

The University of Alabama at Birmingham

Vision Science Graduate Program Handbook

2022-2023

Welcome to the Vision Science Graduate Program

Vision Science is a multidisciplinary field where basic scientists and clinicians focus on the discovery of

new knowledge that will further our understanding of the eye and vision. This discovery includes

virtually every scientific discipline where advances come from biologists, neuroscientists, optical

engineers, epidemiologists, psychologists, optometrists, physicians and others.

The Vision Science Graduate Program at the University of Alabama at Birmingham provides

comprehensive training for the next generation of leaders in vision science. Your decision to pursue graduate training in this program will place you at the center of one of the nation's top biomedical

research institutions and will immerse you in collaborative multidisciplinary research environment that

is today's model for biomedical research leadership. Moreover, our training environment will present

opportunities for creative career paths that involve other educational programs (such as business, law

and public health) that will allow you to position yourself for a career as unique as your individual

talents and interests.

This student handbook is designed to be a key resource for program information that you should find

useful throughout your graduate training. Please read this handbook carefully, and if you have any

questions or concerns, please let us know. Welcome to the Vision Science Graduate Program. Get ready to position yourself among the very best!

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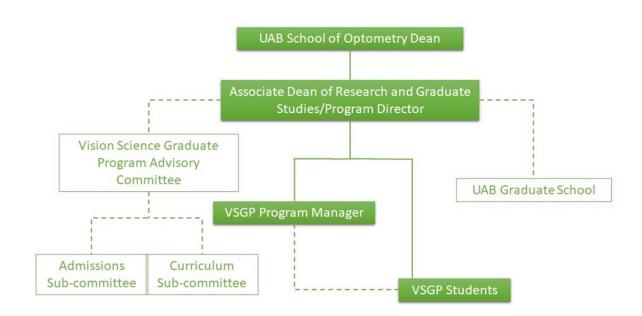
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Section 1: Vision Science Graduate Program Description and Procedures

The following program description establishes the program guidelines for graduate training in the Vision Science Graduate Program (VSGP) at the University of Alabama at Birmingham (UAB). These guidelines define the required program content and help insure that every student receives the best possible education and training. Nevertheless, it is recognized that each student is unique and that circumstances may require variances and individual accommodations to achieve the most effective education and training. Written requests for variance must be presented to the Program Manager and approved by the Program Director.

1.1 Graduate Program Oversight

The chart below shows the organization of oversight for the VSGP. The VSGP is primarily governed by two VSGP administrators: the Program Director (who works with the Associate Dean of Research and Graduate Studies in UAB's School of Optometry) and the Program Manager.



The Vision Science Graduate Program Advisory Committee consists of graduate program faculty and one current VSGP student. Faculty and student membership on the Advisory Committee is changed every year. The role of the Advisory Committee is to serve in an advisory position to the Program Director. The whole committee or selected members will be chosen to provide oversight, mentorship and evaluation of student progress and any needed student remediation. This committee's primary responsibilities are admissions and the curriculum. Each year, this Advisory Committee reviews applicants and recommends admission to qualified applicants. Additional duties include advisement and participation in VSGP recruitment efforts. The committee also reviews the VSGP curriculum and makes recommendations on the current curriculum.

The UAB Graduate School sets the minimum requirements for all degree-seeking graduate students within the VSGP. All final approvals for graduate student progress and benchmarks (i.e. student admissions, committee selections, admission to candidacy, thesis/dissertation approvals and granting of degrees) are processed through the Graduate School. The UAB Graduate School also serves as an advisory source for the Program Director in relation to conflict resolutions and student remediation.

1.2 Graduate Student Responsibilities

1.2.1 UAB Email

The statement below from the UAB Graduate School Catalog/Handbook details UAB's Student Email Address Policy. Official email communication from UAB, the School of Optometry and the VSGP will be sent to your UAB email address only. You may have your UAB email forwarded to your preferred email account, but it is the student's responsibility to maintain the routing of email communication. VSGP administrators will not make any exceptions to this policy.

Every student enrolled at UAB must have an e-mail address that ends with "@uab.edu". Such an e-mail address is required for a student to register for UAB credit courses. It is the student's responsibility to obtain an official UAB e-mail address in a timely manner from the UAB e-mail registering system (https://apps.idm.uab.edu/bid/reg). This will require the student also to have a valid, current, and reliable electronic mailbox through an Internet Service Provider (ISP) or portal or on a server administered by the student's academic department, or on the central mail service provided by the Office of the Vice President for Information Technology. It is the student's responsibility to check his or her e-mail regularly for distribution of official UAB communiqués. UAB recommends that e-mail be checked at least once a day, when practicable. UAB is not responsible for lost, rejected, or delayed e-mail forwarded by UAB from a student's "@uab.edu" address to off campus or unsupported e-mail services or providers. Such lost, rejected, or delayed e-mail does not absolve the student from responsibilities associated with an official UAB communiqué sent to the student's official UAB e-mail address ("@uab.edu"). If there is a change in a student's e-mail address to which the"@uab.edu" alias address is redirected, it is the student's responsibility to make the changes in the UAB e-mail registering system.

1.2.2 Registration for Courses

Students are solely responsible for registering for courses in a timely manner and by the deadlines set by the VSGP administrators. In the event a student does not register by the program deadlines and/or the UAB set registration deadline, the student will be fully responsible for any additional fees incurred. These fees include a late registration fee and a Blazer Flex Pay plan fee. Failing to register will result in a delay of progress towards earning a degree. If the student is on a fellowship (receiving a stipend), failing to register may result in suspension of the stipend. To satisfy the requirements for a fellowship, the student must be a full-time doctoral student registering for at least 27 credit hours per year or at least 9 credit hours per semester.

1.2.3 Course Registration Changes and Tuition Refunds

Students should have all semester course planning finalized when they register. In the event changes to registration need to be made, the student should alert the VSGP Program Manager prior to making changes. All registration changes need to be completed by the University's Add/Drop deadline without tuition fees to ensure no additional fees are charged. If registration changes are made and the Program Manager is not alerted, the student will be responsible for additional fees, etc. *See Section 1.2.2*.

If the student who is receiving a tuition scholarship withdraws from a course and a tuition refund is issued, the student will receive a tuition refund on their student account which will then be direct deposited into the student's linked checking account (*See Section 1.2.6.1*). It will be the student's responsibility to pay the following semester's tuition in the amount that was refunded.

1.2.4 Student Expectations in the Classroom

Course expectations are typically described in each course's syllabus, which outline grading policies and other pertinent information needed to successfully pass each course. Unless otherwise indicated in course syllabi, students are expected to arrive to class on-time and be prepared to participate. Student behavior in class is governed by the UAB Graduate Student Handbook (http://catalog.uab.edu/student-handbook/studentconductcode).

1.2.5 Student Attendance

There are a number of VSGP events where VSGP student attendance is either mandatory or highly recommended to attend. The VSGP will keep track of such attendance and make the records available to various student committees (e.g. thesis, award, etc.). These events are outlined below:

- 1. <u>VSGP Student Thesis/Dissertation Defenses</u>: VSGP student defenses are mandatory for all VSGP students to attend. This provides valuable experience for students when their own defense presentation is given.
- 2. <u>VSGP Student Seminars</u>: These student seminars are student led and VSGP student attendance is required. In the event a student cannot attend, the seminars are recorded and housed on Canvas for students to view.
- 3. <u>VSRC Visiting Scholar Lectures</u>: The Vision Science Research Center (VSRC) hosts guest lecturers throughout the year. First year VSGP student attendance is mandatory and is highly recommended for second year and beyond students.
- 4. <u>Louis and David Rich Lecture Series in Visual Science</u>: These guest lectures are sponsored by the UAB School of Medicine Department of Ophthalmology and Visual Sciences. It is not mandatory for VSGP students to attend, but is highly recommended.
- 5. <u>Vision Science Research at UAB Seminars</u>: These seminars are sponsored by the UAB VSRC. VSGP student attendance is not mandatory but is highly recommended.

1.2.6 General Responsibilities

1.2.6.1 Banking/Checking Accounts

Students are responsible for setting up their banking/checking accounts in two UAB administrative systems in order to receive payments and reimbursements via direct deposit. Direct deposit is the

primary and preferred method to receive payments from the University; physical checks will only be issued under certain circumstances. The student should set up their checking account information in <u>both</u> Blazernet (for student accounting purposes) and Oracle (for Human Resources purposes).

To manage/set-up your checking account information in Blazernet:

- 1. Log in to Blazernet via this link: www.uab.edu/blazernet
- 2. Select the "Student" tab at the top of the page
- 3. Select "Student Account" from the available list
- 4. Select "Direct Deposit Enrollment and Changes" and enter your information

To manage/set-up your checking account information in Oracle:

- 1. Log in to Oracle via this link: www.uab.edu/adminsys
- 2. Select the "Oracle HR & Finance" tab
- 3. Once logged in, select "UAB Self Service Applications"
- 4. Select "Manage Direct Deposit Account" and enter your information

1.2.6.2 Guidelines for Student/Trainee Travel and Approved Travel Reimbursement

Trainee travel is defined as travel by a trainee that is directly related to the trainee's academic research activities and is a required and integral part of a formal training program to fulfill or supplement UAB's obligation to train the individual. Trainee travel applies to the following types of trips:

- 1. Gather data integral to the trainee's research project;
- 2. Attend a scientific conference for the purpose of presenting results of the his/her research project; or
- 3. Attend a scientific conference for the purpose of gaining additional knowledge about his/her research project.

There are numerous guidelines to follow when traveling. Funding policy for travel is described in Section 1.6. The following guidelines are the most important for travel cost reimbursement. For UAB's list of travel guidelines, visit: www.uab.edu/financialaffairs/traveling/trainee

- All VSGP student travel should communicate with VSGP administration before travel arrangements are made. If the student's travel is being supported by UAB School of Optometry funds, the student must complete a pre-approval travel form and submit it to the Program Manager (Kristi Smith, krk@uab.edu) and to the Director of Administration and Fiscal Affairs for approval (Chris Boutwell, cboutwell@uab.edu).
- 2. To limit the financial burden, air travel can be booked via UAB's travel agency, Adtrav. This is the recommended option for booking plane tickets.
- 3. Hotel reservations will be reimbursed after travel is completed. Hotel reservation documentation must indicate the traveler's name for reimbursement (even if a hotel room is being shared). Pre-payment of hotels is not allowed. Use of travel websites such as Expedia, is

- not recommended. If Expedia or other similar sites are used to book flights and hotels, the student will not be reimbursed until travel is completed.
- 4. The per diem limit for meals are \$25 for breakfast, \$50 for lunch, and \$75 for dinner. Tips should not exceed 25%. For reimbursement purposes, itemized meal receipts must be submitted. If an itemized receipt is not submitted, the student will not be reimbursed for that meal.
- 5. Alcoholic beverages and/or alcohol related costs will not be reimbursed. If the student purchases an alcoholic beverage with any meal, it is recommended that it be purchased separately. If it is not purchased separately, it is the student's responsibility to recalculate the meal receipt deducting all costs associated with the alcoholic beverage, i.e. tax and tip.
- 6. When submitting items for reimbursement:
 - a. All receipts must be documented in order to be reimbursed (a requirement stipulated by UAB). Receipts must be provided in either paper or electronic form (the latter as a clear and legible PDFs), with signatures when appropriate.
 - b. Transportation receipts (flights, taxis, etc.) should indicate local destination to and from information.
 - c. Proof of attendance is required for reimbursement. A name badge, registration form, or equivalent proof should be submitted with the reimbursement packet, along with an electronic version of the event itinerary in abbreviated form.

1.3 Academic Standing and Progress

1.3.1 Degree Completion Time Limitations

Full-time enrollment for all graduate students (Master's and Doctoral) is a minimum of 9 credit hours per semester. Part-time enrollment is 6 credit hours per semester. The UAB Graduate School sets an expected time to degree completion limit of 5 years for a Master's degree, and a limit of 7 years for a Doctoral degree. If a student exceeds these time limitations, a one-time extension request can be granted with an approved completion plan.

1.3.2 Academic Good Standing

To remain in academic good standing, students must maintain a B (3.0) or better grade point average and make satisfactory progress toward the degree. Students who do not progress or fail to meet program standards will be reviewed by the Vision Science Graduate Program Advisory Committee. If a student's GPA falls below 3.0, the student will be placed on academic probation and will have two semesters to improve the GPA to 3.0 or higher. The VSGP administrators will create a probation plan for the student outlining a plan to improve the GPA. The probation will be reviewed with the student and signed by the student and the VSGP administrators. If the student continues to receive unsatisfactory grades while on academic probation, the student will be subject to dismissal from the VSGP. If the student is unable to return to good academic standing, the student will be subject to dismissal from the VSGP and the UAB Graduate School.

1.3.3 Annual Progress Assessments

Vision Science Graduate Program student progress will be reviewed once per year. A meeting will be scheduled in the Summer term prior to the new academic year. These annual meetings will focus on

review of individual development plans prepared by the student and their Primary Advisor, and on completion of VSGP benchmarks and student accomplishments (e.g. awards, publications, etc.). Students are also welcome to discuss hurdles toward progress, in order to help find solutions. If necessary, the Vision Science Graduate Program Advisory Committee will evaluate the progress of first year students or those not committed to a Primary Advisor. Progress assessment meetings for 2nd year and beyond students should include input from the student, Primary Advisor, Thesis/Dissertation Committee and the Graduate Program Director.

1.3.4 General Remediation

When general student remediation is needed in events such as failing an exam, VSGP administration will be contacted by the course director to request remediation. The VSGP Program Director will convene a meeting with the course director and members of the VSGP Advisory Committee to (1) first address the cause and concerns for remediation without the student present, and (2) then meet with the student to discuss the concerns. Any remediation will be discussed and a remediation plan will be created, if necessary.

1.4 Graduate Program Curricula and Requirements

All Master's and Doctoral students are required to satisfactorily pass all core Vision Science coursework and additional coursework required for each respective degree. Student evaluations of courses and the corresponding teaching faculty will be distributed for each VS course, and students are expected to provide their feedback within 48 hours of receipt of evaluation. Grades may be withheld if completed evaluations are not submitted. Doctoral students are further required to take three upper level (700) graduate elective courses plus one course in statistics and one on research ethics. Upper level courses are selected at the discretion of the student and their Primary Advisor. Courses offered by other graduate programs at UAB may be substituted for the upper level elective courses, if approved in advance by the Primary Advisor and Vision Science Program Director. Additional elective courses should be discussed with the Primary Advisor and the Program Director.

1.4.1 General Program Requirements

1.4.1.1 Laboratory Rotations

In the first 18 months of enrollment in the program, students will generally complete 3 laboratory rotations, each lasting approximately 10 weeks, before formally selecting a Primary Advisor. Master's students may select an advisor after 1 complete rotation; doctoral students may select their Primary Advisor after completing 2 rotations. During rotations, students are expected to work at least 20 hours a week in lab. Unless approved in advance, rotations must be in the laboratory of a faculty member of the Vision Science Graduate Program. Rotations are classified as non-thesis/non-dissertation research and will be graded as pass/non-pass courses. At the end of each rotation, the student and the faculty supervisor are required to submit a brief written evaluation for that rotation to the VSGP office. The faculty member and the student should discuss the evaluation and a written copy should be given to the student and to the VSGP office.

1.4.1.2 Graduate Student Advisors

The VSGP Director serves as the *de facto* advisor for new students and any current students not assigned to a Primary Advisor, handling course registration, requirements, electives, rotations and any other issues. Students should select a Primary Advisor with whom they wish to carry out their thesis/dissertation research by late spring or early summer of the first year. In exceptional circumstances, students who remain uncommitted to a Primary Advisor following three rotations may request permission from the VSGP director for a fourth rotation. Primary Advisors are selected by mutual consent of the student, prospective advisor, and VSGP Director. Once the student has identified a primary advisor, VSGP administration will initiate the thesis/dissertation advisor selection process. The VSGP advisor selection form will be sent to both the selected advisor and student for completion. The advisor selection form will need to be signed by the student, advisor, VSGP Director, and the advisor's department chair if the primary advisor is not a faculty member in the UAB School of Optometry. Primary Advisor appointments will consider research objectives, educational opportunities, and funding support.

1.4.1.3 Non-Thesis/Dissertation and Thesis/Dissertation Research Credit

Students assigned to a Primary Advisor will register each semester for non-thesis/dissertation research until they are advanced to candidacy. The number of registered research credit hours each semester will be determined by agreement between the student and the advisor and will take into consideration the student's current semester course load as well as the student's research goals. Both non-thesis/dissertation and thesis/dissertation research hours will be graded pass/non-pass. At the beginning and end of each semester, every student will be required to complete, with their advisor, the Thesis/Dissertation Research Hours Grade Report form. At the beginning of the semester, the student and advisor will set semester goals. At the end of the semester, the semester goals will be reviewed for completion or satisfactory progress. The advisor will recommend a grade of Pass or Non-Pass which will be indicated on the grade form. The form will be submitted to the VSGP office for issuing. For full details concerning the VSGP policy regarding specific degree credit hour requirements, consult the current UAB Graduate School Catalog/Handbook, available here: http://catalog.uab.edu/graduate/

1.4.1.4 Thesis (MS) and Dissertation (PhD) Committees

Traditionally, graduate study is highly flexible and individualized. A specific plan of study should be developed as soon as possible upon matriculation. Graduate study committees are created to guide the student toward their degree. Graduate study committees should be able to contribute some relevant insight and expertise to guide the student. Committee members are typically other faculty members at UAB; however, faculty outside of UAB may become a member of the student's committee if that person's expertise is particularly relevant.

The Thesis/Dissertation Committee should be formed as early as possible after the selection of a Primary Advisor and the identification of the research project. The student and the Primary Advisor will consult with the Program Director prior to seeking formal approval of proposed committee members. The student will submit a formal request for committee members to the Program Manager. A Chairman of the Committee, who is not the Primary Advisor, should be selected by the student and Primary Advisor to preside over committee meetings.

1.4.1.5 Thesis and Dissertation Committee Meeting Requirements

In general, students who have formed their thesis/dissertation committees should schedule yearly meetings with their committees to provide updates on their respective thesis/dissertation research. As the student progresses and nears the completion of their thesis/dissertation, committee meetings should be scheduled more frequently (every six months). The student is responsible for initiating the scheduling of committee meetings. Once a committee meeting has been scheduled, the student should inform the VSGP administration of the meeting details. The VSGP administration will ensure that a VSGP representative (i.e. the Program Director, Program Manager, or a member of the VSGP Advisory Committee) will be present at the committee meeting to provide oversight and guidance to any programmatic policies or questions.

Committee meetings should be planned to include the following elements:

- 1. Student presentation of research updates and progress.
- 2. Question and answer session with the committee.
- 3. A period for the committee to discuss the student's progress without the student present.
- 4. An opportunity for the committee to speak with the student without the Primary Advisor present.

1.4.1.6 Thesis and Dissertation Requirements

In consultation with the Primary Advisor and the members of the Dissertation Committee, students will prepare a thesis (MS) or dissertation (PhD) at the conclusion of their research training. The thesis or dissertation will conform to the format approved by the UAB Graduate School. Instructions for preparing the thesis or dissertation are available from the VSGP program office or from the UAB Graduate School at this website: http://www.uab.edu/graduate/images/acrobat/forms/theses/FormatManual.pdf. Beginning with the entering class of 2013, all enrolled doctoral students are required to have at least one accepted peer-reviewed scientific publication related to the dissertation research prior to graduation.

Students are expected to complete and successfully defend their dissertation in a timely fashion, which in general will be by the end of the fifth year. Students in their second year or beyond of enrollment in an accredited graduate program at UAB or at another university and who transfer to the Vision Science Graduate Program in order to work with a specific Primary Advisor may, with the agreement of the Primary Advisor, request a variance from the above guidelines.

1.4.1.7 Thesis and Dissertation Defense Guidelines and Requirements

1.4.1.7.1 Scheduling the Defense

When the thesis/dissertation nears completion, the student will initiate and request that the Graduate Program Manager schedule the Thesis/Dissertation Defense to be conducted on a day and time agreed to by the Thesis/Dissertation Committee. There is a series of actions that must be completed before the defense can be scheduled and a list of the current requirements is outlined below:

1. Provide a committee meeting summary indicating the committee's approval to advance to complete the thesis/dissertation, and approval to defend. This summary should be submitted by

- the advisor to the graduate program office, OR be signed by the advisor and the student submit to the graduate program office.
- 2. Provide/submit the current version of the thesis/dissertation to the graduate program office via Canvas for program review. Program review includes reviewing the quality of the thesis/dissertation document, and scanning for plagiarism via iThenticate or Turnitin. The thesis/dissertation should be submitted to the program office no later than 4 weeks prior to the anticipated defense date.
- 3. Upon graduate program review and approval, the graduate program manager will schedule the defense and officially announce the defense.
- 4. Once confirmation of defense details are received, the student will submit a request for thesis/dissertation approval forms to the graduate program office. The graduate program office will submit the request to the UAB Graduate School.

1.4.1.7.2 Dissertation/ Thesis Review and Defense Postponement

The student will deliver copies of the thesis or dissertation to the committee members no less than two weeks (14 calendar days) before the defense. Members of the committee may request changes in the thesis or dissertation, and the student will, if possible, incorporate those changes into the document before the date of the scheduled defense. If a simple majority of the committee identifies significant faults or inadequacies in the document, the committee may send a written recommendation to the Program Director that the defense be postponed. In the event that the committee is deadlocked concerning the advisability of a postponement, the Program Director will meet with the student and the committee before making a final decision. The student, the thesis/dissertation committee members, and the Program Director will meet four weeks after this determination to re-evaluate the status and make further recommendations.

1.4.1.7.3 Defense Procedures

The dissertation or thesis defense will include an oral presentation of the student's research to the Committee, the Program Director, and any other students, faculty, staff, or members of the general public who choose to attend. Immediately following the oral presentation, the student will meet with the Committee and the Graduate Program Director or a designated representative of the graduate program in private session. In this meeting, the student will respond orally to questions posed by the Committee and the Program Director/Representative. At the end of the meeting, the student will be asked to leave the room and the Committee and the Program Director/Representative will discuss the student's written and oral presentation and reach a consensus concerning the student's thesis/dissertation, presentation, and satisfaction of the program's research conduct requirements. The student will then be called back into the room and informed of the Committee's evaluation. The Committee's decision will be recorded in writing and forwarded by the committee chair to the Program Director's office.

No Consensus to Pass: If one or two committee members choose not to approve the thesis/dissertation, the Committee Chair will follow the process described in the UAB Graduate School Handbook. In such cases, the Primary Advisor should notify the Program Director, discuss the Committee decision with the

Program Director and discuss any recommended alternatives that may include additional research, document revisions, specific remediation, alternative terminal degree plans, etc.

Approval: the committee may approve the thesis/dissertation without changes. This decision is most common when the student and Primary Advisor have actively engaged the Committee members throughout the student's research activities.

It is the student's responsibility to be aware of the schedule established by the Graduate School for submission of the completed dissertation/thesis to the Graduate School Office. The student will be responsible for making any changes or corrections required by the committee and the Graduate School. Once the Graduate School has accepted the thesis/dissertation, the student will provide copies to the Program Director and each committee member.

1.4.2 OD/MS Dual Degree Program

1.4.2.1 Program Requirements

Students enrolled in the dual degree Doctor of Optometry and Master of Science in Vision Science program must complete at least 30 credit hours with at least 6 credit hours of VIS 699 Thesis Research credit hours for the Master's degree. No additional didactic coursework is currently required except for enrollment in 3 credit hours of GRD 717 Research Ethics and VIS 700 Vision Science Literature Review course every Fall and Spring semester. The student's thesis advisor can recommend and require the student to take additional coursework that may be pertinent to the student's thesis research project.

1.4.2.2 Thesis Committee Formation and Committee Meeting Expectations

The Thesis Committee should be formed as early as possible after the selection of a Primary Advisor and the identification of the research project. Committees for master's students will consist of the Primary Advisor and at least 2 other faculty members, with one recommended to be from outside the School of Optometry. The graduate study committee should plan to meet at least one to two times prior to candidacy, and, after candidacy is achieved, meet every three to six months in order to assess research progress, determine timelines, and to address any other relevant issues.

1.4.2.3 Requirements for Admission to Candidacy for OD/MS Students

Dual OD/MS degree students will be required to submit and present a research proposal to their thesis committee to be admitted into candidacy. The format of the research proposal will be determined by the primary thesis advisor in consultation with the VSGP program director. The research proposal should be distributed to the thesis committee no later than 10 business days prior to the scheduled proposal presentation. The proposal should be completed and presented no later than the summer term of the students' third year of enrollment in Optometry school.

1.4.2.4 OD/MS Curriculum

OD/MS in Vision Science Curriculum							
Year/Term:	Course Prefix:	Course Number:	Course Title:	Credit Hours:			
1 st Year OD							
Fall Torm	VIS	700	Vision Science Literature Review	1			
Fall Term	VIS	698	Non-thesis Research Hours	2			
Semester Total:							
Spring Torm	VIS	700	Vision Science Literature Review	1			
Spring Term	VIS	698	Non-thesis Research Hours	2			
			Semester Total:	3			
Summer Term	GRD	717	Research Ethics	3			
Summer Term	VIS	698	Non-thesis Research Hours	1			
			Semester Total:	4			
		2 nd Yea	ar OD				
Fall Term	VIS	700	Vision Science Literature Review	1			
Faii Term	VIS	698	Non-thesis Research Hours	2			
			Semester Total:	3			
C	VIS	700	Vision Science Literature Review	1			
Spring Term	VIS	698	Non-thesis Research Hours	2			
			Semester Total:	3			
Summer Term	VIS	698	Non-thesis Research Hours	3			
			Semester Total:	3			
		3 rd Yea	ar OD				
F-U.T	VIS	700	Vision Science Literature Review	1			
Fall Term	VIS	699	Thesis Research Hours	2			
			Semester Total:	3			
Consists Tarres	VIS	700	Vision Science Literature Review	1			
Spring Term	VIS	699	Thesis Research Hours	2			
			Semester Total:	3			
Summer Term	VIS	699	Thesis Research Hours	2			
	•	1	Semester Total:	2			
		4 th Yea	ar OD				
F-11 T	VIS	700	Vision Science Literature Review	1			
Fall Term	VIS	699	Thesis Research Hours	1			
	•		Semester Total:	2			
Spring Term	VIS	699	Thesis Research Hours	1			
		•	Semester Total:	1			

1.4.3 Master's Program

1.4.3.1 Program requirements

Students enrolled in the Master of Science in Vision Science degree program must complete at least 30 credit hours with at least 6 credit hours of VIS 699 Thesis Research credit hours for the Master's degree. See section 1.4.3.3 for the specific didactic requirements.

1.4.3.2 Thesis Committee Formation and Committee Meeting Expectations

The Thesis Committee should be formed as early as possible after the selection of a Primary Advisor and the identification of the research project. Committees for master's students will consist of the Primary Advisor and at least 2 other faculty members, with one recommended to be from outside the School of Optometry. The graduate study committee should plan to meet at least one to two times prior to candidacy, and, after candidacy is achieved, meet every three to six months in order to assess research progress, determine timelines, and to address any other relevant issues.

1.4.3.3 Requirements for Admission to Candidacy for MS students

Students enrolled in the MS degree program will be required to submit and present a research proposal to their thesis committee to be admitted into candidacy. The format of the research proposal will be determined by the primary thesis advisor in consultation with the VSGP program director. The research proposal should be distributed to the thesis committee no later than 10 business days prior to the scheduled proposal presentation.

1.4.3.4 Master's Curriculum

MS in Vision Science Curriculum					
Term:	Course Prefix:	Course Number:	Course Title:	Credit Hours:	
	1 st Year				
	VIS	610	Ocular Anatomy and Biology	4	
Fall Term	VIS	700	Vision Science Literature Review	1	
	VIS	698	Non-thesis Research Hours	4	
			Semester Total:	9	
	VIS	611	Biology and Pathology of Ocular Disease	4	
Spring Torm	GRD	717	Research Ethics	3	
Spring Term	VIS	700	Vision Science Literature Review	1	
	VIS	698	Non-thesis Research Hours	1	
			Semester Total:	9	
Summer Term	VIS	698	Non-thesis Research Hours	3	
			Semester Total:	3	
		2'	nd Year		
	VIS	700	Vision Science Literature Review	1	
Fall Term	VIS	699	Thesis Research Hours	3	
			Elective	3	
Semester Total:			7		
Spring Torm	VIS	700	Vision Science Literature Review	1	
Spring Term	VIS	699	Thesis Research Hours	3	
			Semester Total:	4	
			Total Credit Hours:	32	

1.4.4 Doctoral Program

1.4.4.1 Program Requirements

Students enrolled in the Doctoral degree program in Vision Science must complete at least 72 credit hours if entering with a Bachelor's degree, or must complete at least 51 credit hours if entering with a previously earned Master's degree. See *Section 2.3.3* for the specific credit hour requirements.

1.4.4.1.1 PhD Student Financial Support

The Vision Science Graduate Program will provide financial support (stipend, tuition and fees, hospital insurance coverage) for students during their first year, unless students have access to funding from other sources. In the absence of alternative means of support, the Primary Advisor is expected to provide this financial support once the student has joined the laboratory.

Students who qualify are encouraged to submit applications for extramural pre-doctoral fellowships. In addition, students and their Primary Advisors are encouraged to apply for fellowships that may be available through training grants or the Program. The Program Director will assist students and their advisors in identifying, and applying for, alternative sources of support.

If a student is unable or unwilling to continue to train in a particular laboratory, or if a Primary Advisor is no longer willing to train or support a particular student, the Primary Advisor will be expected to continue to support the student until the student is able to identify another Primary Advisor. This period of continued support will last no more than 1 semester following written notification of the situation to the Program Director. If, by the end of that semester, the student is unable to identify a Primary Advisor who is willing or able to mentor the student, the Director and the Vision Science Graduate Program Committee will review the situation. In such cases, the Program may assume support for the student while the student continues to try to identify a new Primary Advisor. Alternatively, this situation may serve as cause for the loss of financial support.

1.4.4.1.2 Dissertation Committee Formation and Committee Meeting Expectations

The Thesis/Dissertation Committee should be formed as early as possible after the selection of a Primary Advisor and the identification of the research project. The doctoral committee will consist of the Primary Advisor and four or five other faculty members, with at least one who should be from outside the School of Optometry. Potential external committee members who do not hold current UAB graduate school faculty appointments, e.g. faculty from other institutions, must be approved before they can be appointed to a student's committee. Requests for ad hoc appointments should be initiated through the VSGP Program Manager. The graduate study committee should plan to meet at least once a year after candidacy is achieved, in order to assess research progress, determine timelines, and to address any other relevant issues.

1.4.4.1.3 Requirements for Admission to Candidacy for Doctoral Students

The procedure for admission to candidacy for PhD students in the Vision Science Graduate Program (VSGP) is listed below. It consists of two parts: (1) completion of a written research proposal and (2) an oral qualifying exam in which the student must demonstrate a satisfactory level of general scientific knowledge and understanding of the research proposal topic. Students are expected to demonstrate

their ability to write, think, design, and defend a solid research proposal in the area related to their research interests. While the student's work will obviously relate to their primary advisor's research themes, students are expected to make their own intellectual contributions to the proposal with minimal input (if any) from others.

1.4.4.1.3.1 The Research Proposal

The student must choose between two NIH-style research proposals to serve as guidance documents for their dissertation proposal (described below). The student's choice requires verification of approval from both the student's Primary Advisor and the director of the Vision Science Graduate Program.

There are two written research proposal format options to choose from:

- 1. An NIH R01 or K-style research proposal in current NIH grant format (e.g. 12 pages, 1/2 inch margins, single-spaced 11 point font, etc.), on the topic of the student's intended dissertation research project. If choosing a K-style proposal, the research strategy component should be the focus of the student's proposal; the training components may be ignored.
- 2. A written National Research Service Award (NRSA) fellowship proposal (currently called an F31 application) or stylistically equivalent research application on the topic of the student's intended dissertation research project. This should be done after consultation with the student's Primary Advisor to determine the appropriate fellowship format for the student and lab. The student's Primary Advisor is strongly encouraged to contact the appropriate funding agency to review eligibility prior to approving the choice of a fellowship application. Students writing a fellowship application are encouraged to submit the application to NIH or other funding organizations for consideration for an independent fellowship award. If the student is not submitting their dissertation proposal to NIH, the training components may be ignored. The UAB Graduate School provides incentives to fellowship applicants and supplements the stipend of each successful awardee. For more information, visit

https://www.uab.edu/graduate/students/current-students/paying/financing/individual-fellowship-incentive-program.

Note: The Primary Advisor is <u>not</u> required to have an active NIH grant in order for a student to apply for an NRSA pre-doctoral fellowship. The Primary Advisor should have a track record of prior successful graduate training, track record of prior funding, and a solid publication record. In the absence of an active grant, evidence of adequate internal funding and pending grants may be all that is needed.

1.4.4.1.3.2 Oral Qualifying Examination

The written research proposal must be distributed to the student's PhD committee at least 10 business days before the Qualifying Exam.

The oral qualifying exam should be scheduled for no less than 2 hours. The student will have an oral presentation (with slides, if desired) that summarizes the research proposal. The committee will ask the student questions about the proposal and about the research area to determine if the student has achieved an appropriate level of general scientific knowledge, competence within their specific

discipline, and command of relevant background literature needed to proceed with the dissertation research.

The qualifying exam should be completed by Fall semester candidacy deadline at the beginning of the third year to enable Fall-term admission to candidacy; consult the UAB Graduate School website for administrative deadline dates for the current term. In extenuating circumstances, the research proposal can be completed by December of the third year for Spring-term admission to candidacy.

1.4.4.1.4 Teaching Requirement

Teaching experience is an important component of graduate education and is a requirement for doctoral students and optional, but encouraged, for master's students. Before completing thesis/dissertation requirements, each student is required to actively participate in teaching in some form. This will generally involve assisting in lecture or laboratory courses offered by Vision Science faculty in graduate or professional programs. Students should work with the VSGP administrators for advice regarding specific teaching opportunities and their suitability for meeting program requirements. A list of teaching opportunities will be kept in the Vision Science Graduate Program office. After determining what opportunities are available, students will be responsible for contacting faculty members and asking to assist in a specific course. Some especially time-intensive or effort-intensive courses may require two assistants. The faculty member for whom the student serves as an assistant will notify the Program Manager upon the successful completion of the responsibilities as an assistant. After completing the teaching requirement, the student is required to request a letter from the faculty supervisor that assesses the teaching experience and is submitted to the VSGP office.

1.4.4.1.5 Publication Requirement

The UAB Vision Science Graduate Program Advisory and Admissions committee voted to approve a new peer-review publication requirement effective for the entering class of 2013. This policy requires all enrolled doctoral students to have at least one scientific article of his/her dissertation research accepted for publication prior to graduation.

1.4.4.3 Doctoral Curriculum

PhD in Vision Science Curriculum					
Term:	Course Prefix:	Course Number:	Course Title:	Credit Hours:	
		1	* Year		
	VIS	610	Ocular Anatomy and Biology	4	
Fall Term	VIS	612	Optics for Vision Science	4	
raii Terrii	VIS	700	Vision Science Literature Review	1	
	VIS	798	Non-thesis Research Hours	4	
			Semester Total:	13	
	VIS	611	Biology and Pathology of Ocular Disease	4	
Carina Torm	VIS	613	Visual Neuroscience	4	
Spring Term	VIS	700	Vision Science Literature Review	1	
	VIS	798	Non-dissertation Research Hours	1	
			Semester Total:	10	
Cumana a Tarm	VIS	798	Non-dissertation Research Hours	6	
Summer Term	GRD	717	Research Ethics	3	
			Semester Total:	9	
		2'	rd Year		
	VIS	700	Vision Science Literature Review	1	
Fall Term	VIS	798	Non-dissertation Research Hours	2	
Fall Term	BST	621	Statistical Methods 1	3	
			Elective	3	
			Semester Total:	9	
	VIS	700	Vision Science Literature Review	1	
Spring Term	VIS	798	Non-dissertation Research Hours	5	
			Elective	3	
			Semester Total:	9	
Summer Term	VIS	798	Non-dissertation Research Hours	9	
			Semester Total:	9	
3 rd Year and Beyond					
	VIS	700	Vision Science Literature Review	-	
	VIS	799	Dissertation Research Hours	24	
			Total Credit Hours:	83	

1.5 VSGP Scholarships and Application Procedures

At the beginning of every academic year, there will be two to three endowed scholarships available to graduate students in the VSGP. The scholarship names are:

- 1. Sylvia S. Worrell Endowed Scholarship
- 2. Paul D. Worrell Endowed Scholarship
- 3. Faculty of Optometry and Vision Science Endowed Scholarship

The minimum requirements for receiving these scholarships are: the student must have at least a 3.0 GPA and be enrolled as a VSGP graduate student. The value of these scholarships' ranges from \$1,000 to \$2,500. If a student is awarded one of the above scholarships, the awarded funds should be used for research activities such as research supplies and/or conference travel.

Scholarship applications will be sent to graduate students in the month of June preceding the upcoming academic year. Completed applications will be reviewed by members of the UAB School of Optometry Awards and Recognition Committee (comprised of faculty and staff in the UAB School of Optometry) or by members of VSGP Advisory Committee. Announcement of the scholarship recipients will be made in the month of August. Scholarship awards will be routed through the students' university student account and will be refunded and direct deposited into the students' linked checking account. Scholarship recipients will be required to attend the annual UAB School of Optometry scholarship reception and will be required to provide a written statement of how the scholarship funds supported their graduate research activities.

1.6 Travel Funding Policy

Listed below are the guidelines and a prioritized list of principles for graduate student travel to scientific meetings. The aim of this guidance is to avoid students having to personally fund their research-related travel.

- 1. First, students should consult their advisor about what travel support the advisor can provide and to learn if the advisor is aware of any travel fellowships other than those listed below.
- 2. Second, VSGP students should apply for the UAB Graduate Student Government (GSG) travel grant whenever feasible. UAB graduate students can receive the GSG travel award two times while enrolled at UAB. The maximum award per selection is \$400. The application process opens every semester. Visit https://www.uab.edu/gsg/funding/travel-grants for the GSG's guidelines and procedures for applying for this travel grant.
- 3. Third, students are eligible for a number of competitive travel awards from many professional societies and organizations who endeavor to recognize talented students. Students should work with their advisors and Vision Science Graduate Program office to identify competitive travel awards that not only provide needed funds, but also make a nice addition to the CV.
- 4. Fourth, if support from the advisor and/or travel fellowships are insufficient or unavailable, VSGP can provide support up to \$750 for presentations for one meeting per year (e.g. ARVO or the Society for Neuroscience, but not both). Any requests for travel funds from the VSGP must be made and approved before the travel occurs, otherwise the support will be at the discretion

- of the Director. If the VSGP student travel fund support has been used for the fiscal year (October to September), other sources of support should be sought.
- Finally, if the student has exhausted all available sources of support and still requires assistance, the advisor should contact the Vision Science Graduate Program office to discuss further options.

1.7 Disputes and Conflict Resolution

Although rare, disagreements can arise that may affect a student's progress towards the completion of the degree. The parties involved in such a dispute should make a good faith effort to discuss and resolve the disagreement. The following guidelines may be helpful.

Step 1. Identify the problem; clearly define what happened and what you perceive is needed to resolve the issue.

Step 2. Approach the other person or group involved with the dispute one-on-one. Set up a mutually agreeable time to talk; listen and ask to be listened to; use "I" statements when speaking; avoid assigning blame or leveling accusations.

Step 3. If these steps do not culminate in a resolution, the parties involved with the dispute should agree to approach an impartial third party, a mediator, who will respect confidentiality and with whom the situation can be discussed. The Program Director will suggest such a third party if asked. The mediator may be able to help the parties involved reach a resolution.

If notified and requested in writing, the Director and the Vision Science Graduate Committee will meet to consider and discuss any problems within 14 calendar days following receipt of the written request. In the event that a quorum of the Committee is not available within this time period, the Committee will meet as soon thereafter as a quorum can be gathered. The Committee may also ask the parties in the dispute to appear before the committee to provide additional information.

The result of the Committee's deliberations will be communicated in writing to the parties involved in the dispute within seven (7) calendar days after the meeting.

If a party involved in the dispute is not satisfied with the outcome of the arbitration process, an appeal may be submitted to the Graduate School Appeals Board. Please see Graduate School website for specific information about the appeals process.

Section 2: The UAB Graduate School

From the Graduate School Handbook: "The UAB Graduate School seeks to nurture skills that transcend disciplinary boundaries, preparing graduate students to participate successfully in professional and academic arenas. With coordinated and interdisciplinary degree programs available, the UAB Graduate School offers students an opportunity to tailor their educational experience to their own career objective. The Graduate School administers doctoral programs, post-master's education specialist programs, and master's level programs, with additional programs planned for the future. Graduate students, you should expect many challenges as they build upon previous educational experiences in new and exciting ways. Graduate education has a distinctly different character from that of undergraduate education. Students explore their chosen area of study in greater depth, and are also challenged to reach across boundaries and address larger intellectual issues. There will be greater emphasis on originality and the creation of new knowledge. The Graduate Catalog outlines all of the policies and procedures pertaining to academic performance, degree progress, academic and nonacademic conduct, and student responsibilities. UAB graduate students are expected to be familiar with these policies and to abide by them. Failure to do so may impede a student's progress or may result in disciplinary action and, in some cases, dismissal. In addition to Graduate School policies, students are responsible for knowing and abiding by all UAB Policies and Procedures which can be located in the UAB Policies and Procedures Library at here."

The UAB Graduate School Handbook is the governing document for students in the Vision Science Graduate Program. The VSGP standards may exceed standards documented in the UAB Graduate School Handbook, but may not be lower than these documented standards. Wherever explicit standards for the VSGP program are not specified, students should refer to the relevant section of the UAB Graduate School Handbook for guidance, e.g. *Minimum Course Credit Requirements*.

Several other university-wide policies apply to graduate students and are included in the UAB Graduate School handbook. These include additional policies concerning health care for international students and visiting international scholars, AIDS and AIDS-related conditions, a drug-free workplace, alcoholic beverage use, smoking, electronic data processing security, and computer software use. Copies of these policies are available in the Graduate School office, and on the UAB Policies and Procedures Library Web site (https://www.uab.edu/policies/Pages/default.aspx).

The following sections from the UAB Graduate School Handbook are for convenient reference and any questions or concerns should be addressed by consulting the full document: http://catalog.uab.edu/pdf/grad-1920.pdf as well as the VSGP program administrators.

2.1 Graduate Assistantships and Traineeships (Fellowships)

Graduate Assistants and Trainees are obligated at all times to maintain high ethical standards in academic and nonacademic activities, and to report violations of these standards to the faculty mentor and/or program director. Such students should stay well informed of departmental, school, and institutional regulations, and follow them consistently. In general, Graduate Assistants and Trainees are

expected to be engaged in activities associated with their graduate programs year-round, including the periods between academic terms.

2.1.1 Responsibilities of Graduate Trainees

Graduate Trainees are supported by fellowship and other institutional funds that do not have a service requirement but are instead intended to allow the student to be committed full-time to their graduate studies. The fundamental responsibility of Graduate Trainees is to immerse themselves full-time in their graduate studies, carrying out those activities required by their program, including course work and any original research necessary to fulfill thesis, pre-dissertation, or dissertation requirements that the program stipulates.

2.1.2 Responsibilities of Graduate Assistants

In general, Graduate Assistantships (including Graduate Research Assistantships and Graduate Teaching Assistantships) provide support from research grants or other institutional funds for students engaged in activities that support the research, teaching, and service missions of the university. The fundamental responsibility of Graduate Assistants is to work closely with their faculty mentors in carrying out research, teaching, or service activities, while at the same time making good progress toward the completion of the degree program. If a student's assistantship responsibilities and academic program are properly coordinated, these responsibilities will be compatible. The assistant and mentor should articulate their goals early in the term of appointment and work together to achieve them. If problems arise in the assistantship assignment, the Graduate Assistant should seek help first from the faculty mentor. If problems cannot be resolved, the student should consult their program director.

2.2 Requirements for the Master's Degree

2.2.1 Plan I or Plan II

The Graduate School recognizes two principal paths, known as Plan I and Plan II, that lead to the master's degree. Where both Plan I and Plan II are available within the same graduate program, an early and meaningful choice should be made by the student, in close consultation with the student's advisor. A change in choice of plans requires the approval of the program director. [*The Plan II Master's degree is not an option in the VSGP*].

Plan I requires the completion, in good academic standing, of at least 24 semester hours of appropriate graduate work and 6 semester hours of thesis research for a total of at least 30 semester hours, with the presentation of an acceptable thesis embodying the results of original research work.

2.2.2 Steps Toward Earning the Master's Degree

- 1. Admission to master's degree program
- 2. Selection of faculty advisor
- 3. Maintenance of academic good standing
- 4. Appointment of graduate study committee—Plan I (Thesis) only
- 5. IRB and/or IACUC approvals obtained and renewed annually
- 6. Admission to candidacy—at least one semester before graduation is expected—Plan I (Thesis) only

- 7. Application for Degree—See https://www.uab.edu/graduate/students/current-students/completing-your-degree/application-deadlines for each semester's deadline
- 8. Production of preliminary version of thesis (Plan I only)
- 9. Defense of thesis (for Plan I only) (see https://www.uab.edu/graduate/students/current-students/completing-your-degree/application-deadlines)
- 10. One PDF of the defended committee- approved thesis (Plan I only) submitted online no later than 2 weeks (10 business days) after the published public defense deadline
- 11. Conferring of degree

2.2.3 Admission Into Degree Candidacy (Plan I Only)

Admission to candidacy is a formal step acknowledging that the student has been performing well and is likely to complete the degree. Candidacy admission is recommended by the student's graduate study committee and approved by the graduate program director and the Graduate School Dean. For Plan I students, admission should occur when the student has obtained an adequate background and has provided the committee with an acceptable proposal for thesis research. In addition, the Vice President for Research requires that all students engaging in research complete the applicable Responsible Conduct in Research requirements which can be found the following at http://www.uab.edu/graduate/images/acrobat/RCRrequirements.pdf. Responsible Conduct in Research requirements must be completed within four (4) years prior to applying for candidacy as they expire after that time. Students do not have to complete all coursework prior to admission to candidacy if the graduate study committee ascertains that the student has an adequate foundation in the discipline. Students must be in good academic standing to be eligible for admission to candidacy, and admission must take place no later than one semester before the expected graduation. Before being admitted to candidacy, students must complete a Research Compliance Verification form and attach photocopies of the appropriate assurance letters and/or forms. Students must be admitted to candidacy before they can register for thesis research hours (i.e., 699). Applications for Admission to Candidacy are available online at https://www.uab.edu/graduate/students/current-students/academic-policies-progress/forms.

2.2.4 IRB and IACUC Approval

If a student's research involves human or animal subjects, approval from the Institutional Review Board (IRB) or Institutional Animal Care and Use Committee (IACUC) must be documented before admission to candidacy can be approved. IRB/IACUC approvals must be kept current until the research is completed. For ways in which students can be added to a protocol, refer to the Tip Sheet for Students Involved in Research Involving Human or Animal Subjects. The IACUC form must display the appropriate research protocol number.

2.3 Requirements for the Doctoral Degree

2.3.1 Doctoral Degree Overview

The doctoral degree is granted in recognition of scholarly proficiency and distinctive achievement in a specific field of an academic discipline. The first component is demonstrated by successful completion of advanced coursework of both a didactic and an unstructured nature as well as by adequate performance on the comprehensive examination. Traditionally, the student demonstrates the second component by

independently performing original research. In certain doctoral programs, performing a major project may be acceptable even though it may not consist of traditional research. However, in all programs, with a few exceptions, a dissertation presenting the results of the student's independent study is required.

2.3.2 Steps Toward Earning the Doctoral Degree

- 1. Admission to doctoral degree program
- 2. Selection of faculty advisor
- 3. Maintenance of good academic standing
- 4. Appointment of graduate study committee
- 5. Passing of comprehensive examination
- 6. IRB and/or IACUC approvals obtained and renewed annually
- 7. Admission to candidacy—no later than two semesters before expected graduation
- 8. Application for degree—See https://www.uab.edu/graduate/students/current-students/completing-your-degree/application-deadlines
- 9. Draft of preliminary version of dissertation
- 10. Review of the draft by committee members
- 11. Revisions made to dissertation in response to committee feedback
- 12. Defense of dissertation (see https://www.uab.edu/graduate/students/current-students/completing-your-degree/application-deadlines)
- 13. A PDF of the defended committee-approved dissertation is submitted to the UAB/ProQuest submission web site no later than 2 weeks (10 business days) following the published deadline date for the public defense
- 14. Conferring of the doctoral degree

2.3.3 Minimum Course Credit Requirements

The Graduate School has minimum course credit requirements for students in doctoral programs. Program requirements for course work may exceed the Graduate School minimums but may not be less than the Graduate School minimum.

If entering with a baccalaureate degree, a student is required to earn a minimum of 72 credit hours comprised of the following:

- 1. Completion of 48 semester hours of coursework prior to candidacy:
 - A minimum of 22 hours of core coursework directly related to the discipline
 - No more than 16 hours of non-dissertation research (i.e. 798) can be counted
 - No more than 10 hours of labs, seminars, or GRD and CIRTL courses can be counted
- 2. Completion of 24 semester hours of research-based work over a minimum of two semesters in candidacy which can be designated as either:
 - A minimum of 24 semester hours in 799 dissertation research OR
 - A minimum of 12 semester hours in 799 dissertation research AND, either during or before candidacy, 12 semester hours in other appropriate research-based coursework which has been approved by the graduate student's program

If entering with a previous master's degree appropriate to the doctoral degree field, a student is required to earn a minimum of 51 credit hours comprised of the following. These requirements also apply to students with previously earned M.S., D.V.M., D.M.D., D.D.S., etc.:

- 1. Completion of 27 semester hours of coursework prior to candidacy:
 - A minimum of 15 hours of core coursework directly related to the discipline
 - No more than 6 hours of non-dissertation research (i.e. 798) can be counted
 - No more than 6 hours of labs, seminars, or GRD and CIRTL courses can be counted
- 2. Completion of 24 semester hours of research-based work over a minimum of two semesters in candidacy which can be designated as either:
 - A minimum of 24 semester hours in 799 dissertation research OR
 - A minimum of 12 semester hours in 799 dissertation research AND, either during or before candidacy, 12 semester hours in other appropriate research-based coursework which has been approved by the graduate student's program

Up to 12 credits of course work that have not been applied toward meeting the requirements for an earned degree taken at UAB or other institutions may be used to satisfy these course credit requirements upon approval of the graduate program director and the Graduate School Dean. Courses which have been previously applied toward meeting the requirements of another degree are not eligible to satisfy minimum course credit requirements. The student's graduate department or program should provide a course planning curriculum worksheet along with the student's application for degree. This worksheet should detail the courses taken which are intended to be used toward meeting degree requirements.

2.3.4 IRB and IACUC Approval

If a student's research involves human or animal subjects, approval from the Institutional Review Board (IRB) or Institutional Animal Care and Use Committee (IACUC) must be documented before admission to candidacy can be approved and IRB/IACUC approvals must be kept current until the research is completed. For ways in which students can be added to a protocol, refer to the Tip Sheet for Students Involved in Research Involving Human or Animal Subjects. The IACUC form must display the appropriate research protocol number.

2.3.5 Graduate Student Exit Survey

Doctoral graduates are required to take the *Graduate School Exit Survey* as part of graduation requirements. Collecting important information and feedback from graduate students will help to improve the quality of future graduate program offerings. After submission of the revised version of the student's final dissertation, they will be contacted via email and provided the secure link to take the electronic survey.

2.4 Academic Ethics and Conduct

Graduate students at UAB have joined a distinguished academic community that is guided by a conviction in the worth of knowledge and its pursuit. By virtue of your membership in this community, they accrue many benefits—among them, access to the ideas and materials of others. Graduate

students not only learn from others but also engage in the pursuit of new knowledge and, in some instances, teach or provide service to others. Being a member of an academic community and functioning in multiple roles in the community carries with it certain responsibilities.

As members of an academic community, students, faculty, and administrators share a responsibility to seek truths and communicate them to others. As we pursue knowledge and encourage learning, we acknowledge the need for a free exchange of ideas and recognize the importance of listening to and maintaining respect for the views of others. We must always aspire to learn, apply, and communicate to others the best scholarly standards of the disciplines in which we are involved. High scholarly standards demand high ethical standards.

We must commit to learning and communicating the best ethical standards and their application to our disciplines. In interactions with others, we must demonstrate respect for them as individuals, give credit for significant academic or scholarly assistance, and respect the confidential nature of some exchanges. We must adhere to the highest standards of academic conduct, avoiding those acts of misconduct and dishonesty that undermine the purposes of the academic community.

All UAB students are expected to be familiar with the UAB Academic Honor Code as well as any honor codes that are specific to their schools or disciplines. The code represents a commitment to integrity in the academic community and a respect for an individual's educational endeavors:

I have read and, by choosing to become a member of the UAB academic community, accept the UAB Honor Code. I understand that violation of this code will result in penalties as severe as expulsion from the university. I promise and confirm that I will not, at any time and under any circumstances, involve myself with abetting, cheating, plagiarism, fabrication, or misrepresentation while enrolled as a student at the University of Alabama at Birmingham.

2.5 Academic Integrity — Honor Code

The University of Alabama at Birmingham expects all members of its academic community to function according to the highest ethical and professional standards. Students, faculty, and administration of the institution must be involved to ensure this quality of academic conduct. Academic misconduct undermines the purpose of education. Such behavior is a serious violation of the trust that must exist among faculty and students for a university to nurture intellectual growth and development. Academic misconduct can generally be defined as all acts of dishonesty in an academic or related matter.

Academic dishonesty includes, but is not limited to, the following categories of behavior:

ABETTING: helping another student commit an act of academic dishonesty. Allowing others to copy your quiz answers, or use your work as their own are examples of abetting.

CHEATING: use or attempted use of unauthorized materials, information, study aids, the answers of others, or computer-related information.

PLAGIARISM: claiming as your own the ideas, words, data, computer programs, creative compositions, artwork, etc., done by someone else. Examples include improper citation of referenced works, use of commercially available scholarly papers, failure to cite sources, and copying others' ideas.

FABRICATION: presenting as genuine falsified data, citations, or quotations.

MISREPRESENTATION: falsification, alteration or misstatement of the contents of documents, academic work, or other materials related to academic matters, including representing work substantially done for one class as work done for another without receiving prior approval from the instructor. Misrepresentation also includes misrepresenting schedules, prerequisites, transcripts, or other academic records.

Violations of the UAB Academic Honor Code are punishable by a range of penalties, from receiving a failing grade on an assignment to an F in the course to dismissal. Any course grade of F for academic misconduct supersedes any other grade or notation for that class. Withdrawal from a course while a possible violation of the Academic Honor Code is under review will not preclude the assignment of a course grade that appropriately reflects the student's performance prior to withdrawal if the violation is substantiated.

Section 3: UAB Policies

3.1 Graduate Student Policy Concerning Student Participation in Proprietary Research Effective August 28, 2007

Faculty, staff, and students of a university create, disseminate, and apply knowledge for the benefit of society. When faculty of the university are involved in research, some of which may be of a proprietary nature, particular care must be taken to ensure that the need for graduate students to publicly present and publicly defend the results of their thesis or dissertation research is not compromised. Graduate student advisors, graduate program directors, and graduate students themselves, therefore, share in the responsibility to ensure that graduate students are well informed if they become involved in thesis or dissertation research that is, or has the potential to become, proprietary if participation in that research will delay completion of their degree requirements or negatively affect their productivity or future employability. Students must be made aware of the implications of performing thesis or dissertation work of a proprietary nature. For example, will that work delay time to degree, or will it have a potential negative effect on obtaining a postdoctoral position or an employment opportunity? In cases where the thesis or dissertation work has intellectual property implications, adherence to university policies on intellectual property is required.

It is the policy of the Graduate School that a faculty member or a graduate student should not enter into an agreement that prevents or significantly delays the presentation or publication of research results unless the delay is required for proprietary reasons. Students and their advisors can embargo the release of the contents of a thesis or dissertation by both the UAB library and ProQuest UMI for up to two years to provide time to resolve intellectual property considerations or prior publication issues. If, however, a decision is made to embargo a student's thesis or dissertation, or delay publication of work described therein, these decisions should not delay the student's time to completion of his/her degree requirements.

In instances where, despite good faith efforts on the part of the graduate student advisor, the graduate program director, and the graduate student, a dispute arises regarding the release or publication of a graduate student's thesis or dissertation research, the Graduate School Dean must be notified. The Graduate School Dean will immediately convene a meeting of the graduate student, the graduate advisor, the involved graduate program director, and members of the student's thesis or dissertation committee. This group, in consultation with the Vice President for Research and/or the Executive Director of the Research Foundation, will resolve the problem.

If the situation cannot be resolved through the efforts of this group, a ruling will be made by the Senior Vice President and Dean, School of Medicine; the Vice President for Research and Economic Development; or the Provost.

3.2 UAB Policy Concerning the Responsible Conduct of Research and Other Scholarly Activities

Effective January 2, 2013

The previous version of this policy was adapted from a statement on "The Maintenance of High Ethical Standards in the Conduct of Research" (1982) published by the Executive Council of the Association of American Medical Colleges. The current version, while based on the 1997 version, has been modified to conform to the Public Health Service Policies on Research Misconduct: Final Rule, 42 CFR Parts 50 and 93, published May 17, 2005 in the Federal Register. This policy is broad in scope and addresses, as the title states, "ethical standards in research and other scholarly activities."

3.2.1 Introduction

The maintenance of high ethical standards in research and scholarly activities is paramount to ensuring the success of UAB's mission and demonstrates UAB's values in action. Validity and accuracy in performing, recording, and reporting research and other scholarly activities are intrinsically essential to the process for discovery of new knowledge; dishonesty in these endeavors runs counter to the very nature of research and scholarly activities, that is, the pursuit of truth and public trust.

It is in the best interest of the public and of academic institutions to prevent misconduct in research and scholarly activities and to deal effectively and responsibly with instances in which misconduct is suspected. This policy supports these fundamental values and reinforces the expectations of UAB community members as expressed in the UAB Enterprise Code of Conduct.

3.2.2 Definitions

For purposes of this policy, the following definitions apply:

Allegation – A disclosure of possible Research Misconduct through any means of communication

Assessment – A review to determine if the Allegation states a potential claim of Research Misconduct, as defined by this policy, and if the Allegation is sufficiently credible and specific to identify possible evidence of Research Misconduct.

Fabrication – Making up data or results and recording or reporting them.

Falsification – Manipulating Research materials, equipment, or processes, or changing or omitting data or results such that the Research is not accurately represented in the Research record.

Inquiry – A process conducted by a committee involving information gathering and initial fact finding to determine whether an Allegation of Research Misconduct requires further review and to determine the Respondent(s).

Investigation – A formal examination and evaluation of facts conducted by a committee for the purpose of determining if Research Misconduct has occurred and, if Misconduct is established, to identify the person(s) responsible.

Plagiarism – Appropriation of another person's ideas, processes, results, or words, without giving appropriate credit.

Reports – Work product, including but not limited to, manuscripts submitted for publication, publications or presentations, abstracts submitted for presentations at meetings, summaries of Research or other deliverables to Research sponsors, and any internal Research summaries, publications or presentations.

Research – A systematic experiment, study, evaluation, demonstration, survey, or other scholarly work designed to develop or contribute to general knowledge or specific knowledge.

Research Misconduct – Fabrication, Falsification or Plagiarism in proposing, recording, performing or reviewing Research, or in reporting Research results.

Respondent – the individual against whom an Allegation of Research Misconduct is directed or who is the subject of a Research Misconduct proceeding.

3.2.3 Policy Statement

- 1. UAB shall accept as employees only those individuals whose career activities clearly demonstrate the highest ethical standards. To this end, the relevant credentials of all potential employees are to be thoroughly examined by the appropriate department/unit heads or their representatives in order to verify the claimed accomplishments of the candidate. The responsible department/unit heads or their representatives shall seek further confirmation of the candidate's accomplishments during the normal procedures of personal interviews and letters from references. Proof of faculty credentials shall be maintained by the responsible dean or department head in accordance with appropriate records retention policies and schedules.
- 2. Faculty members and any individuals who supervise colleagues, fellows, technicians, staff, or students are expected to provide them with appropriate guidance and counsel to maintain the highest professional and ethical standards.
- The UAB academic and research community is encouraged to promote individual awareness of the importance of maintaining high ethical standards in Research and scholarly activities and to discuss issues related to Research ethics in formal courses, in seminars, and by other informal means.
- 4. Results of Research and scholarly activities should be supported by verifiable evidence. Faculty and staff should maintain sufficient records or other documentation of their studies for at least six years following the most recent use of such records or information contained in such records. It is the responsibility of senior investigators and scholars to develop among junior colleagues and trainees the necessary respect for careful recording and preservation of primary data.
- 5. The UAB research and academic community is encouraged to engage in free discussion of results, to share data and techniques, and to avoid secrecy in the conduct of scholarly activities, provided such free discussion and sharing are consistent with the proper protection of intellectual property. It should be remembered that independent confirmation of results is

- important in direct proportion to the potential significance of the results in question and may be crucial to the establishment of new concepts.
- 6. Faculty members are responsible for the quality of all Reports based on their own efforts or on the collaborative work of students, technicians, or colleagues, especially those which bear the faculty member's name. The same standards of scientific integrity apply to abstracts as to full-length publications. Abstracts or other Reports of preliminary findings should indicate clearly that the findings are preliminary. Any Report of Research results must include the name of at least one faculty member, employee, or trainee who assumes full professional and ethical responsibility for the contents of the Report. Each contributor to the Report must assume full responsibility for their own contributions to the Report. UAB supports the practice of explicitly describing the role(s) of each contributor in the conduct of the project and preparation of resulting Report(s).
- 7. Any faculty member, employee, or trainee who has reason to suspect any other faculty member, employee, or trainee of Research Misconduct with regard to the conduct or reporting of Research has the responsibility of following up these suspicions in accordance with the procedures outlined below.
- 8. Research Misconduct does not include honest error or honest differences of opinion. Intentionally withholding information relevant to the review of Research Misconduct, intentionally pressuring others to do so, or bringing malicious charges against another individual shall be considered a violation of this policy and the UAB Enterprise Code of Conduct. Additionally, any act of interference, retaliation or coercion by a UAB employee against a faculty member, employee, or trainee for using this policy is prohibited and is also a violation of this policy and the UAB Enterprise Code of Conduct.
- 9. A finding of Research Misconduct requires that: 1) there is a significant departure from accepted practices of the relevant Research or scholarly community; 2) the Research Misconduct is committed intentionally, or knowingly or recklessly; and 3) the alleged Research Misconduct is proven by a preponderance of the evidence. If the initial Inquiry or the subsequent Investigation indicates that the Allegations are unsubstantiated, UAB will make diligent efforts to restore the reputation of those accused at UAB with any involved funding agencies and elsewhere.
- 10. Allegations of this nature are very serious matters, and all parties involved should take measures to assure that the positions and reputations of all individuals named in such Allegations and all individuals who in good faith report apparent Research Misconduct are protected. Details of the charge, the name of the accused, the identity of the complainant, and all other information about the case shall be kept confidential as far as possible, compatible with investigating the case. Revealing confidential information to those not involved in the review shall itself be considered a violation of this policy and the UAB Enterprise Code of Conduct.
- 11. Because UAB is interested in protecting the health and safety of research subjects, students, staff, and faculty and because UAB is responsible for protecting sponsored research resources, if the situation warrants it, interim administrative action may be taken prior to conclusion of either the Inquiry or the Investigation to provide protection for individuals and resources in accordance with existing UAB policy. Such action includes, but is not limited to, administrative suspension; re-assignment of student(s); involvement of the Institutional Review Board, the

- Institutional Animal Care and Use Committee, the University Compliance Office, and the Office of Internal Audit-UAB; or notification of external sponsors when required by federal regulations.
- 12. In the event that a respondent is employed by UAB and another organization, UAB may share information with such employees of the other organization as it deems appropriate and employees from such organization may also participate in the process set forth in this Policy as UAB deems appropriate.

3.2.4 Procedures To Be Followed

3.2.4.1 Reporting Allegations of Research Misconduct

It is the responsibility of faculty, employees, and trainees who become aware of Research Misconduct to report such Research Misconduct to one of the following: (a) their department/unit head, (b) the dean of the school in which their department/unit is located, (c) the UAB Research Integrity Officer (RIO), or (d) the UAB Ethics Matters Hotline. In the case of graduate students or of trainees at any level, such evidence also may be reported to a faculty mentor or the Dean of the Graduate School. Those individuals receiving such Allegations or evidence of Research Misconduct must immediately report to the UAB RIO. The RIO will report the Allegation to the Dean of the unit in which the alleged Research Misconduct occurred and to the Provost. In the event that there are Allegations against a Dean or other member of senior leadership, the RIO will consult with the Office of Counsel regarding the appropriate reporting line.

3.2.4.2 Assessment

In consultation with the Dean and the Provost, or other appropriate responsible official, the RIO will conduct or direct a preliminary Assessment of the information presented. The purpose of the preliminary Assessment is to determine if the Allegation states a potential claim of Research Misconduct, as defined by this policy, and if the Allegation is sufficiently credible and specific to identify possible evidence of Research Misconduct. If these criteria are met, the RIO will inform the appropriate department/unit head and the Office of Counsel and will initiate an Inquiry. Reporting Allegations to the department/unit head in advance of the preliminary Assessment will be at the discretion of the Dean.

3.2.4.3 Inquiry

- 1. If, as a result of the Assessment, an Inquiry is deemed necessary, the RIO will prepare a written summary of Allegations for the suspected individual (respondent), if named or known, which will be delivered in a manner sensitive to the confidentiality of the process. At the time the summary of the Allegations of Research Misconduct is delivered to the respondent, i.e., the accused party, records thought to be relevant to the Allegation(s) will be sequestered by the RIO or his/her designee. Such records will be inventoried and, thereafter, access to the originals or copies will be provided, to the respondent or his/her designee, as may be necessary. Original records will be retained by the RIO for the duration of the Inquiry/Investigation.
- In consultation with the Dean(s), the RIO shall appoint a committee of faculty members to investigate the charges through an Inquiry process, including interviews with the individual making the Allegation (complainant, if known), the respondent (if one is known), and such other

individuals deemed necessary to determine whether the Allegation warrants an Investigation. The RIO will appoint the committee chair. The Inquiry Committee will usually be comprised of at least three members with relevant expertise who, preferably, do not hold primary academic appointments in the department of the respondent. To ensure that necessary expertise is available to the Inquiry Committee, advice may be sought from appropriate individuals outside the Committee and University. The RIO shall consult with the Dean, the proposed members of the Committee, and the respondent in order to ensure that a real or apparent conflict of interest does not exist between the Committee members and the complainant, or the Committee members and the respondent. The decision of the RIO regarding an alleged conflict of interest shall be final.

- 3. UAB will endeavor to complete the Inquiry within 60 days of its initiation. If the Inquiry extends beyond 60 days, the reasons for the extension will be documented by the UAB RIO and will be retained with the record of the Inquiry.
- 4. The RIO shall keep the Dean or department/unit head and the Office of Counsel informed during the Inquiry process, and the Office of Counsel shall provide advice concerning procedural matters.
- 5. The written report of the Inquiry shall state what evidence was reviewed, shall summarize the relevant interviews, and shall include the conclusions of the Inquiry and the basis for its recommendation. The respondent(s) shall be given a copy of the Inquiry report and shall have up to 14 calendar days to make written comment regarding the report. This report, including a conclusion as to whether there is reasonable cause to believe that Research Misconduct has occurred, shall be forwarded to the Provost (with a copy to the UAB RIO) through the appropriate dean who should make whatever comment or recommendation is deemed warranted.
- 6. The Provost, with the advice and counsel of the RIO and others, as appropriate, shall decide whether to close the matter following the Inquiry or whether sufficient basis exists to proceed with an Investigation.

3.2.4.4 Investigation

- 1. The RIO, in consultation with the Provost and others, as necessary, will initiate a formal Investigation and appoint an Investigation Committee within 30 days of the completion of the Inquiry. The written report of the Inquiry will be made available to the Investigation Committee.
- 2. The RIO shall appoint a chair of the Committee. The Investigation Committee will usually be comprised of at least five members who, if possible, do not hold primary faculty appointments in the department of the respondent(s) and were not part of the Inquiry proceeding. The RIO shall consult with the Provost, the proposed members of the committee, and the respondent to ensure that a real or apparent conflict of interest does not exist between the Committee members and the complainant, or the Committee members and the respondent. The decision of the RIO regarding an alleged conflict of interest shall be final.
- 3. If applicable, upon initiation of an Investigation, the RIO will notify the appropriate oversight agency or body, for example, the Office of Research Integrity, in accordance with federal

regulations and in consultation with the Provost. Appropriate funding agencies or journals shall be notified if it is ascertained during the Inquiry or Investigation that the potential Research Misconduct constitutes an immediate health hazard or, if such notification is necessary to protect the interests of the persons making the Allegations, the individuals who are the subject of the Allegations, or any co-investigators and associates, or, if it is likely that the alleged incident is going to be publicly reported or if there is a likelihood that a criminal violation has occurred.

- 4. The chairperson shall conduct meetings of the Investigation Committee as frequently as required in order to determine whether or not the activities alleged in the charge constitute Research Misconduct, and, if so, to identify the individual(s) responsible. During the course of the Investigation, new charges and/or different respondents may be identified and the Investigation may be modified accordingly. If additional Research data are thought to be relevant to the Investigation, they may be sequestered and access to the originals or copies will be provided, as may be necessary.
- 5. The respondent(s) will be given a written summary of the charge(s) and access to supporting evidence, and will be afforded an opportunity to appear before the Committee to comment on Allegations. The respondent may be accompanied by an advisor of his or her choosing, but the advisor may not participate in the proceeding or address the Committee. The Committee will base its findings and conclusions on a preponderance of the evidence considered.
- 6. All meetings and deliberations of the Investigation Committee shall be held in confidence. The RIO and/or his or her designee(s) and a representative of the Office of Counsel may be present at meetings for technical assistance and to provide guidance and advice as to process. The Committee may call upon persons with technical expertise for assistance in the review of data or in the investigative process, as necessary. Technical expertise may be sought from within or outside the University, at the discretion of the Committee. If persons called to meet with the Committee are unable to meet face-to-face, interviews may occur by other means. Interviews of persons appearing before the committee in formal session, whether in person or remotely, will be recorded and transcribed. In some instances, one or more members of the Committee may be authorized to conduct an interview on behalf of the entire Committee.
- 7. The Committee will endeavor to complete its review and report for submission to the President within 120 days of being charged with its task. This time period includes 30 days for the respondent to provide a written response to the report (see below). In the event that a case takes longer to resolve, the RIO will request, if required, extensions from the appropriate oversight agency or body, for example the Office of Research Integrity for PHS- funded research.
- 8. A copy of the Committee's report will be provided to the respondent, who will have up to 30 calendar days to provide a written response, if desired. Such response will be included as an appendix to the report submitted to the President. A respondent found by the Investigation Committee to have committed Research Misconduct will also have 30 calendar days to submit a written appeal of the findings and conclusion(s) of the Committee to the President. An individual found by the Investigation Committee to have committed Research Misconduct may or may not be the respondent identified in the original Allegation.

- 9. The President, based on the Investigation Committee's findings and responses to those findings, shall determine what actions are appropriate; such actions may include discharge from employment at UAB or, in the case of a student, expulsion from UAB. The President will notify the UAB RIO who in turn will work with the appropriate UAB offices to notify any sponsors supporting the Research in question and any journals or other publications which may have been affected by the publication of results of that Research. The President's decision is final.
- 10. If applicable, the UAB RIO shall submit the report of the Investigation to the appropriate federal oversight agency, e.g., the federal Office of Research Integrity, and shall include in that report the policies and procedures under which the Investigation was conducted, how and from whom information was obtained relevant to the Investigation, the findings of the Investigation, and the basis of the findings. Also included will be a description of any sanctions taken by UAB and the actual text of, or an accurate summary of, the views of any individual(s) found to have engaged in Research Misconduct.