaluation form from the Examining Committee (7b). This

- will be conducted as soon as feasible after the second-year student cohort has completed their Research Presentations and oral exams, usually by the end of May.
- 9. The result of this comprehensive Assessment will be one of the following:
 - a) Full Pass: The student is deemed eligible for the optional Master's Degree, and is allowed to pursue admission to PhD candidacy. (Q)
 - b) Terminal Pass: The student is deemed eligible for a terminal optional Master's Degree, but cannot pursue admission to PhD candidacy. (C)
 - c) Re-Examination: The Research Presentation and oral exam (or only the latter) is scheduled to be repeated at a time arranged by the Examining Committee, but not later than the end of September of that year. Only one re-examination is permitted.
 - d) Fail: Student is not eligible for a Master's Degree, cannot pursue admission to PhD candidacy, and must leave the program.
- 10. If the GSEC does not reach a consensus on the outcome or there is more than one dissenting member of the Examining Committee (7c), the matter may be taken to the full GSC (graduate faculty) for further consideration.
- 11. Students who have passed the Second Year Assessment should choose a Dissertation Advisor (R), write a Dissertation Proposal (S), form a Dissertation Committee (R), and apply for candidacy on-line. The application will be approved by the Graduate Advisor only if the outcome of the Second Year Assessment was "Full Pass."
- 12. In exceptional circumstances, students can petition the GSEC for a delay in taking the exam (which may be a re-examination). Such a petition will be approved only for compelling reasons supported by appropriate documentation. If such a petition is granted, the latest any Research Presentation and associated oral exam can be given is by the end of the Spring Semester in the third year.

Q. Application for PhD Candidacy

- 1. Candidacy application affords the Graduate Dean the opportunity for detailed examination of a student's record, for maintaining Graduate School standards, and for enforcement of Graduate School regulations. A correct and proper application will prevent delays and additional effort. The following suggestions may be helpful.
- 2. Students for whom the outcome of the Second Year Assessment is a "Full Pass" are expected to advance to Ph.D. candidacy by the last class day of the next long term following the exam (Fall of the third year). All steps of the Ph.D. candidacy application process should be completed by that date, including the online submission of the

Graduate School Degree Candidacy Application Form. A student may petition the GSEC to consider an extension, which may be granted under exceptional circumstances (for example, a change of Advisor and/or research subfield).

Application for PhD candidacy involves the following steps:

- a) First, students select a Dissertation Advisor and form a Dissertation Committee. The selection process is described in detail in section R.
- b) Next, students must develop a Dissertation Proposal (5 pages or less) of research to be carried out for the PhD degree and have the Dissertation Committee members approve the proposal and sign the PhD Candidacy Sign-Off Sheet.
- c) Finally, students must submit the *PhD Candidacy Sign-Off Sheet* to the Graduate Coordinator, who will then guide them through the Graduate School's candidacy application process. (Worth noting: once a dissertation abstraction has been submitted online, it cannot be directly edited. Instead, it must be withdrawn and a new version submitted. So, edit your abstract carefully and don't use LaTeX symbols!)
- 3. Students whose native language is not English must submit evidence to the Graduate Advisor that they have passed their University English Certification. (X)
- 4. The online application must be electronically approved by the Graduate Advisor, GSC Chair, and other University officials. When the notification that PhD candidacy has been approved is received from the Graduate School, students must register for the dissertation course AST 399W, 699W or 999W. (D, N)
- 5. Initially candidacy is valid for two years. Thereafter, upon recommendation by the GSC and approval by the Graduate Dean, candidacy may be extended on a year-to-year basis. It should be emphasized that extensions are <u>not</u> automatically granted. Each case is individually discussed by the GSEC before an extension is recommended or disallowed.

R. Research and Dissertation Committees

1. The terms Research Advisor/Committee/Project are defined as follow:

Your <u>Research Advisor</u> supervises your research until you pass the Second Year Assessment.

Your <u>Research Committee</u>, which includes your Research Advisor, checks your progress on research until you pass the Second Year Assessment (P). It holds committee meetings at the frequency specified in section I.

The term <u>Research Project</u> describes the research you do up until the Research Presentation and Second-Year Assessment.

2. The terms Dissertation Advisor/Committee/Project are defined as follows:

Your <u>Dissertation Advisor</u> supervises your research after you pass the Second Year Assessment.

Your <u>Dissertation Committee</u>, along with your Dissertation Advisor, works with you after you pass the Second Year Assessment and as you start applying for PhD candidacy (Q). It is responsible for approving your PhD Dissertation Proposal and signing the *PhD Candidacy Sign-Off Sheet* (Q). It checks your research progress after you are admitted to PhD candidacy and holds committee meetings at the frequency specified in section I.

The PhD <u>Dissertation Project</u> is the sum total of research done by you at UT (both before and after you pass the second-year assessment), but it lays greater emphasis on research done after you pass the second-year assessment. (S,T)

The term "Advisor" or "Supervisor" refers to either the Research Advisor or the Dissertation Advisor, whichever is relevant.

- 3. You must choose a Research Advisor and Committee by March 1st of the first year. After deciding on the subject of research, you and your Research Advisor will select three to five others who agree to serve on the Research Committee, with the stipulation that at least three members of the committee must be members of the Astronomy Department GSC. Until the Second Year Assessment, this committee functions locally and holds committee meetings at the frequency specified in section I.
- 4. You must develop a written Research Proposal (5 pages or less) describing the research to be carried out during the Research Project, have it approved by your Research Committee submit it to the Graduate Advisor by the end of May of the first year. (D)
- 5. If you pass your Second Year Assessment with an outcome of "Full Pass", you should apply for PhD candidacy by the fall of the third year by following the steps in section Q. The first step involves selecting a Dissertation Advisor and Dissertation Committee. Possible options for the selection include the following:
 - a) If you decide to pursue a PhD Dissertation project that is closely linked to your second-year project, your Research Advisor typically becomes your Dissertation Advisor, and your Research Committee becomes the basis for the Dissertation committee.
 - b) If you opt to change research areas and work with a new Dissertation Advisor, your Dissertation Committee may end up being substantially different from the Research Committee. If you choose this route, we recommend that you talk to the Graduate Advisor for guidance and recognize that it may result in a delay in your timeline. (0)
 - c) Other variations are possible. For example, you may, because of the evolution of your research goals or other reasons, decide at this point to change the composition of your committee while retaining the same Advisor.

6. The final committee membership will be submitted formally to the Graduate Dean to become the Dissertation Committee. Normally, a committee member from outside the department is added at this point. After the committee has been accepted by the Graduate Dean, the Graduate School must approve any committee changes.

The following rules only come into play when the final Dissertation Committee is chosen for presentation to the Graduate School:

- a) One committee member must be a recognized expert on the subject from outside UT and must hold a position at another institution that is equivalent to that of a member of the graduate faculty. In special circumstances, that outside member may be a faculty member at UT so long as he or she is a member of a Graduate Studies Committee other than Astronomy (for example, Physics). The Dissertation Advisor should ensure that travel expenses of the outside member to the final defense can be furnished from within the department (alternatively, they may participate remotely).
 - b) At least three members of the committee must be members of the Astronomy Department Graduate Studies Committee.
 - c) Non-faculty UT Austin astronomers (including Research Scientists, Postdoctoral Fellows and staff PhDs) may be members of the committee, but the reason and their qualifications for serving on the committee must be furnished to the Graduate Advisor for forwarding to the Graduate Dean. These scientists may not chair the committee but may serve as Co-chair. Non-faculty UT Austin astronomers may not serve as the "outside" member.
 - d) For PhD defense committees, adjunct professors can serve as members. But, as per Graduate School rules, they cannot be supervisors and they do not count toward the requirement that at least three members of the committee must be members of the Astronomy Department GSC.
 - e) Only a member of the GSC can be the chairperson of the committee, but if a committee member who is not a member of the GSC is performing a major part of the supervising professor's function, he or she may be appointed Co-chair. Emeritus and Emeritus-elect Professors may be co-supervisors, but not sole supervisors, of a PhD project. If a Professor moves to emeritus status while serving as supervisor, the Graduate School will require that a co-supervisor be added.
 - f) Changes to the Dissertation Committee must be approved by the Dissertation Advisor, and then a formal request is made to the Graduate Advisor, who will forward it to the Graduate Dean. You are expected to initiate the process, but the Graduate Coordinator will facilitate the process. There are some restrictions on making such changes very close in time to the defense (i.e. "last-minute changes").

S. Dissertation Proposal

- 1. Students applying for PhD candidacy must select a Dissertation Advisor and Dissertation Committee as outlined in section R. They must then prepare a research proposal, called a Dissertation Proposal, for their PhD Dissertation. The Dissertation Proposal consists of a title, an abstract, the name of the Dissertation Advisor, the names of the proposed Dissertation Committee members, and five or fewer single-spaced pages of discussion, containing the following information:
 - a) A description of the research problem, pointing out its importance.
 - b) A brief summary of the proposed investigation that will constitute the research for the PhD dissertation.
 - c) Discussion of any needs and problems that will be encountered in carrying out the research (observing time, travel, equipment, large amounts of computing, etc.).
 - d) A schedule for research starting from after the Second Year Assessment through the final dissertation defense, focusing on a plan for publishing papers. The plan must have a schedule that leads to a PhD in 5 years from the time of entry into the graduate program. The proposal must include contingency plans for dealing with issues like observing time lost to bad weather, etc.
 - e) A brief discussion of how the earlier Research Project (completed by the spring of the second year) will be incorporated in the final PhD Dissertation, which is the sum total of research done by you at UT. (R).
- 2. Most students choose a Dissertation Project that is closely tied to their initial Research Project. In such cases, we recommend that students use their second-year Research Proposal as a starting point to develop their Dissertation Proposal.
- Students must submit their Dissertation Proposal to their Dissertation Committee for review and thereafter modify the proposal to address the committee's comments.
 Committee members then approve the final Dissertation Proposal and sign the PhD Candidacy Sign-Off Sheet.
- 4. Students must submit the *PhD Candidacy Sign-Off Sheet* to the Graduate Coordinator and complete the Graduate School's PhD candidacy application process by the fall of their third year (exceptions may be made with GSEC approval).
- 5. The Dissertation Proposal can be made available to the GSC by the Graduate Advisor.

T. Final Oral Examination or Defense of Dissertation

- 1. At the beginning of the semester or summer session during which you hope to take the final oral examination and obtain your degree, a number of administrative steps must be taken, each with its own deadline. Instructions and forms may be obtained from the Graduate Coordinator.
- 2. Having ascertained that the degree requirements have been met, you must submit the Request for Final Oral to the Graduate School <u>at least two weeks</u> before the date of the examination.

Check with the Graduate Coordinator and Graduate School on the latest attendance rules for the PhD defense. Since 2016, there have been two options which have different attendance rules: "(1) The traditional option of meeting in a room; or (2) the virtual (electronic) option of meeting using technology; i.e., teleconferencing or videoconferencing. The intent is that all committee members will participate in the defense either in person or electronically; however, if one committee member that is not the supervisor/co-supervisor is unable to attend the defense, then the member's absence must be explained, together with an assurance that the dissertation will be read, and if approved, signed." This rule makes it easier to assemble a committee, but it is still imperative to start early to seek a suitable date and time.

You must try to schedule your PhD defense on a date where all committee member can attend, as certified by their signatures on the form (the Dissertation Advisor may sign for a member from another institution who will attend). Forms are available from the Graduate School webpage.

- 3. The final oral examination cannot be held unless you have placed a <u>complete</u> draft of the dissertation in the hands of <u>all</u> committee members attending the examination <u>at</u> <u>least four weeks</u> before the scheduled date of the examination. You <u>must</u> have a firm understanding with your committee of what constitutes a complete draft (occasionally lists of references and certain appendices may not be required). It is strongly recommended that you have already incorporated into this draft comments and suggestions of committee members based on an earlier draft of the dissertation (or portions thereof) that you submitted to the committee for this purpose.
- 4. The final oral examination starts with a public oral presentation of the dissertation, roughly 50 minutes in length. Normally, the public presentation is followed by questions from the audience. The audience is then excused, and the committee examines you on the dissertation and material related to the dissertation.
- 5. The Graduate Dean has furnished the Dissertation Advisor with detailed instructions (Report of Dissertation Committee) as to what possible actions the committee may take regarding passing the examination and revisions of the dissertation. When a decision has been made by the committee, you are informed of the decision, as is the Graduate Dean by the Report of Dissertation Committee form.

- 6. You will make all revisions to the dissertation required by the Dissertation Committee at the final oral examination, obtain approval signatures for the final draft from your entire committee, and upload the final draft in the format required by the Graduate School. In case one committee member (no more and not the Dissertation Advisor) refuses to sign the Report of Dissertation Committee form, the Dissertation Advisor may, if they wish, discuss this situation with the Graduate Dean and request the Dean's acceptance of the dissertation with one signature missing. Normally, a copy of the final dissertation is given to each committee member.
- 7. If the final version of the PhD dissertation is not submitted to the Graduate School by the semester or session deadline, awarding of the degree will be postponed until the commencement for which the deadline is met. You must continue to register as a graduate student until the degree is awarded.
- 8. The Graduate School requires that a student's status as a Ph.D. candidate is reviewed for renewal by the Graduate Studies Committee two years after the initial advancement to candidacy, and again annually after that time. At the time of each of these reviews, a recommendation is made to the Graduate School whether the student's candidacy should be terminated or continued.

U. Financial Aid to Graduate Students

- 1. The forms of financial aid available to graduate students are:
 - a) University fellowships awarded by the Graduate School after April 1 for the following academic year. Nominations are determined in March by the Admissions Committee for incoming students and by the GSEC for existing students. These nominations are forwarded to the Graduate School by the Graduate Advisor.
 - b) Teaching or research assistantships awarded by the department. Commitments of such aid for the following academic year are typically made in August. Research assistantships are worked out between the student and the Advisor.
 - c) Summer Session teaching and research assistantships (and occasionally university fellowships). These are awarded separately from the long-session financial aid, usually during late April, following essentially the same procedures as for long-session financial aid.
 - d) Fellowships, scholarships, or summer appointments from sources other than the University of Texas.
 - e) Small grants by the Graduate School for travel to learned society meetings or for research assistance (travel and/or equipment). These are awarded through the same process as the other travel funds and require the student to fill out the online travel funding request form.

- f) Small travel or research grants administered by the student's Research Group(s), that are also accessed through the on-line travel request form.
- g) Cox Graduate Excellence Funds and other endowment funding. The Cox Fund is an endowment maintained by the department to promote excellence in astronomy at the University of Texas. A portion of these funds are generally set aside for the Cox Graduate Excellence Fund overseen by the Graduate Advisor. You may submit a request by filling out the travel funding form to request support for observing runs, attendance at conferences, and other purposes relating to your graduate education. Often students get their travel expenses covered using a combination of funds from their research groups, Advisor, and the Cox Graduate Excellence Fund.
- h) Special financial assistance. If a student has an unusual need for research assistance and there are compelling scientific reasons for such assistance, contacting the department chairperson or the Director of McDonald Observatory may be helpful.
- The assigning of department assistantships depends on the source of funds. Decisions on teaching assistantships are made by the faculty member in charge of such assignments that year, in consultation with the department chairperson. Other research assistantships that are paid from research grants are awarded either by or with the consent of the faculty member or research scientist who is principal investigator for the grant. These awards generally are made in accordance with department policies for the awarding of financial aid, as described above. You are free to contact directly the principal investigators of grants at any time concerning financial aid, but any arrangements made must be reported to your Advisor and to the Department Chair.
- 3. Because the overall picture and the policies for financial aid within the department can change from year to year, you might check with the Chair of the Department of Astronomy or the Graduate Advisor concerning possible changes. Policy memoranda concerning financial aid and award procedures will be distributed as appropriate.
- 4. Generally speaking, students are not appointed for more than 20 hours/week. Exceptions are sometimes made for special situations; students with valid reasons for appointments in excess of 20 hours/week should consult with the Graduate Advisor. (Note that international students are not eligible for appointments of more than 20 hours.) Additional employment outside the department usually impedes progress toward the degree, but it may also provide experience valuable for future careers. For example, if your goal is to teach in a small college, you may benefit from teaching at a local community college. Any outside employment should be discussed with your research advisor and/or the Graduate Advisor.
- 5. Under the Graduate School's Fourteen-Semester Rule on Student Employment, graduate students may only be employed as a Graduate Research Assistant, Teaching Assistant, and other titles for a maximum of 14 long semesters. Exceptions to the Fourteen Semester Rule are only made under very special circumstances. (A)

V. Student Educational Records

- 1. A file of educational records will be maintained by the Graduate Coordinator for each graduate student. The file will contain such items as the student's application materials, grades, class evaluation forms, Research Committee Meeting Progress Reports, and other evaluations, along with copies of petitions and other documents, such as applications for candidacy or degrees and correspondence with the Graduate School regarding the student. You will be allowed to see your own file at any time, with two exceptions: financial statements by parents and letters of recommendation to which you have waived the right of access. You can see your file only in the presence of the Graduate Coordinator or a designated faculty member and may not remove any document from the file. You may place documents in your file to be considered when the Graduate Studies Committee is evaluating you.
- 2. Security of, access to, challenging of material contained in, and destruction of these files are governed by the Family Educational Rights and Privacy Act as described in Chapter 9, Appendix C to the University Catalogue: General Information. Only authorized persons will have access to these files.

W. Sources of Information concerning the Graduate Program

- 1. The Graduate School maintains a webpage with regular updates on their policies, regulations, and administrative procedures. Many forms and their instructions can be found on their webpage at https://gradschool.utexas.edu/academics/forms.
- 2. Additional information or answers to questions about department procedures and regulations can be obtained from the following GSC members:
 - a) Graduate Advisor and/or Graduate Coordinator

Registration (preregistration)

Matters involving the Graduate School office that cannot be handled by direct contact (petitions)

Pre-candidacy regulations and procedures, including application for candidacy (MA and PhD)

Petitions for exceptions to astronomy program regulations

Student's record file

Graduate school research and travel grants to students

b) Chair of the Graduate Studies Committee (GSC)

Graduate course offerings (scheduling and content)

Graduate Studies Committee policies

Matters involving the Graduate School office that cannot be handled by direct contact (petitions)

Pre-candidacy regulations and procedures, including application for candidacy (MA and PhD)

c) Graduate Coordinator

TA course assignments

d) Chair of the Undergraduate Studies Committee

Undergraduate course matters
Teaching equipment for undergraduate courses

- 3. The graduate students have a representative elected by themselves who attends all GSC meetings, except executive sessions, and who can bring suggestions, complaints, or other matters before the GSC as well as present student opinions on matters discussed by the GSC.
- 4. The Department Chair will discuss any matter with a student.

X. English Proficiency Requirement

Below is the GSC policy regarding English proficiency:

- 1. Demonstrating proficiency in English is an <u>academic</u> requirement in our graduate program. If a student is not a native speaker of English, then proficiency in English must be demonstrated by passing the certification test administered by the University. This must be done whether or not the student is employed as a TA. A student will not be admitted to candidacy for the PhD until certified in English.
- 2. The deadline for demonstrating proficiency is the beginning of the fall semester of the student's second year in graduate school. Students who have not met this deadline must petition the Graduate Studies Committee for permission to remain in the graduate program, and must do so annually until certification has been accomplished. Permission to continue in the graduate program will be granted only if the Graduate Studies Committee feels that reasonable progress towards a mastery of English is being made by the student. Students who are allowed to continue will be placed at the bottom of the priority list for TA positions until such time as they are certified.
- 3. Entering graduate students whose native language is not English must take the proficiency exam preceding their first year. The Department of Astronomy will pay the exam fee. Thereafter, the student will be responsible for the fee for any subsequent exams. A student who has not yet passed the exam will be required to take it every April and November at his or her own expense until certified.

Y. Scholastic Integrity and the Honor Code

Students in our program are expected to follow the Honor Code of the University, as reproduced here:

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

There are further guidelines in specific areas to elaborate the terms of the Honor Code. Here is the statement about Academic Integrity:

A fundamental principle for any educational institution, academic integrity is highly valued and seriously regarded at The University of Texas at Austin. More specifically, you and other students are expected to maintain absolute integrity and a high standard of individual honor in scholastic work undertaken at the University. This is a very basic expectation that is further reinforced by the University's Honor Code. At a minimum, you should complete any assignments, exams, and other scholastic endeavors with the utmost honesty, which requires you to:

- acknowledge the contributions of other sources to your scholastic efforts;
- complete your assignments independently unless expressly authorized to seek or obtain assistance in preparing them;
- follow instructions for assignments and exams, and observe the standards of your academic discipline; and
- avoid engaging in any form of academic dishonesty on behalf of yourself or another student.

For the official policies on academic integrity and scholastic dishonesty, please refer to <u>Chapter 11</u> of the *Institutional Rules on Student Services and Activities*.

In practice, some assignments in classes will involve collaborative or team work, while other work should be done completely independently. If the expectations of the professor regarding collaboration on a particular assignment are not clear, it is the student's obligation to ask for clarification. Pressuring other students to help you with an assignment that should be done independently is a violation of the Honor Code.

Z. Withdrawal and Dismissal from the Program

1. Withdrawal

A graduate student wishing to leave the program before the completion of a PhD is expected to give at least **six weeks notice** and provide a statement in writing of their intent to their Advisor, the Graduate Coordinator, and the Graduate Advisor. Students are expected to coordinate with their current research and/or teaching supervisor to wrap up and/or hand-off any work obligations.

Students withdrawing from the program before the end of a semester may incur fees (e.g., prorated tuition) in accordance with Graduate School policy. Any remaining account balance at the appointment end-date will be the sole responsibility of the student.

2. Dismissal

A graduate student may be dismissed from the program for any of the following reasons.

- a) Failure to make adequate progress, as judged by the GSC in consultation with the Research Committee.
- b) Failure to maintain a B average in course work.
- c) Any violation of the Honor Code, as judged by the GSEC.