

Applied Science Program
Graduate Student Handbook

Table of Contents

INTRODUCTION	2
MASTER OF SCIENCE	3
PROGRAM REQUIREMENTS FOR MASTER OF SCIENCE	3
COURSE WORK	3
EMPHASIS IN APPLIED PHYSICS	4
CREDIT TRANSFERS	4
STUDENT ADVISORY COMMITTEE	4
THESIS OPTION	4
<i>Thesis Proposal</i>	4
<i>Thesis Defense</i>	4
<i>Comprehensive Exams</i>	5
<i>Project Presentation and Report</i>	5
CREDIT REQUIREMENTS	6
<i>Course Credits</i>	6
<i>Thesis/Dissertation or Project Credits</i>	6
ACADEMIC STANDING	6
SUMMARY OF GRADUATION REQUIREMENTS FOR APPLIED SCIENCE MS DEGREE	7
DOCTORATE OF PHILOSOPHY	9
ASSISTANTSHIPS AND FELLOWSHIPS	9
INTERNATIONAL STUDENTS	10
ORIENTATION AND ASSIGNMENT OF A PROVISIONAL MENTOR	10
PROGRAM REQUIREMENTS FOR DOCTOR OF PHILOSOPHY	11
<i>Course Work, Research, and Credit Requirements</i>	11
<i>Writing Requirement</i>	11
<i>Seminar Requirement</i>	12
<i>Research Ethics Course Requirement</i>	12
LABORATORY ROTATIONS	13
DOCTORAL ADVISOR	14
ADVISORY COMMITTEE	14
CREDIT TRANSFER	16
CANDIDACY EXAMINATION	17
PH.D. DISSERTATION PROPOSAL ORAL EXAMINATION	18
PH.D. DISSERTATION DEFENSE EXAMINATION	19
ACADEMIC STANDING	20
SUMMARY OF GRADUATION REQUIREMENTS FOR APPLIED SCIENCE PH.D.	21
APPLIED SCIENCE PROGRAM REGISTRATION PROCEDURES	24
REGISTRATION	24
ADD / DROP	24
APPLIED SCIENCE EMPHASIS AREAS.....	25
APPLIED BIOSCIENCES	25
APPLIED BIOSCIENCES CANDIDACY EXAMS	26
APPLIED CHEMISTRY	28

APPLIED CHEMISTRY CANDIDACY EXAMS	29
APPLIED PHYSICS	31
APPLIED PHYSICS CANDIDACY EXAMS	33
COMPUTATIONAL SCIENCE	35
COMPUTATIONAL SCIENCE CANDIDACY EXAMS	ERROR! BOOKMARK NOT DEFINED.
WAIVERS	36
PETITIONING TO HAVE REQUIREMENTS WAIVED.....	37
WAIVING PROGRAM COURSE REQUIREMENTS	38
APPLIED SCIENCE PROGRAM POLICIES & PROCEDURES	38
HOME MAILING ADDRESSES.....	38
STUDENT OFFICES	38
KEYS AND KEY CARDS	38
PAYCHECK RECEIPT	39
THESIS AND DISSERTATION EXPENSES	39
GRADUATION	39
TRAVEL.....	39
UA LITTLE ROCK GRADUATE SCHOOL GUIDE FOR NEW STUDENTS	40
POLICIES	40
<i>Equal Opportunity / Affirmative Action</i>	40
<i>Equal Access Policy</i>	40
<i>Alternative Formats and Accommodations</i>	40
WHAT YOU NEED TO KNOW AND DO BEFORE THE FIRST DAY OF CLASSES	41
<i>Advising</i>	41
<i>Registering and Confirming Classes</i>	41
<i>Vehicle Registration and Parking</i>	41
<i>Disability Support Services</i>	42
<i>Books</i>	42
<i>Safety</i>	42
<i>Especially for Graduate Assistants</i>	43
Paperwork	43
Confirmation Letter	43
Billing.....	43
Paychecks	44
Term of Appointment.....	44
WHAT YOU NEED TO KNOW AND DO DURING THE FIRST WEEK	45
<i>Payment Deadline</i>	45
<i>Schedule Adjustment Period</i>	45
<i>Withdrawal from the University</i>	45
<i>UA Little Rock Campus Card</i>	45
<i>Health Services</i>	46
<i>Postal Services</i>	46
<i>Computer/Internet Use</i>	46
<i>Library</i>	46
<i>University Writing Center</i>	47
<i>Copies</i>	47
<i>Donaghey Student Center Fitness and Aquatics</i>	47
<i>Graduate Student Association (GSA)</i>	48
<i>Graduate Student Research Forum</i>	48

<i>Policy Documents</i>	48
<i>Grievances and Procedures</i>	49
<i>Grade Point Average (GPA)</i>	49
ADDITIONAL GRADUATE PROGRAM INFORMATION	50
ANNUAL GRADUATE STUDENT PROGRESS REPORT	50
CHANGING EMPHASIS AREAS AFTER ADMISSION.....	51
TRAVEL.....	51
CODE OF CONDUCT	52
FACILITIES	52
LEAVING THE PROGRAM	53
SUPPORT PERSONNEL CONTACTS	54
APPLIED SCIENCE PROGRAM	54
GRADUATE INSTITUTE OF TECHNOLOGY	54
UA LITTLE ROCK GRADUATE SCHOOL	54

Table of Figures

Figure 1 MS Thesis-Option Required Credit Hours	6
Figure 2 Master's Degree Thesis Option Milestones	7
Figure 3 Thesis and Non-Thesis Option Table	8
Figure 4 Ph.D. Required Credit Hours	20
Figure 5 Doctoral Milestones	22
Figure 6 Sample Ph.D. Time Table	23
Figure 7 Biosciences Candidacy Subjects.....	27
Figure 8 Chemistry Candidacy Subjects.....	30
Figure 9 Physics Candidacy Subjects	34
Figure 10 Applied Mathematics and Statistics Candidacy Subjects	35
Figure 11 CALS Restructure.....	54

Appendix A, Academic Progress	A-1
Annual Graduate Student Progress Report	A-2, A-3, A-4
Appendix B, Dissemination of Research during the Reporting Period	A-5
Supervisory or Examining Committee Appointment	A-6
Candidacy Exam Request	A-7

Applied Science Program Graduate Student Handbook

Introduction

The Applied Science Program is an interdisciplinary, graduate-only program that supports applied research in a broad set of areas. These areas include applied biosciences, applied chemistry, applied physics, applied mathematics, statistics, computational science, environmental science, geophysics, materials science, and nanotechnology.

The Program offers two degrees, the Doctor of Philosophy and the Master of Science. Each degree has several emphases, which are explained under the separate programs. Faculty housed in several other programs within the College of Arts, Letters, and Sciences (CALs) participates in the various emphasis tracks.

Your graduate education in the Applied Science Program will be a very different experience from your undergraduate career. Merely meeting or satisfying degree requirements should not be the aim of a quality graduate program. Graduate education is an opportunity to increase your knowledge, to broaden your understanding, and to develop your independent thinking and research capabilities. Consequently, your academic program of study and achievement should reflect a commitment to the discipline and to scholarly standards. While graduate faculty and staff members serve as counselors and assistants, your accomplishments as a graduate student are primarily a result of your own personal ambition and dedication. The success of your graduate education depends on your ability to define goals and to organize and execute a program of study and research needed to meet those goals.

This handbook is intended as a guideline for most of the rules governing the graduate programs within the Applied Science Program. Graduate students and faculty should familiarize themselves with its content, paying particular attention to [Department and University deadlines](#).

Take time to bookmark these websites in your browsers and make a habit of referring to the sites often. Most questions you have will be addressed either in this handbook or on these websites.

UA Little Rock Graduate School Home Page <http://ualr.edu/gradschool/>

Applied Science Program Home Page <http://ualr.edu/appliedscience/>

UA Little Rock Graduate Catalog
<http://ualr.edu/gradschool/index.php/home/student-resources/graduate-catalog/>

In general, the information in this handbook and the accompanying forms are the student's responsibility during their term in the program. Please refer to the *Graduate Catalog* for official information.

Master of Science

The Master of Science degree is an interdisciplinary program designed to advance a student's knowledge beyond the baccalaureate degree and to teach the student how to approach a research project. The student may either pursue a generic degree in applied science or, with sufficient specialized course work, may earn a master's degree in applied physics.

The degree is designed for students with a wide variety of research and/or curricular interests in science and engineering. The thesis option includes a proposal defense and a thesis defense, and provides an opportunity to the student to carry out thesis-based research. The non-thesis option includes a comprehensive oral exam and a project. The student choosing the non-thesis option will have three different alternatives to satisfy the comprehensive exam and project requirement. These alternatives are intended to cater to students who (1) are in the ASCI Ph.D. program and want to acquire the ASCI M.S. degree since they satisfy a majority of the cognate requirements, (2) want to complete some of the requirements of the ASCI Ph.D. as a precursor to applying for admission to the Ph.D. program, (3) want to complete a predominantly course-based master's degree. The details of the program are given below.

Program Requirements for Master of Science

Course Work

The Master of Science degree requires a minimum of 30 credit hours beyond the baccalaureate degree. The student's plan of study must be developed in conjunction with the Thesis Advisor/Project Instructor and Student Advisory Committee. If a student receives one or more Cs in their course work in one semester, they will be warned that their academic performance is unacceptable and that their status will be reviewed by the Applied Science faculty, which will suggest corrective action. A student receiving Cs in more than one semester or either a D or an F in their course work will be dismissed from the program, pending review by the Applied Science faculty.

Emphasis in Applied Physics

To earn an emphasis in applied physics, students must take at least nine credit hours from recognized physics courses in either the Applied Science Program or the Physics Department.

Credit Transfers

A maximum of six credit hours may be transferred from an accredited graduate program.

The graduate coordinator will determine applicability of the transfer.

Student Advisory Committee

The Student Advisory Committee will be composed of four members, including the committee chair, who will be the thesis advisor or project instructor. The chair and two of the three members must be faculty members from Applied Science, Systems Engineering, or Physics. The remaining member can be any other UA Little Rock graduate faculty or Applied Science adjunct faculty. The Applied Science faculty must approve the committee constituency.

Thesis Option

The thesis subject is selected by the student and the Student Advisory Committee at least one year prior to the oral defense. The written thesis format must follow the [UA Little Rock Graduate School Dissertation and Thesis Guide](#).

Thesis Proposal

At least one year prior to the thesis defense, the candidate must submit a written proposal and orally present their proposed thesis work to the Student Advisory Committee.

Thesis Defense

The candidate will present and orally defend their completed master's thesis before their Student Advisory Committee. Defenses will be

- held in the Applied Science Conference room
- open to the public
- announced at least two weeks in advance

Comprehensive Exams

After the candidate has completed eighteen credit hours of graded course work, they may attempt the comprehensive exams. The student may choose one of two comprehensive exam requirements, and their Student Advisory Committee must approve the student's exam choice in writing. The exam requirement must be passed in one or two attempts. If a second attempt is needed, it must take place in the semester following the first attempt. Comprehensive exam options are

- an oral exam administered by their Student Advisory Committee; or
- the doctoral candidacy exams. If a student chooses this option, they must pass the exams in three candidacy subjects within the same emphasis area. The student may test only in those candidacy subjects, which they have taken as part of the eighteen credit hours of graded course work. The doctoral candidacy exam rules will be invoked to determine whether the student has passed or failed.

Project Presentation and Report

The student must complete a project, by means of six credits of Independent Study (ASCI 7389) with the project instructor as the instructor of record.

Before taking the Independent Study courses, the student

must present a project plan to the Student Advisory Committee (SAC).

Upon completion of the Independent Study courses, the student

must orally present their work to the SAC,

deliver a written project report in the format specified by the project instructor to the SAC for approval (at least two thirds of the committee members will have to vote in favor of that outcome).

In lieu of the project presentation and report, the student may

successfully defend their doctoral proposal and show acceptance of a peer-reviewed document on some completed portion of a project (such as a conference paper or a journal article) with the student as primary author.

the SAC must approve this change in writing

Credit requirements

The Master of Science degree requires a minimum of 30 credit hours beyond the baccalaureate degree.

Course Credits

A minimum of 18 credit hours in 5000 or 7000 level graded courses within COS or EIT must be taken.

A grade of B or better must be obtained in each course to count toward the minimum course requirement.

A maximum of six credits of independent study (ASCI 7389) or special topics (5399, 7399) may be applied to the Master of Science with the following exception: those students who are required to use six credits of independent study (ASCI 7389) to complete a project under the non-thesis option may apply three additional credits of independent study (ASCI 7389) or special topics (5399, 7399) to the Master of Science.

Thesis/Dissertation or Project Credits

Either a

- minimum of 12 credit hours of master's thesis (ASCI 8X00) or
- minimum of 12 credits of research/dissertation (ASCI 9X00) or
- minimum of six credits of independent study (ASCI 7389) are required

Academic Standing

A thesis-option student's academic performance will be considered unacceptable if they fail to complete the following requirements in the semester that the student has accumulated program credit hours as shown in Figure 1 MS Thesis-Option Required Credit Hours.

Requirements	Accumulated program credit hours
Major advisor selection	9 credit hours
Advisory committee formation & proposal defense	18 credit hours
Defend thesis	45 credit hours

Figure 1 MS Thesis-Option Required Credit Hours

Summary of Graduation Requirements for Applied Science MS Degree

Please see Figure 2 Master's Degree Thesis Option Milestones below for clarification.

- Successful completion of the program with a minimum GPA of 3.0
- Successful completion of the writing requirements

Thesis Option

- Successful completion of Thesis proposal
- Successful completion of Thesis defense
- Submission of an acceptable thesis to Graduate School

Non-thesis Option

- Successful completion of Comprehensive Exam
- Successful completion of Project Presentation and Report

Master's Degree (Thesis Option) Milestones

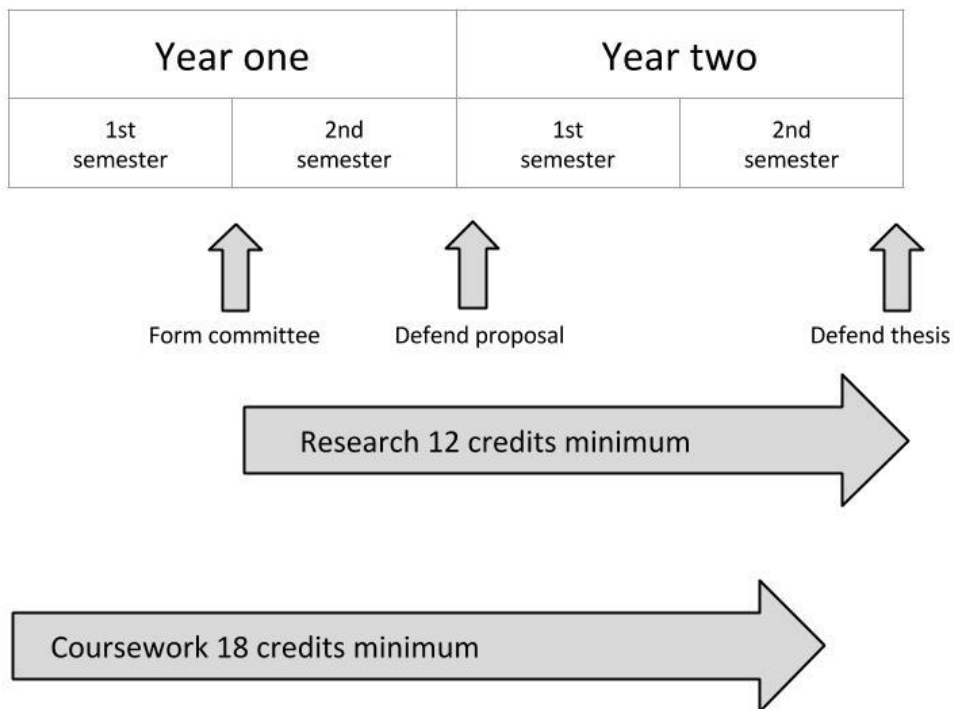


Figure 2 Master's Degree Thesis Option Milestones

The following Figure 3 Thesis and Non-Thesis Option Table provides a brief explanation of MS options. Emphasis Area Coordinators will guide students to their best degree route.

Requirement	M.S. (thesis option)	M.S. non-thesis option		
		Alternative 1	Alternative 2	Alternative 3
Typical Student audience	This option is intended for those who want to complete a thesis-based research at the Master's level	This alternative is intended for those students who are in the ASCI Ph.D. program and want to acquire the ASCI M.S. degree since they satisfy a majority of the cognate requirements	This alternative is intended for those Master's students who want to complete some of the requirements of the ASCI Ph.D. program as a precursor to applying for admission to the Ph.D. program	This alternative is intended for those who want to complete a predominantly course-based Master's degree.
Minimum graded Course credits	18 credits. <i>A maximum of six independent study (ASCI 7389) and/or special topics credits (5399,7399) may be applied towards the M.S. requirement.</i>	18 credits <i>A maximum of six independent study (ASCI 7389) and/or special topics credits (5399,7399) may be applied towards the M.S. requirement.</i>	18 credits <i>A maximum of three independent study (ASCI 7389) or special topics credits (5399, 7399) in addition to the six credits of independent study (ASCI 7389) credits required for project (see second row and last row) may be applied towards the M.S. requirement.</i>	18 credits <i>A maximum of three independent study (ASCI 7389) or special topics credits (5399, 7399) in addition to the six credits of independent study (ASCI 7389) credits required for project (see second row and last row) may be applied towards the M.S. requirement.</i>
Thesis/Dissertation or Project credits	12 Master's credits (ASCI 8X00)	12 doctoral credits (ASCI 9X00)	Six credits of independent study (ASCI 7389) for project (see below)	Six credits of independent study (ASCI 7389) for project (see below)
Thesis proposal and defense	Required	Not applicable	Not applicable	Not applicable
Comprehensive Exam	Not applicable	Must pass three candidacy subjects in Doctoral Candidacy Exam	Must pass three candidacy subjects in Doctoral Candidacy Exam	Oral Exam administered by Student's Advisory Committee
Project presentation and report	Not applicable	1.Successful defense of the doctoral proposal, 2.Publication of a conference paper or journal with student as primary or corresponding author	Complete project by means of six credits of independent study (ASCI 7389), make project presentation and submit report	Complete project by means of six credits of independent study (ASCI 7389), make project presentation and submit report

Figure 3 Thesis and Non-Thesis Option Table

Doctorate of Philosophy

Faculty participating in the doctoral program is drawn mainly from the Applied Science Program, Biology, Chemistry, Earth Science, Mathematics and Statistics, and Physics. Due to the diverse nature of the faculty, the program offers opportunities in several interdisciplinary research areas.

The Doctor of Philosophy in Applied Science is awarded upon completion of a program of advanced study including a significant original dissertation in applied research or design. Work accomplished without the supervision of an Applied Science Program doctoral faculty member will not be accepted in lieu of the dissertation requirement. The research must be relevant to the emphasis area in which the student is pursuing a degree.

All emphases have different program requirements. Each emphasis has its own candidacy areas and seminar requirements, which are described under the "Program Requirements for the Doctor of Philosophy" section of this Handbook and under [Applied Science](#) in the UA Little Rock Graduate Catalog.

The following emphasis areas are offered: Applied Biosciences, Applied Chemistry, Applied Physics, and Computational Science.

Assistantships and Fellowships

Graduate assistantships (GA), teaching assistantships (TA), research assistantships (RA), and fellowships are available to qualified full-time students. To apply, students must send an application for an assistantship.

Students entering the program fall into three categories:

- Students who are supported by a state-funded graduate assistantship (GA) or teaching assistantship (TA) through the College of Science and Mathematics. These students are given a work assignment based on research/teaching/laboratory duties for 20 hours per week in return for receiving the GA or TA stipend. These assistantships pay tuition and provide a stipend for living expenses. Students must pay registration and technology fees, buy textbooks, and purchase support material. Any student supported on a teaching assistantship or a state graduate assistantship shall maintain full-time graduate student status taking nine to 12 credit hours. The Applied Science Program must approve hours over 12. GA stipends are available for a maximum of five years for a Ph.D. degree student. Students should search for a research mentor prior to the first summer to acquire summer funding. Because the majority of state support does not include summer support.

- Students who are supported by external grant funding—research assistantships (RA). If a graduate faculty member supports a student who has not yet chosen a dissertation topic, the work assignment by the primary investigator will be no more than 20 hours per week.
- Students supported by fellowships. These fellowships provide support based upon the granting agency.

A student awarded an assistantship must maintain full-time graduate student status.

International Students

In order to qualify for a teaching assistantship, international students whose native language is not English

must score a 5.0 on the Test of Spoken English (TSE).

must have valid health insurance must before registration. Students with families are recommended to obtain coverage for the entire family.

The [Office of International Student Services](#) is available to provide assistance to incoming and enrolled students.

Orientation and Assignment of a Provisional Mentor

One week prior to the beginning of their first semester, new Ph.D. students will have the opportunity to ask questions of the Applied Science Graduate Coordinator.

The Graduate Coordinator will be assigned as the student's Provisional Mentor. The Graduate Coordinator will act as the student's temporary advisor until the student has selected their Doctoral Advisor. Students should meet with the Graduate Coordinator as soon as possible to

receive course selection and registration instruction, and

assist with other requirements to begin their graduate education at UA Little Rock

Students should consult regularly with the Graduate Coordinator during their first semester about progress with coursework, rotations, etc. By the end of the first semester, students should

select their Doctoral Advisors

Program Requirements for Doctor of Philosophy

Course Work, Research, and Credit Requirements

All emphasis areas require

72 credit hours minimum beyond the baccalaureate degree.

Specific requirements depend on the emphasis area and are detailed in those sections

18 credit hours minimum of graded course work is required from 5000 and 7000 level courses in the Applied Science Program

a plan of study to be developed in conjunction with their Doctoral Advisor and Advisory Committee.

the course "Introduction to Research in Applied Science" (i.e. ASCI 7145, or ASCI 7245, or ASCI 7345), must be taken, and a grade of "credit" must be obtained.

42 credit hours minimum of 9000 level doctoral research or dissertation is required. The research must be substantial and must extend the state of the art in the student's chosen field through theoretical development, design or process improvement, or experimental technique.

If a student receives one C in their course work, they will be warned that their academic performance is unacceptable; they will be reviewed by the Doctoral Affairs Committee (DAC), which will suggest corrective action. A student receiving two Cs or a D or F in their coursework will be dismissed from the program, pending review by the DAC.

Students can register up to 15 credit hours per Fall and Spring Semesters, and up to 6 credit hours during the full Summer Semester each academic year.

Writing Requirement

The Applied Science Program offers an English Writing Proficiency Exam (WPE) each Spring Semester. This exam assesses the student's ability to communicate in writing. Each student

must pass this exam to fulfill graduation requirements

A student who does not pass the WPE is required to take the English Writing Proficiency Laboratory (EWPL). The EWPL is also offered each Spring Semester. The student must take the EWPL each spring until they pass.

Seminar Requirement

All doctoral students are required to

attend the orientation seminar at the beginning of each semester

All students registered for six credits or more (excluding ASCI 7190) in a semester will need to

register for ASCI 7190 in that semester

All students who register for less than six credits (excluding ASCI 7190) in a semester will need to

register for ASCI 7190 in the Fall Semester of the current academic year, and may fulfill the seminar attendance requirement over the entire academic year

Students in the Applied Biosciences emphasis area may choose to register for Applied Bioscience Seminar (ASCI 7192) instead of ASCI 7190.

A maximum of 1 credit of seminar hour per semester can be counted towards the credit requirements of Applied Science Ph.D.

Students who have completed the Applied Science Ph.D. graduation requirements except the dissertation defense and who are in their final semester before graduation may no longer be required to register for seminar (ASCI 7190 or ASCI 7192) upon the approval of their Graduate Coordinator.

Research Ethics Course Requirement

All Applied Science doctoral students are required to

register and

successfully complete the Research Ethics course (ASCI 7118), for any one semester prior to graduating from the program.

A student registered for the Research Ethics course can be exempt from registering for Applied Science Seminar or Applied Bioscience Seminar for that semester upon the approval of their Graduate Coordinator. This one-credit course will be counted towards the overall credit requirements.

Laboratory Rotations

Ph.D. students must

- register for ASCI 7x45 Introduction to Research in Applied Science, or “Laboratory Rotation” in their first semester in the program, and
- receive a “satisfactory” grade at the end of the rotation

The purpose of laboratory rotations is to:

- Enable the student to identify a suitable laboratory for dissertation research
- Expose the student to various disciplines within the Applied Science Ph.D. program and to learn techniques that will be useful in the course of the student's research
- Enable the student to identify faculty who would be suitable members of the student's dissertation committee.

The rotations help the student select a Doctoral Advisor. Rotations can be performed with any faculty member participating in the Applied Science Graduate Program, who are listed on the [Program's faculty list](#). Students can receive one to three credit hours for their rotations by registering for Introduction to Research in Applied Science (ASCI 7145, 7245, or 7345). Upon arrival, students should arrange meetings with individual faculty members to discuss mutual research interests.

At the end of the rotation, the student and Rotation Host will

- meet and discuss the rotation.

The student will

- present the results (orally or a written report) to the rotation host
- submit a written report to the coordinator of laboratory rotation

If the student has not selected their Dissertation Advisor after the first semester of rotations, the student will be required to register again for ASCI 7x45.

Failure to perform adequately in the laboratory rotation may result in termination of state assistantship funding.

A maximum of two credits of laboratory rotation can be counted towards the credit requirements of Applied Science Ph.D.

Doctoral Advisor

A student's Doctoral Advisor must

be a Doctoral Faculty in the Applied Science graduate program.

The selection of a Doctoral Advisor is one of the most important choices students will make during their time in our program.

A Doctoral Advisor should be chosen with the intent of

matching research interests

trust in the student's educational future

Students are dependent upon the Doctoral Advisor for financial support of dissertation research, and often Graduate Assistantships. This situation should be clarified with prospective Doctoral Advisors. Both students and prospective Doctoral Advisors should use laboratory rotations to determine compatibility before committing to each other.

When a Doctoral Advisor is selected, students should

complete the "Selection of Major Advisor" form in the Appendix of this Handbook.

The form should be signed by

the Doctoral Advisor and

the Applied Science Graduate Coordinator for inclusion in the student's file.

Students who do not have a Doctoral Advisor by the end of the third semester may be dismissed.

Changing Doctoral Advisors after this point is possible, and sometimes advisable, but it may slow a student's completion of degree requirements.

Advisory Committee

Students should

select and

meet with their Advisory Committee (i.e. Dissertation Committee) prior to the completion of the third semester.

The Student Advisory Committee's role is to advise and help direct students' academic and research programs. The advisory committee must be composed of a minimum of five members, specifically

the committee chair, who will be the student's Doctoral Advisor

four of the five members, including the chair, must be Applied Science doctoral faculty members

remaining member(s) may be any other person who has graduate faculty status at UA Little Rock. This also includes full-time research faculty with graduate faculty status. However, post-doctoral researchers cannot serve in dissertation committees.

The Doctoral Affairs Committee (DAC) must approve the committee constituency after the initial review by the Graduate Coordinator. When students

- propose their dissertation committee to DAC, they also need to
- provide a brief written justification explaining the role of each member in contribution to their dissertation research.

Students are encouraged to form their advisory committee with a majority of faculty members from the student's respective emphasis area. Dissertation committee cannot be changed after the proposal defense unless the student has a compelling or extraordinary reason (e.g. leave or retirement of one of the members).

The dissertation subject

- is selected by the student, with input from the advisory committee
- is at least two years before the oral defense
- must be a scholarly contribution to a major field of applied science in the student's emphasis area, consisting of new important knowledge or a major modification, amplification, or interpretation of existing significant knowledge.

The written dissertation format

- must follow the [UA Little Rock Graduate School Dissertation and Thesis Guide](#).

In the first meeting with the committee, the student should

- provide background material on their education to improve course advisement, and
- brief the committee on their research interest
- bring up thoughts about the dissertation

Obtaining committee consent is essential toward ensuring future success.

Subsequently, the student should

- meet with the committee at least once a year.

Regular meetings will ensure that progress is made in accordance with the committee's expectations.

Credit Transfer

Students can transfer up to six credit hours of graduate level course work from a previous institution. Credit transferability is determined by the student's Advisory Committee based upon the applicability of the courses selected for dissertation work and the student's educational goals.

Therefore, students must

- form their Advisory Committee before they can transfer credits.
- collect the signatures of their Advisory Committee members and Graduate Coordinator on the Transfer of Credit application before it can be submitted to the Graduate School.

The form also must include

- the student's transcript from the previous institution and
- course descriptions for the credits that are intended to transfer

Thesis or dissertation research hours from another program are not transferrable. Courses requested must be completed within five years at the time of transfer application.

Students who were enrolled in a relevant graduate program at UA Little Rock prior to Applied Science Ph.D. (e.g. UA Little Rock's MS programs of Biology, Chemistry, Mathematics, and Applied Science) do not need to go through a formal transfer of credit paperwork. Their relevant course work credits (i.e. no six-credit hours limit) can be counted toward their Applied Science credit requirements upon the approval of their Graduate Coordinator.

Candidacy Examination

Candidacy Examinations determine whether the applicant possesses the attributes of a doctoral candidate.

The Candidacy Exam will be held twice a year after the start of fall and spring classes.

The exam is a comprehensive written test composed of four subject tests (known as candidacy areas), each test must be passed.

Students

must hold a minimum 3.0 GPA in their graduate course work to take Candidacy

Exams

must be admitted to an emphasis area to take the exam

may not attempt the exam in the first year of the program

must attempt after completing candidacy preparation subjects

must submit Candidacy Exam Request forms (located in Appendix page A-7) either

before May 15th prior to Fall Semester testing, or

before December 15th prior to Spring Semester testing

will be tested on topics selected from the Candidacy Subject List in their emphasis area

may attempt the Candidacy Exam a maximum of two times and must attempt in consecutive semesters

must complete testing before their fifth year in the program

Students who have not passed all exams after the second attempt will be dismissed from the program.

Students are encouraged to present an open seminar on the proposal prior to meeting with the advisory committee

Ph.D. Dissertation Proposal Oral Examination

The student must orally defend the rationale and experimental procedures for the proposed doctoral dissertation.

Two years (minimum) prior to the dissertation defense, candidates must

- present a written proposal in either a
 - National Institutes of Health (NIH) or
 - National Science Foundation (NSF) grant proposal format for their dissertation work to the Advisory Committee

Two weeks before meeting with the Student Advisory Committee, the student

- must give the proposal to their SAC
- should reserve the Applied Science Conference Room for their oral defense

Two weeks (minimum) before the oral defense the Applied Science Program Administrative Assistant needs

- names of student and their Dissertation Advisor
- proposal title
- abstract
- date and location of oral defense (to be announced to Applied Science faculty and students)

Students who fail the proposal may be dismissed from the program.

The Advisory Committee Chairperson will obtain a degree audit from the Graduate Coordinator and present it to the SAC during the proposal defense, and inform the student about the minimum number of credits needed to fulfill program requirements prior to graduation.

- Supervisory or Examining Committee Report form must be filed at the conclusion of defense.

Ph.D. Dissertation Defense Examination

To complete the requirements for the Ph.D. degree students

- will prepare, and
- successfully defend a written dissertation in the format dictated by the UA Little Rock Graduate School
- must orally defend their completed Ph.D. research to their advisory committee

Two weeks before oral defense with the Student Advisory Committee, the student

- must give the dissertation to their SAC
- should reserve the Applied Science Conference Room for their oral defense

Two weeks (minimum) before the oral defense the Applied Science Program Administrative Assistant needs

- names of student and their Dissertation Advisor
- dissertation title
- abstract
- date and location of oral defense (to be announced to UA Little Rock faculty and students)

The first part of this final examination will be open to the public and will consist of an open seminar on the student's research. This will be followed by a closed examination during which the candidate will be examined by the Advisory Committee. This examination will follow guidelines established by the UA Little Rock Graduate School. The examination can be wide-ranging, but will usually utilize the student's research as a starting point.

At the completion of the examination, the Advisory Committee will vote to either pass or fail the student.

If two negative votes are received from committee members, it is considered a failure of the exam.

Supervisory or Examining Committee Report form, which will be provided to the chair of the Advisory Committee, must be signed by the members at the conclusion of defense and filed with the Applied Science Program.

Students who successfully pass the oral defense need to

- submit an acceptable written dissertation to Graduate School before
 - December 1st for fall semesters
 - May 1st for spring semesters
 - August 1st for summer semesters

The format and content of the dissertation should meet [thesis and dissertation requirements](#) and satisfy the review and recommendations of the Advisory Committee.

Academic Standing

The Applied Science Director and Graduate Coordinator rely on the recommendation of the Student Advisory Committee for suggestions on that student's status. If academic problems occur in the first year prior to the selection of a Doctoral Advisor, it is the responsibility of the Applied Science Director or Graduate Coordinator to recommend a resolution to the problem. Normally, a student will be given every opportunity to correct this problem within one year, provided that all other indications (for example, research progress) are positive.

If a student receives one C in their course work, they will be warned that their academic performance is unacceptable, and they will be reviewed by the Doctoral Affairs Committee (DAC), which will suggest corrective action. A student receiving two Cs or either a D or an F in their coursework will be dismissed from the program, pending review by the DAC.

A student must have a cumulative GPA of 3.0 or higher to graduate from the program.

In addition, a student's academic performance will be considered unacceptable if they fail to complete the following requirements in the semester that the student has accumulated net program eligible credit hours / timelines as shown in Figure 4 Ph.D. Required Credit Hours.

Requirements	Accumulated program eligible credit hours / timelines
Major advisor selection	18 credits
Dissertation Committee formation	27 credits
Take Candidacy exams	45 credits
Defend proposal	63 credits
Defend thesis	More than minimum of 72 credits and less than 108 credits

Figure 4 Ph.D. Required Credit Hours

Summary of Graduation Requirements for Applied Science Ph.D.

- Minimum of 72 credit hours beyond BS degree
- Minimum of 18 credit hours graded course work (5000 and 7000 level)
- Minimum of 42 credit hours of 9000-level research-dissertation work
- Registration in Applied Science Seminar (ASCI 7190), or Applied Bioscience Seminar (ASCI 7192) for Applied Bioscience emphasis area students, is required every semester (1-credit/semester count towards the overall credit requirements)
- Successful completion of the Research Ethics course (will count towards the overall credit requirements)
- Successful completion of Laboratory Rotation (up to 2-credits count towards the overall credit requirements)
- Successful completion of the writing exam
- Formation of Dissertation and Advisory Committee (a minimum of 5 members)
- Successful completion of candidacy examinations
- Successful completion of dissertation proposal and oral defense
- Successful completion of dissertation defense
- Submission of an acceptable dissertation to Graduate School
- Successful completion of the program with a minimum GPA of 3.0

The following visual has been provided to clarify expected timelines for doctoral students. Please see Emphasis Area Coordinator for questions. Please see Figure 5 Doctoral Milestones below.

Doctoral Degree Milestones

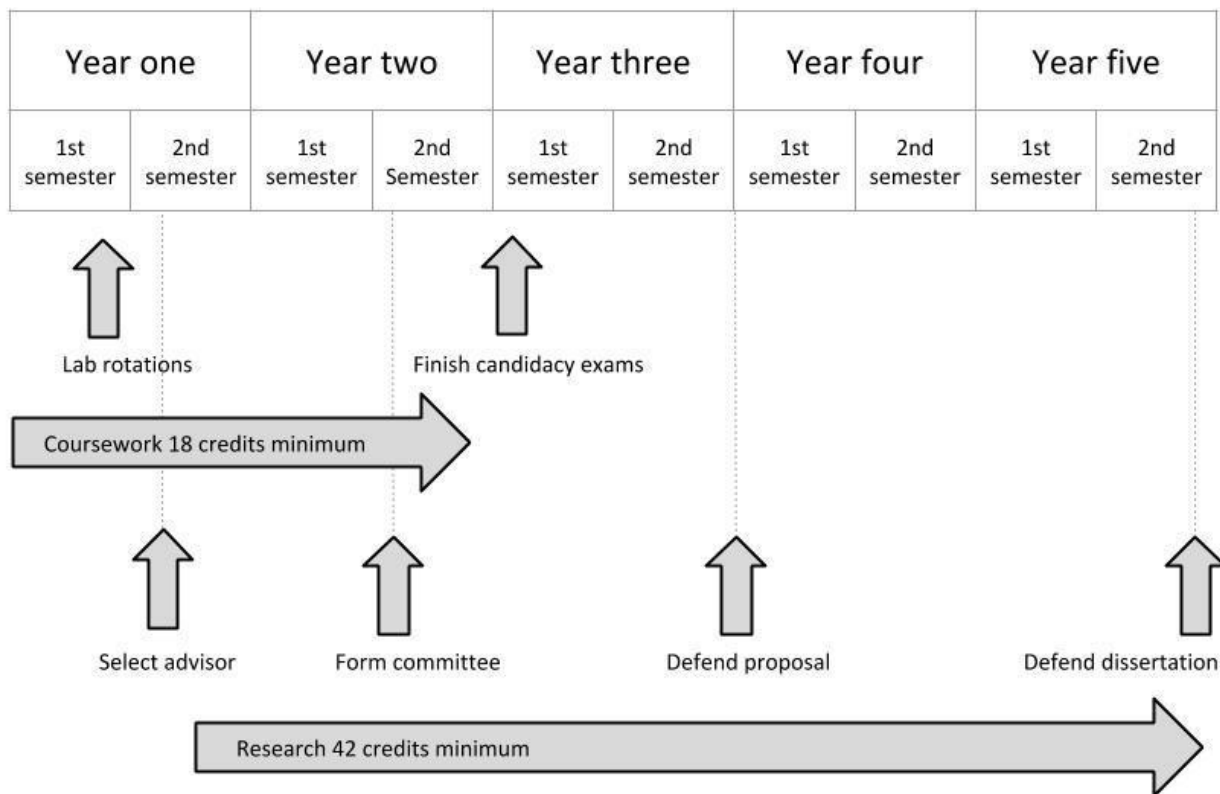


Figure 5 Doctoral Milestones

Please read the following Figure 5 Sample Ph.D. Time Table for program expectations.

<p>First Year</p> <p>First Semester</p> <ol style="list-style-type: none"> 1. Orientation Session 2. Meet with Graduate Coordinator - draft a plan of study 3. Take appropriate candidacy preparation courses 4. Complete three rotations as required 5. Select Doctoral Advisor by the end of the semester <p>Second Semester</p> <ol style="list-style-type: none"> 1. Continue course work 2. Submit Annual Progress Report 3. Select Doctoral Advisor by the end of the semester in the event that this was not done in the first semester <p>Summer</p> <ol style="list-style-type: none"> 1. Begin Dissertation work
<p>Second Year</p> <p>First Semester</p> <ol style="list-style-type: none"> 1. Continue preparatory courses 2. Form and meet with Advisory Committee to plan dissertation work 3. Develop a plan of study and submit to the Doctoral Advisory Committee <p>Second Semester</p> <ol style="list-style-type: none"> 1. Conclude preparatory course work 2. Continue dissertation effort 3. Submit Annual Progress Report 4. Submit finalized Plan of Study to Doctoral Advisory Committee <p>Summer</p> <ol style="list-style-type: none"> 1. Concentrate upon dissertation research 2. Prepare for Candidacy Exams <p>Begin writing your dissertation at least one semester before your intended graduation.</p>
<p>Third Year</p> <p>First Semester</p> <ol style="list-style-type: none"> 1. Take Candidacy Exams 2. Prepare and Defend Research Proposal by the third year of Study 3. Take any specialized course work outlined in the Plan of Study 4. Continue dissertation research <p>Second Semester</p> <ol style="list-style-type: none"> 1. Prepare and Defend Research Proposal <p>Remaining Semesters</p> <ol style="list-style-type: none"> 1. Conclude Dissertation research 2. Submit Annual Progress Report in the spring term of each subsequent year

Figure 6 Sample Ph.D. Time Table

Applied Science Program Registration Procedures

Registration

Obtain a Registration and Advisement form in the Applied Science Program main office. Complete and return the form to the Applied Science Program main office after the approval of the Doctoral Advisor. The registration and advisement forms are to go through the Applied Science Graduate Coordinator for final approval. All advising flags¹ are lifted through Applied Science office ONLY. The advisement flag is cleared to allow you to register via BOSS. The form is retained as a Program record and is filed in your student folder. There may be other forms and/or paperwork that you will need to take care of, especially if you are a new student. This is determined by each student.

Add / Drop

Students can drop classes online before classes begin, or withdraw after classes have begun.

Go to the Office of Records and Registration, in [Student Services Center 218](#), and make your request personally.

Fax a signed [Drop/Withdraw form](#) to: 501.569.8168

Mail a signed [Drop/Withdraw form](#) to
University of Arkansas at Little Rock
Attn: Records and Registration
2801 South University Avenue
Little Rock, AR 72204-1099

Drop your course online. Students have until the last day of late registration to drop a course online. To determine this date please refer to our online [academic calendar](#).

Please Note: Students can drop all but their final course in this manner. In order to drop a course online students need to

Log into your [BOSS account](#)

Read the *Important Dates* page and click the *Click here to continue...* link

Select *Student Services* from the options given

Click the *Registration* link from the menu

Click the *Add/Drop Classes* link from the menu

Select *Drop* from the drop-down menu next to the course(s) you wish to drop

Click the *Submit Changes* button at the bottom of the page

¹ Advising flags are placed on student's records. Advising flags show that a student has not turned in the Advisement form. Please note that ONLY the Applied Science department can lift the advising flag.

Applied Science Emphasis Areas

Applied Biosciences

Applied Biosciences is an interdisciplinary research and academic emphasis area offering advanced degrees through the Applied Science Program. The emphasis area incorporates faculty with research programs in the Biology, Applied Science, and Chemistry disciplines at UA Little Rock. The emphasis area is coordinated with the developing biotechnology industry within the state of Arkansas and is aligned with related programs in the University of Arkansas system.

The Applied Biosciences Working Group

The Applied Biosciences Working Group is a group of faculty that acts in an oversight role for the Applied Biosciences emphasis, helping to develop policy governing the program and working to improve the program to the benefit of both faculty and students. The working group is responsible for recommending student admissions and candidates for Graduate Assistantships, overseeing student progress, moderating conflicts between advisors and students when requested and administering other general University and Program policies regarding graduate student activities.

Recognizing that science is a cooperative enterprise, the Applied Biosciences working group strives to create a sense of community, cooperation and caring among students and between students, faculty and staff. This is facilitated through participation in seminars, colloquia and special social functions. It is to your advantage to participate fully in all of these activities.

Applied Biosciences Seminar Requirement

Attendance at the Applied Biosciences weekly seminar series is mandatory and all Applied Bioscience PhD students must enroll in ASCI 7192 for one unit each semester. Students are encouraged to present their seminars as part of the final Ph.D. Dissertation Defense examination.

Applied Biosciences Candidacy Exams

1. Consult the following table specific to your emphasis area.
2. Select four candidacy subjects.
3. Choose for each subject, a candidacy course to be tested on (Under the Discipline-Specific Applications subject, a course listed in other subjects of the same emphasis area can not be requested for candidacy exam). Students must have taken these courses at UA Little Rock before taking the corresponding candidacy exams. However, a *one-time waiver may be granted*. See *Waivers section for details*.
4. Gain approval from Graduate Coordinator.
5. Submit Candidacy Exam Request Forms to the Applied Science Program (CALs Dean's Office, 501.569.3296) no later than May 15th or December 15th prior to the Fall or Spring Semester exams to be taken, respectively. The Candidacy Exam Request form is located in the Appendix on page A-7.
6. Take exams in all four candidacy subjects during one semester (no exceptions). Students who pass all four exams are finished with candidacy exams.
7. If you fail one or more exams, you will have only one more chance to pass the exams in the semester immediately following the semester of your first attempts.
8. Attempt one last time to pass candidacy exams either in the same subject of precedent failure or in a different candidacy subject. Exams that you passed in the first attempt must not to be retaken, but failure to pass candidacy exams after the second results in program dismissal.
9. See the following Figure 7 Biosciences Candidacy Subjects for exam selections.

BIOSCIENCES CANDIDACY SUBJECTS

<i>COURSES</i>	Organismal Functions	Cellular Function	Genetics	Biochemistry and Molecular Biology	Biological Modeling and Analysis	Ecological Interactions	Discipline-Specific Applications
	BIOL 5403 Comparative Physiology	BIOL 5401 Cell Biology	ASCI 7385 Concepts in Genetic	BIOL 5418 Molecular Biology	BIOL 5415 Biometry	BIOL 7311 Behavioral Ecology	In this section, any Applied Science course with a regular course number (i.e. Special topics with 5399 or 7399 designation not allowed) may be chosen.
	BIOL 5419 Plant Physiology	BIOL 5413 Immunology					
	BIOL 5422 Mammalian Physiology		Analysis ASCI 7387 Genomics	ASCI 7375 Biochemistry of Biological Molecules	BIOL 7420 Phylogenetics	BIOL 5412 Plant Ecology	
	ASCI 7386 Recombinant DNA Methods and Applications	BIOL 5406 Pathogenic Microbiology			BIOL 7310 Experimental Design		

Figure 7 Biosciences Candidacy Subjects

Applied Chemistry

The Applied Science Ph.D. provides advanced preparation for careers in government, industrial, and academic research. The degree offers a flexible program of study in order to take advantage of the previous training of each student. The number of required courses has been minimized, placing the responsibility for development of a student's program upon the student and their advisory committee. Research is the major focus of this program. Our faculty members pursue vigorous and productive research programs on a variety of topics, providing graduate students with numerous opportunities to select an area of specialization. Teaching is also a required activity in the program, and graduate students contribute to the teaching mission of the Applied Science Program as TAs (teaching assistants) most often in freshman level laboratories.

The Applied Chemistry Faculty

Participating faculty are from the Applied Science Program. In addition to their other faculty responsibilities, this faculty directs Applied Chemistry students in doctoral research, serve as members of the student's supervisory committees, and generally oversee operation of the program. They also serve as supervisors for the work assignments of Ph.D. students supported by a state-funded graduate assistantship. Several faculty are engaged in collaborative research programs, bringing together talents and knowledge from different areas to focus on interdisciplinary problems. Research collaborations exist among this group of faculty, as well as externally with the University of Arkansas for Medical Sciences (UAMS) and the National Center for Toxicological Research (NCTR). Research collaborations outside the central Arkansas area have included NASA-Kennedy Space Center and Oak Ridge National Laboratories.

Students in Applied Chemistry

Participating students are a diverse group, whose academic background represents not only Arkansas and the surrounding region, but also many other states and foreign countries. Students work closely with one another and with faculty mentors, creating a spirit of community and cooperation. This is facilitated through seminars and various social functions. Students are expected to conduct themselves in a professional and ethical manner.

A specific goal and benefit of the program is development of the student's skills in all areas of scientific communication.

Applied Chemistry Candidacy Exams

1. Consult the following table specific to your emphasis area.
2. Select four candidacy subjects.
3. Choose for each subject, a candidacy course to be tested on (Under the Discipline-Specific Applications subject, a course listed in other subjects of the same emphasis area can not be requested for candidacy exam). Students must have taken these courses at UA Little Rock before taking the corresponding candidacy exams. However, a *one-time waiver may be granted*. See *Waivers section for details*.
4. Gain approval from Graduate Coordinator.
5. Submit Candidacy Exam Request Forms to the Applied Science Program (CAL S Dean's Office, 501.569.3296) no later than May 15th or December 15th prior to the Fall or Spring Semester exams to be taken, respectively. The Candidacy Exam Request form is located in the Appendix on page A-7.
6. Take exams in all four candidacy subjects during one semester (no exceptions). Students who pass all four exams are finished with candidacy exams.
7. If you fail one or more exams, you will have only one more chance to pass the exams in the semester immediately following the semester of your first attempts.
8. Attempt one last time to pass candidacy exams either in the same subject of precedent failure or in a different candidacy subject. Exams that you passed in the first attempt must not to be retaken, but failure to pass candidacy exams after the second results in program dismissal.
9. Please see the following Figure 8 Chemistry Candidacy Subjects for exam selection.

CHEMISTRY CANDIDACY SUBJECTS

	Analytical Chemistry	Inorganic Chemistry	Organic Chemistry	Physical Chemistry	Discipline-Specific Applications
COURSES	<p style="text-align: center;">CHEM 7311 Advanced Analytical Chemistry</p>	<p style="text-align: center;">CHEM 7340 Advanced Inorganic Chemistry</p>	<p style="text-align: center;">CHEM 7350 Organic Reaction Mechanisms</p>	<p style="text-align: center;">CHEM 7370 Physical Principles of Chemical Reactivity</p>	<p style="text-align: center;">In this section, any COS course with a regular course number (i.e. Special topics with 5399 or 7399 designation not allowed) may be chosen.</p>

Figure 8 Chemistry Candidacy Subjects

Applied Physics

This emphasis area incorporates research programs from the UA Little Rock Applied Science Program and Physics and Astronomy. Current research areas are described below.

Materials Research

This research area focuses on properties, characterization, and advanced technological applications of thin film and nanostructured materials. Research topics include micro- and nano-fabrication, advanced characterization techniques, solid state physics, materials for energy applications, bio-materials, multifunctional materials, smart materials, thin film coating technologies, composite materials, and materials for space exploration. For more information contact [Dr. Tansel Karabacak](mailto:txkarabacak@ualr.edu), (txkarabacak@ualr.edu; 501.569.8045).

Applied Geophysics and Seismology

Applied Geophysics, which combines knowledge from physics, mathematics, and geology, includes exploration and imaging of the earth's interior through physical measurement collected at or near the earth's surface by highly specialized equipment. The research program at UA Little Rock is oriented toward the development and application of geophysical technologies for environmental, geotechnical, and engineering applications. Gravity, magnetic, electric, seismic, and ground penetrating radar are the main technologies utilized in the research. Topography and three-dimensional imaging of the shallow subsurface using these technologies is an important research focus. This Applied Physics area also conducts research in earthquake seismology. For more information contact Dr. [Haydar Al-Shukri](mailto:hjalshukri@ualr.edu), (hjalshukri@ualr.edu; 501.569.8000).

Direct Dark Matter Searches

DarkSide (Depleted Argon Cryogenic Scintillation and Ionization Detection) is an experimental collaboration for the detection of a proposed form of dark matter—Weakly Interacting Massive Particles (WIMPs). Its scientific program is planned in phases with increasing sensitivity. The first step is Darkside-50, a dual-phase, 50 kg depleted argon time projection chamber (TPC). WIMPs would be detected when they scatter off an argon nucleus in the bulk liquid argon target. The nucleus recoils leaving a short track of ionized argon. Molecular processes of electronic recombination produce a flash of scintillation light detected by arrays of photomultiplier tubes (PMTs). By applying an electric field, a fraction of the electrons are drifted to the anode grid, multiplied in the gas phase above the liquid argon and detected as a second signal. This dual readout allows us to distinguish nuclear recoils from other background events. Darkside-50 will be deployed at the Gran Sasso underground laboratories in Italy. The second phase of DarkSide is within a larger project called MAX (Multi-ton Argon and Xenon detectors), which also includes the XENON collaboration. The plan is to run dual-phase ton-sized depleted argon and xenon detectors side by side, to validate discovery claims with different targets.

Optics Research

The science of optics and the technology of photonics (generating and harnessing light and other forms of radiant energy whose quantum unit is the photon) are now recognized as critical enablers for information technology and telecommunications, health care and the life sciences, sensing applications in industry and manufacturing, and developments in several areas of national defense. The Applied Optics Laboratory (AOL) at UA Little Rock provides research opportunities in the Applied Physics emphasis area for students interested in developing photonic devices for measurements in industry, the environment, aerospace, medicine, and agriculture. For more information contact [Dr. Al Adams](mailto:ajadams@ualr.edu), (ajadams@ualr.edu; 501.683.7086).

Applied Physics Candidacy Exams

1. Consult the following table specific to your emphasis area.
2. Select four candidacy subjects.
3. For each subject, choose a candidacy course to be tested on (Under the Discipline-Specific Applications subject, a course listed in other subjects of the same emphasis area can not be requested for candidacy exam). Students must have taken these courses at UA Little Rock before taking the corresponding candidacy exams. However, a *one-time waiver may be granted*. See *Waivers section for details*.
4. Gain approval from Graduate Coordinator.
5. Submit Candidacy Exam Request Forms to the Applied Science Program ([CALS Dean's Office](#), 501.569.3296) no later than May 15th or December 15th prior to the Fall or Spring Semester exams to be taken, respectively. The Candidacy Exam Request form is located in the Appendix on page A-7.
6. Take exams in all four candidacy subjects during one semester (no exceptions). Students who pass all four exams are finished with candidacy exams.
7. If you fail one or more exams, you will have only one more chance to pass the exams in the semester immediately following the semester of your first attempts.
8. Attempt one last time to pass candidacy exams either in the same subject of precedent failure or in a different candidacy subject. Exams that you passed in the first attempt must not to be retaken, but failure to pass candidacy exams after the second results in program dismissal.
9. Please see the following Figure 9 Physics Candidacy Subjects for exam options.

PHYSICS CANDIDACY SUBJECTS

COURSES	Mechanics	Electricity and Magnetism	Quantum Mechanics	Statistical Thermodynamics	Discipline Specific Applications
	PHYS 5311 Classical Mechanics	PHYS 5321 Electromagnetism	PHYS 5350 Quantum Mechanics I	PHYS 5310 Statistical Thermodynamics	In this section, any COS course with a regular course number (i.e. Special topics with 5399 or 7399 designation not allowed) may be chosen.
	ASCI 5315 Advanced Dynamics				
	ERSC 5373 Hydrogeology				
	Elastic Wave Theory	Potential Theory	Materials Physics	Materials Processing	Astrophysics
ASCI 5355 Elastic Wave Theory	ASCI 5360 Potential Theory	PHYS 5340 Solid State Physics	Micro- and Nano-Fabrication (ASCI 7318)	PHYS 5301 Astrophysics	

Figure 9 Physics Candidacy Subjects

Applied Mathematics and Statistics

Applied Mathematics and Statistics is an interdisciplinary research and academic emphasis offering a Ph.D. through the Applied Science Program in coordination with the Mathematics and Statistics, Physics, and Chemistry. The emphasis is designed to enable students in a wide variety of scientific fields to become experts at applying computational tools and techniques to their specific disciplines.

Admission to the Applied Mathematics and Statistics Emphasis Area

Applied Mathematics and Statistics emphasis area requires knowledge of discrete mathematics, differential and integral calculus for single and multivariate functions, linear algebra, differential equations, mathematical statistics, and knowledge of programming through data structures. Additional prerequisites may be required for courses in each concentration area.

PhD Applied Science, Applied Mathematics and Statistics

Candidacy Exams

1. Consult the following table specific to your emphasis area.
2. Select four candidacy subjects.
3. For each subject, choose a candidacy course to be tested on (Under the Discipline-Specific Applications subject, a course listed in other subjects of the same emphasis area cannot be requested for candidacy exam). Students must have taken these courses at UA Little Rock before taking the corresponding candidacy exams. However, a *one-time waiver may be granted*. See *Waivers section for details*.
4. Gain approval from Graduate Coordinator.
5. Submit Candidacy Exam Request Forms to the Applied Science Program coordinator no later than May 15th or December 15th prior to the Fall or Spring Semester exams to be taken, respectively. The Candidacy Exam Request form is located in the Appendix of the graduate student handbook.
6. Take exams in all four candidacy subjects during one semester (no exceptions). Students who pass all four exams are finished with candidacy exams.
7. If you fail one or more exams, you will have only one more chance to pass the exams in the semester immediately following the semester of your first attempts.
8. Attempt one last time to pass candidacy exams either in the same subject of precedent failure or in a different candidacy subject. Exams that you passed in the first attempt must not to be retaken, but failure to pass candidacy exams after the second results in program dismissal.
9. Please see the following figure for exam options.

EMPHASIS AREA: Applied Mathematics and Statistics							
(Candidacy Subjects appear in bold letters below. There may be one or more candidacy courses under each candidacy subject. Theses appear in regular font.)							
CANDIDACY SUBJECTS							
	Applied Statistics	Computational Statistics	Differential Equations	Linear Algebra	Mathematical Statistics	The Theory of Numerical Methods	Discipline-Specific Applications
CANDIDACY	STAT 7341 Advanced Statistical Methods II	STAT 7343 Programming in SAS	MATH 7322 Advanced Differential Equations	MATH 7311 Advanced Linear Algebra	MATH 7351 Mathematical Statistics II	MATH 7324 Advanced Numerical Analysis II	In this section, any CALS course with a regular course number may be chosen. Course work will be at the discretion of the advisor.
	MATH 7353 Linear and Non-Linear Regression	MATH 7354 Experimental Design	MATH 7325 Partial Differential Equations	MATH 7312 Computational Linear Algebra		MATH 7330 Theory of Finite Element Method	

Figure 10 Applied Mathematics and Statistics Candidacy Subjects

Waivers

Provision to grant a one-time waiver of requirement to take Candidacy subject course at UA Little Rock prior to taking Candidacy Exam in those subjects.

Prior to taking candidacy exams, a Ph.D. student in the Applied Science Program can petition the Graduate Coordinator for a one-time waiver of requirement to take candidacy subject courses for credit at UA Little Rock if the student has taken comparable courses in those subjects at the graduate level for credit in another university. The graduate coordinator will approve or deny the petition based on, in part, the following:

The student has provided the graduate coordinator with an official syllabus of comparable courses taken at another university as well as the grade received.

Student has met the instructor of the candidacy subject at UA Little Rock who has reviewed all materials, interviewed the petitioner, and provided written communication to the Graduate Coordinator (with a copy to the petitioner) to whether or not they are ready to take the exam.

Under no circumstances will a waiver for more than two candidacy subjects be granted, nor subsequent requests for waivers be considered.

Petitioning to Have Requirements Waived

The requirements described in this handbook provide a well-rounded background for all students in areas important to the pursuit of a career in Applied Science. While the described guidelines are to be fulfilled by all graduate students, the Program recognizes that specific cases may arise in which 1.) equivalent requirements (especially course requirements) have been fulfilled recently at a comparable university or, 2.) a student's program would benefit if specific aspects of the Applied Science requirements were modified. If a student feels this to be the case, a formal written petition may be made to the Doctoral Advisory Committee to request waiving or alteration of the Applied Science requirements. Students may petition only once for each issue and, in all cases, sufficient documentation must accompany the request. Petitions should be made in a timely fashion prior to graduation (generally within the first year for M.S. students and the first two years for Ph.D. students).

Waiving Program Course Requirements

An amply documented petition to waive program course requirements would include, but would not be limited to: grade received, institution and date the course was taken, a letter from the course instructor if possible, a copy of the course syllabus, a description of general areas covered, a listing of textbooks used in the course, and a letter of support from the student's Doctoral Advisor. Other areas open to petitioning include substitutions in general course area requirements. In all cases, the student should clearly describe why the current requirement would not best fulfill their needs and what would be gained as a result of any changes.

Applied Science Program Policies & Procedures

[CALs Dean's Office](#) 501.569.8000

Home Mailing Addresses

It is extremely important that the Applied Science Program maintains students' current home mailing address at all times. If the home address has changed since last semester or if student is new, please be sure we have the current address. If the home address changes during the semester, students are required to notify the Office of Human Resources and the Registrar's Office. International students, according to INS policy, a Change of Address form must be filled out each time there is a change of residence. This is the student's responsibility.

Student Offices

Students will be assigned office space during their term of study at UA Little Rock. If practical, space will be located near their chosen Doctoral Advisor's research area.

Keys and Key Cards

To request a key or key card, go to the office administrator of your Emphasis Area. When the correct documentation has been filled out they will return it to you and you will be able to pick up the approved keys from the key room on campus. Your major advisor is responsible for giving you the keypad code to enter their laboratory. Upon graduation, keys must be turned in to the Physical Plant, or you will not receive your degree.

NOTE: Students are responsible for making sure office/lab doors are locked and lights are turned off.

Paycheck Receipt

Graduate Research Assistants, Fellows, and Teaching Assistants are paid twice monthly on the 15th and the last day of the month. Paychecks are distributed by direct deposit to student's bank account through UA Little Rock. Go to the Office of Human Resources and fill out a New Hire packet. Direct deposit forms are included. To view your paystub, visit the UA Little Rock website <http://www.boss.ualr.edu>.

Thesis and Dissertation Expenses

Students are responsible for all costs pertaining to the preparation and finalization of their thesis/dissertations (that is, copies/transparencies made, binding, special paper, etc.).

Graduation

The Graduation Application should be completed well in advance of your graduation date. To fill out a Graduation Application go directly to your [BOSS account](#) and follow the links for Graduation Application.

Travel

Provide the appropriate support person with all of your travel information. A travel authorization is completed to make arrangements, including cash advances. Cash advances must be requested seven days prior to the travel. During your trip, please keep all your receipts. When returning from a trip, you must complete a TR-1 form (available from the Applied Science Program office) within in three days of returning; then return it to the appropriate support person with all of your original receipts. **Please note: you must fill out a travel authorization you make any final travel arrangements or purchase airline ticket.**

UA Little Rock Graduate School Guide for New Students

Policies

Equal Opportunity / Affirmative Action

UA Little Rock is committed to the policy of providing equal opportunity for all persons and will not discriminate in admissions, programs, or any other educational function or service on the basis of sex, disability, age, race, national origin, color, or religion. In carrying out this commitment, the University follows the principle of affirmative action and operates with the federal laws and executive orders prohibiting discrimination. Inquiries concerning the application of any of the federal laws or regulations may be referred to the [UA Little Rock Office of Human Resources](#), 501.569.3180.

Equal Access Policy

UA Little Rock makes every effort to meet special accommodation and access needs. For information on specific accommodations for individuals with disabilities, contact the department, program, or organization sponsoring the class or event you wish to attend or call the Office of [Disability Support Services](#) (501.569.3143). If you have questions, concerns, or comments regarding accommodations and accessibility, you may contact UA Little Rock Health Services (501.569.3188).

Alternative Formats and Accommodations

This document can be provided in alternative formats. UA Little Rock makes every effort to meet special accommodation and access needs. For information on specific accommodations for individuals with disabilities, contact [Disability Support Services](#) (501.569.3143).

What You Need to Know and Do Before the First Day of Classes

Visit the UA Little Rock website for the [online schedule of classes](#). All programs require that you be advised before you register for classes.

Advising

Students need to be advised by staff within their discipline. [Applied Science Program](#) students will be advised by the Graduate Student Coordinator who best knows the student's intended emphasis area. Prospective students must contact the Applied Science Program and clarify their intent. An advising staff member will help with the initial process, but may not be the student's advisor for the remainder of the student's progress.

Registering and Confirming Classes

Visit the [UA Little Rock BOSS](#) and click on Online Registration link. Follow the directions posted on that site to register. You will need your student ID number and PIN number which can be obtained in the Admissions and Records Office of the UA Little Rock when you present a photo ID.

Vehicle Registration and Parking

Open campus parking is free. However, you need to get a sticker for your vehicle. Stickers are generally made available at a special location on campus (usually in one of the meeting rooms of the Donaghey Center) during the first few weeks of school. They are available the rest of the year at the Parking Office in Public Safety (located in the Plaza Shopping Center on Asher Avenue). Reserved parking must be purchased each semester and is sold first-come first-served to all students, faculty, and staff.

Parking regulations are enforced. In particular, do not leave your car unattended in the circle drive by the Administration South building.

Disability Support Services

UA Little Rock accommodates students with documented disabilities of any type. If you think you might be eligible for services, contact [Disability Support Services](#) at 501.569.3143. You could be eligible for extended time on exams, testing in other formats (for example, oral or large print). Assistance with getting books on tape, and other accommodations designed to equalize your opportunity to succeed at UA Little Rock. Parking for people with disabilities is available (Health Services, 501.569.3188). There are also rooms in the residence hall equipped for students with wheelchairs and students with hearing loss (Housing, 501.661.1743).

For those students who use books on tape because of visual loss or a learning disability (or who need mobility training on campus because of visual loss) it is critical that they contact Disability Support Services as soon as possible even if located away from Little Rock Arkansas. Most students who use books on tape know that the acquisition process is lengthy.

Mobility training must be arranged through the State Division of Services for the Blind, and the application process needs to begin as soon as possible.

Books

The [UA Little Rock Bookstore](#), a branch of Barnes and Noble Booksellers, is located on the lower floor of the Donaghey Student Center. Both new and used textbooks are sold for most courses. The bookstore also carries a wide range of school and office supplies, clothing, plus packaged food and drink. The Campus Bookstore, at 3006 S. University in the Broadmoor Shopping Center, also carries UA Little Rock textbooks. Both bookstores buy back textbooks.

Safety

It is best to be prudent: do not walk alone on campus after dark. If you do not have a friend to walk with, call the Department of Public Safety (DPS) at 501.569.3400 or pick up a campus blue light telephone to be connected with a DPS dispatcher directly, and ask for an escort.

Remember; if a crime, accident, or other emergency does occur, notify DPS immediately, 501.569.3400. Little Rock Police Department's first action is to call UA Little Rock DPS.

Especially for Graduate Assistants

Paperwork

Go to the Office of Human Resources (Personnel) in the University Services Building and complete the following forms so you can be put on the payroll:

- Federal and State tax forms
- [I-9 form](#)
- Drug use statement
- Personal Data Sheet

If you have worked on campus during the previous year, you may not need to complete all of the forms.

International students on F-1 or J-1 visas also must complete the Certificate of On-Campus Employment Eligibility from the International Student Office and return it to the Graduate School. You will not be paid until you have returned the necessary form or forms.

Confirmation Letter

Shortly before school starts, you should receive a letter from the Graduate School delineating the terms of your graduate assistantship. If you have not received your letter by the last two days before the semester starts, please call the Graduate School at 501.569.8661.

Work Assignment

You should meet with your supervisor and arrange your hours shortly before the semester begins. Your hours of work depend on the arrangements you make. Records are not sent to the Graduate School or Payroll office. You are accountable to your supervisor for your time and may be requested to complete a time log for internal program use.

Billing

Tuition scholarships will be credited to your account during the registration period. You are responsible for all registration fees. Depending on the arrangements of your assistantship, you may be responsible for part of your tuition. Be sure you have paid your portion or arrange for deferred payment with the Cashier's Office before the payment deadline. If registration fees are NOT paid by the advertised deadline, a late charge is assessed. Also, be sure to let the Graduate School know if you make any changes (drop or add) in your schedule. Undergraduate classes, even if required for certification purposes or efficiency removal, will not be covered by the tuition scholarship.

Paychecks

You will be paid twice a month, on the 15th and on the last day of each month. If the 15th or last day falls on a weekend, payday will be on the previous Friday. All pay is distributed by direct deposit to your bank account through the University. You may fill out a direct deposit form at the Payroll office in the Administration North Building, Room 108. To view your paystub, visit the UA Little Rock Web site <http://www.ualr.edu> and click on the BOSS Online Registration link. Follow the directions posted on that sight to view your paystub. You will need your student ID number and PIN number, which can be obtained in the Records and Registration Office of the UA Little Rock when you present a photo ID.

Those of you whose assistantships are renewed for the next semester should note that there is a six-week gap between the last payday in the fall semester and first payday in the spring.

Term of Appointment

Appointments are renewable each semester, contingent upon satisfactory academic progress toward a degree (passing nine graduate hours) and satisfactory work performance. If your initial appointment covered two semesters, you will not receive another notification letter, and you do not need to do anything for your appointment to continue. If your initial appointment was for one semester, ask your supervisor if it will be continued. If not, and if you are interested in finding another appointment, speak to the Graduate School as soon as possible.

What You Need to Know and Do during the First Week

Payment Deadline

The deadline for payment of all tuition and fees is at the end of the first week of classes and is published in the [UA Little Rock Schedule of Classes](#). If your total payment has not been received (and you have not made arrangements for a payment plan) you will be administratively withdrawn and will not be able to re-enroll for the semester.

Schedule Adjustment Period

The schedule adjustment deadline is also at the end of the first week of classes and is published in the class schedule. During the first week of classes, students may add and drop classes without penalty or notation on the permanent record, and may change from credit to audit status and vice versa. Any increases in tuition costs resulting from schedule changes must be paid by the normal payment deadline.

The end of the schedule adjustment period is not the same as the drop date. As mentioned above, classes dropped during the schedule adjustment period do not show on your record and do not have to be paid for. You may still drop classes after the end of the adjustment period, up to the drop date (about seven weeks into the semester). Your record will show a grade of W and you will get no refund. Incidentally, although you may be forced to drop a class because of circumstances beyond your control, a continued pattern of W grades does not look good on a graduate transcript. As a graduate student, you are expected to be able to judge your time commitments and plan accordingly.

Withdrawal from the University

If you must withdraw from the University, or drop all your courses, you may be able to receive a full or partial refund, depending on when you withdraw. Consult the Schedule of Classes for the refund schedule. You can generally get a 100% refund on any or all courses if you drop them by the payment deadline. You can get a 50% refund if you withdraw (drop all classes) within the second week of school. The dates and conditions of this policy may change; be sure to check the [Schedule of Classes](#) for the specifics.

UA Little Rock Campus Card

You will need your campus ID card; for instance, you may want to check a book out of the library or use the exercise equipment at the Donaghey Student Center. Go to the lower level of the Donaghey Student Center near the entrance of the UA Little Rock Bookstore. The staff will take your picture and generate your card while you wait. This card will be valid as long as you are a continuing student at UA Little Rock; it does not need to be updated. You can also put money on the card, and use the card to purchase food at the campus cafeterias. In that case, you don't have to pay sales tax. For definitive information on this facility, please contact Dining Services in the Donaghey Student Center.

Health Services

Cut your finger? Have a sinus infection? Faint from anxiety in your first seminar? Health Services can help. Staff members can treat minor injuries, write some prescriptions, make physician referrals and give you general health information on a wealth of topics. Health Services is located on the lower level of the Donaghey Student Center across from the bookstore.

Postal Services

Need to mail a letter or pay a bill? You can buy stamps from a vending machine in the Donaghey Student Center in the upper level, near Meeting Rooms A, B and C. There is a mailbox in the Student Concourse (nearest to the old Student Union Building, A, which houses computer labs and University Mailing Services). At Mail Services, you may mail a letter there as late as 4:00 p.m. to go out the same day, as long as you provide the postage.

The closest post office to UA Little Rock is Asher Station at 7401 Asher Avenue, a bit more than a mile west of the intersection of Asher and University, adjacent to the University of Arkansas Criminal Justice Institute.

Computer/Internet Use

All incoming students are automatically issued email and BOSS accounts on UA Little Rock's server. The account password is set initially to your student identification number, but you are required to change it to a password of your choice the first time you log on.

Access the UA Little Rock web mail system at mail.ualr.edu

In addition to the computer resources of your program, there are computers available for your use in many locations throughout the campus. These include the Library Lab, the PC Lab, the Mac Lab, the HELP Lab in ETAS 308 and the CyberCafé in the Donaghey Student Center.

Library

You can search the library online through the public access catalog (OPAC) for a book by title, author, subject, a combination of those, or by additional methods. The OPAC will show whether the library holds a book and whether it is currently available in the stacks. You do not even need to go to the library to "go to the library". Access the [Ottenheimer Library](#) online at any time from any place through UA Little Rock's web site. Both connections also offer information on your account: you can key in a user number and get a list of materials you have charged out.

In case 300,000 book volumes and 2,600 periodical subscriptions are not enough, the OPAC also offers a gateway to other libraries and databases around the nation. If the book or periodical issue you need is not available in the library, you can usually obtain it through Interlibrary Loan, which offers various book and document delivery services.

Tours of the library are offered by the Reference Department. These include class and group tours, limited tours for individuals and a self-guided tour using a printed handout. Many other handouts on library holdings and research techniques also are available at

the reference desk.

University Writing Center

Do not miss this wonderful resource. Writing is a skill that always can be improved. The staff members of the [University Writing Center](#) are qualified and prepared to help writers of all levels. They are trained to help you improve your own writing. They will not write for you and they will not compromise your ownership of your own work.

In addition to personalized assistance, the Center offers other resources: basic English laboratory courses; cassette and computer lessons on usage, punctuation, and structure; a library of books and flyers on writing; and Apple computers with software for word processing, publishing, and internet access. The Center is located in Student Union B 116; telephone 501.569.8343.

Copies

If you have been to the library, you have probably noticed the copy machines in there. Photocopying is subject to copyright laws; it is your responsibility to be aware of them. Then, buy copy cards at the circulation desk; you get a better price per copy than if you pay with handfuls of change. There are also copy machines located outside the entrance to the UA Little Rock Bookstore in the Donaghey Student Center.

Donaghey Student Center Fitness and Aquatics

Students should exercise the body as well as the mind. Exercise is a sound investment of your time and energy. Student fees have already paid for students to use the fitness and aquatics facilities. Rather than spending one more hour after countless hours of research or work on a project, take that hour and play racquetball, go for a swim, take an aerobics class, or lift weights. Some of the exercise machines can even be used in a racing mode, so invite your lab partner to come with you.

The Fitness and Aquatic Center is located on the bottom floor of the Donaghey Student Center. Facilities include Arkansas' only Olympic-sized pool (wheelchair accessible), four basketball courts, seven types of cardiovascular training machines, racquetball and volley ball courts, strength training facilities including free weights and machines and a 1/8 mile, two-lane indoor track for walking and jogging.

Graduate Student Association (GSA)

The GSA is an organization for graduate students that works with UA Little Rock and the Graduate School to assess graduate student needs and help meet those needs. It is not a governing body, but an advocacy group, looking after your interests as a graduate student. GSA holds monthly meetings that provide information on UA Little Rock services, news about special opportunities for UA Little Rock graduate students and opportunities to socialize and network with peers. Community leaders often speak at the meetings allowing students to learn more about career options and community issues. Call the Graduate School (501.569.8781 or 501.569.8661) to find out when and where the meetings are scheduled, and then come!

Graduate Student Research Forum

The Graduate Student Research Forum is a yearly event hosted by the UA Little Rock Graduate Student Association. The Forum has the specific goal of giving UA Little Rock graduate students a chance to present their scholarly work. Presentations are evaluated by a panel of judges from the university and professional communities. Awards for the finest presentations from each category are presented at a noon luncheon ceremony. Participating in the Research Forum allows students to learn about what other students are doing and get ideas for future projects. Prizewinners have an excellent item to add to their resume. Check with your Emphasis Area Coordinator to find out how participants are chosen in your area. It may be time for you to start a project!

Policy Documents

There are three major documents (besides this one) you should obtain and be familiar with as a UA Little Rock graduate student. The [Graduate Catalog](#) contains academic policies and specific information about all graduate programs and courses. It is available in the Graduate School to fully admitted students for free, or may be viewed online. The Student Handbook contains the [Code of Student Rights, Responsibilities, and Behavior](#) and other nonacademic policies. It is available in the Office of the Dean of Students. Finally, the [UA Little Rock Dissertation and Thesis Guide](#) contains the guidelines for preparation and submission of dissertations, thesis and other final projects. It appears in its entirety in the Graduate Catalog and can be viewed online at (<http://www.ualr.edu/gradschool/assets/archive/pdfs/thesisguide.pdf>). .

Grievances and Procedures

As a student, you have specific rights and responsibilities. There are procedures to follow to rectify the situation. The procedures vary depending on the type of problem. Below is a list containing descriptions of situations, the school policy that applies to each situation, where to find the information and the suggested first contact you should make with the administration.

- You believe you have been discriminated against because of your race, ethnicity, sex, disability, or age
- You believe you have been discriminated against because of HIV-positive status
- A student, faculty member, or administrator makes sexual remarks to you that make you uncomfortable
- You are sexually assaulted on campus
- You receive an Allegation of Academic Offense form accusing you of an offense
- You witness another student or students cheating
- You believe someone has tampered with your lab data or broken into your computer account
- You receive a final course grade that you think is unfair
- There is a dispute about what requirements you need to fulfill for your degree
- You believe you should be exempted from or receive special accommodations in a course because of a disability
- You are accused of a behavioral violation
- Another student assaults or verbally abuses you

Grade Point Average (GPA)

Graduate students will maintain a minimum cumulative grade point average of 3.0. If GPA drops under 3.0 students will be placed on academic probation and will have a fixed amount of time to remedy the situation. Consult Academic Probation and Graduation Requirements found in the [Academic Policies](#) section of the Graduate Catalog for more information.

Additional Graduate Program Information

Annual Graduate Student Progress Report

All M.S. and Ph.D. students in the Applied Science Graduate Program will submit an Annual Graduate Student Progress Report by May 15th each year. This report is to ensure that students are making satisfactory progress toward their degree.

The Annual Graduate Student Progress Report is a three-page report in the Appendix on pages A-2, A-3, and A-4.

It is entirely the student's responsibility to complete the report, with appropriate signatures, by the deadline.

The Annual Graduate Student Progress Report will be

- completed in its entirety each year
- approved by the Research Advisor who will verify the information by his or her signature
- submitted to the Applied Science Program Administrative Assistant (who will deliver reports to the Applied Science Graduate Coordinator)

For new students who start the program in Spring Semester, the Graduate Coordinator will sign as the provisional mentor. Students who fail to submit their Annual Graduate Student Progress Reports will not be allowed to register for credit hours until they do so.

Changing Emphasis Areas after Admission

Students are awarded financial support based upon the emphasis area to which they apply. Students who do not pursue a course prescribed by the selected emphasis area will lose their support. For foreign students, a loss of graduate support will impact their ability to support themselves. Additionally, their INS status will be affected.*

When students apply to the graduate program, they select their Ph.D. emphasis areas based on their undergraduate and/or graduate degree. The Applied Science Program recognizes that every student has a unique background, personal goals, and professional desires. Therefore, an individual's program and course work may bridge between the various emphasis areas to allow a broad-based research program.

The appropriate liaisons and the Applied Science Graduate Coordinator must approve any emphasis area change within the Applied Science Doctoral Program after the student's first semester. Change to a different emphasis area will be discouraged whenever the student would need to take a substantial number of undergraduate courses to prepare for the candidacy requirements in the new emphasis area.

Students who do not pursue the program as outlined in their first semester by the Graduate Coordinator or in future semesters as outlined by their Ph.D. Advisory Committee will lose their financial support.

Students who are holding student F-1 visas should check with the International Student Office to ensure that they are not violating any of the conditions of their F-1 visa status.

Travel

The Applied Science Graduate Program encourages student attendance at scientific meetings and workshops. Generally, a student's Doctoral Advisor is expected to provide support for students who are presenting papers or posters at a meeting. Alternatively, students should seek travel grants from an appropriate professional organization. Applied Science Program and Graduate School can also provide student travel awards contingent on the availability of funds (Please see the travel award application forms attached.).

Code of Conduct

Graduate students must abide by all relevant standards and rules of UA Little Rock. Students should recognize that there are general ethical standards that they are obligated to follow with respect to activities such as cheating or plagiarism. As employees, there are different standards with respect to the execution of responsibilities, including the protection of UA Little Rock property. For instance, students should recognize that all research carried out under a sponsoring faculty member legally belongs to UA Little Rock, not the student. Failure to abide by University or Program guidelines can result in dismissal from the program. If students are concerned about an ethical situation, they should consult their Doctoral Advisor, the Applied Sciences Graduate Coordinator.

Facilities

Faculty members of the Applied Science Graduate Programs are primarily distributed between the ETAS, Science Laboratories Buildings, Dickinson Hall, Fribourgh Hall, and the Physics/Astronomy Building. The Applied Science Program office is located in room 300 of ETAS. The Graduate Institute of Technology (GIT) is located in room 329 of ETAS. Regular office hours are 8:00 am - 5:00 pm, Monday - Friday.

Leaving the Program

A student may request a temporary leave of absence from the Graduate Program by petitioning the Applied Science Director. This should be in writing and contain appropriate explanations. To re-enter the program, the student must petition the Applied Science Program. Acceptance will depend upon issues such as past performance, funding availability and whether there is an advisor willing to accept the student in their laboratory. Students should recognize that without formally requesting and receiving such a Leave of Absence, they are officially terminated by UA Little Rock any time they do not register for one semester, after which they must officially apply for re-admittance to the University. To prevent the need to reapply for admittance, students should register in Applied Science Seminar (ASCI 7190) so they are registered for at least one class.

Students may resign from the Graduate Program at any time. To do so, they should write a letter to the Graduate Coordinator stating their intent. It is advised that students contemplating such a move should first consult with their Doctoral Advisor or the Graduate Coordinator before beginning such a process.

Students can be dismissed from a faculty member's research program at any time if the Doctoral Advisor (in consultation with the student's Advisory Committee) determines that the student is not making acceptable progress. Such a dismissal will not constitute dismissal from the Program, but it is the obligation of the student to find an acceptable replacement Doctoral Advisor in the Program within one semester. Students will not be allowed to continue their education with the Program without a Doctoral Advisor. Students in this situation should schedule a session with the Graduate Coordinator to determine the best course of action.

Students can be terminated from the Graduate Program by the recommendation of their Advisory Committee and with the approval of Doctoral Affairs Committee for the following reasons:

- Failure to meet minimum academic standards
- Failure to make acceptable progress in their degree work
- Failure to meet generally acceptable ethical standards of the University
- Failure on the candidacy or research proposal exam
- Failure during the thesis/dissertation or project (for non-thesis M.S. students) defense
- Failure to have research advisor

It is the student's obligation to ensure that they are complying with University and Program guidelines with respect to these aspects of their education. If students are unsure or concerned about their status within the Program, they should consult with their Doctoral Advisor, or their Emphasis Area Coordinator.

Support Personnel Contacts

Applied Science Program

[For full-time faculty, click here.](#)

[For adjunct faculty, click here.](#)

Graduate Institute of Technology

[For GIT Staff Directory, click here.](#)

UA Little Rock Graduate School

[For UA Little Rock's university-wide graduate program contacts, click here.](#)

UA Little Rock's academic restructuring has resulted in a new personnel organization. Students should speak to their Emphasis Area Coordinators as a first line of contact. Please see the following Figure 11 CALS Restructure for clarification.

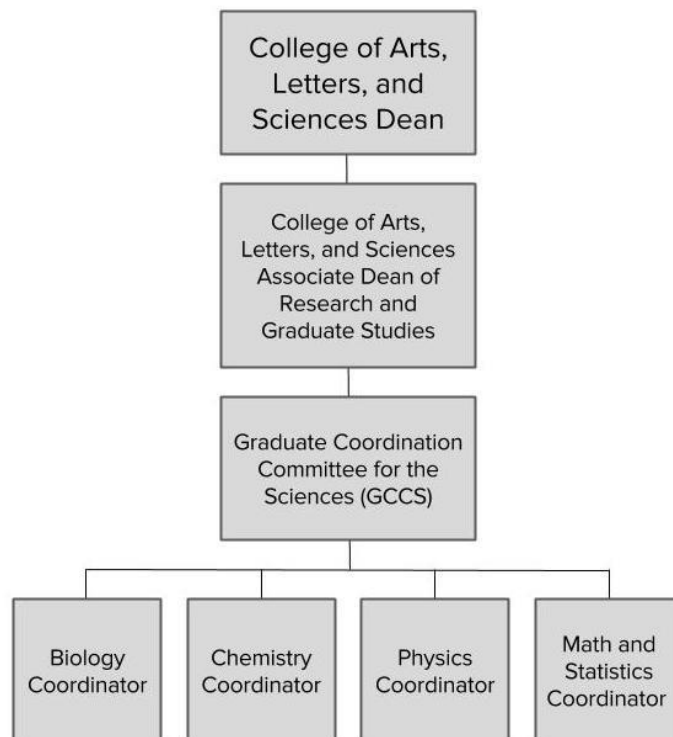


Figure 11 CALS Restructure