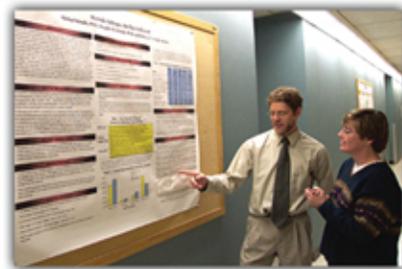


[www.uab.edu/graduate](http://www.uab.edu/graduate)



**UAB**

The University of Alabama at Birmingham  
Graduate Catalog 2013-2014

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# 2013-2014 Catalog of Graduate Programs

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## Welcome to the UAB Graduate School

We offer doctoral, post-masters education specialist, and master's level programs, spanning across the disciplines.

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.

# About UAB

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Over four decades, UAB has evolved from an academic extension center into an autonomous, comprehensive urban university and academic health center within the University of Alabama System. UAB has established wide-ranging programs in six liberal arts and professional schools and six health-professional schools, with graduate programs serving all major units. Annual UAB enrollment exceeds 17,500 students. Classes are offered seven days a week.

UAB is situated near downtown Birmingham and the historic Five Points South district. The campus stretches across 86 square blocks and occupies more than 100 primary buildings. UAB is Alabama's largest single-site employer, with more than 23,000 employees and an economic impact exceeding \$5 billion annually on the state.

## General Information

### Role Statement

UAB's undergraduate instructional programs are broad-based and designed to serve the needs of a diverse student body without sacrificing a strong general education foundation. Programs range from the liberal arts and sciences to professionally oriented studies, including business, education, engineering, and the health disciplines. UAB's graduate offerings are shaped by its location in the state's largest metropolitan area, by its mandate to serve a large and heterogeneous constituency, by its responsibility to contribute to the economic and professional development of Birmingham and the state, and by its role of providing support to a nationally recognized academic health sciences center.

At the graduate level, programs serve the career needs of educators and business leaders, as well as those involved in advancing the frontiers of the health sciences. Training for health professionals is available through programs at the baccalaureate, master's, doctoral, and professional degree levels.

UAB also has the primary responsibility for meeting the state's health professional needs. It offers a comprehensive range of programs which encompass both basic preparation and sophisticated graduate and specialty training in medicine, dentistry, optometry, nursing, the health professions, and public health.

As one of the nation's leading research institutions, UAB emphasizes both basic and applied research. Although the majority of the university's research effort is in the biomedical sciences and related areas, all instructional programs are expected to participate in research activities. UAB's urban setting necessitates the development of research programs that are responsive to the city's economic, social, and cultural needs. Much of the research conducted at UAB is interdisciplinary in nature and is organized through centers that bring together experts in a number of related fields to concentrate on a particular problem or issue. UAB attracted more than \$450 million in external research funding in 2011 and currently ranks 20th in funding from the National Institutes of Health. UAB also ranks in the Carnegie Foundation's highest tier for research activity and in the "community engagement" classification, the only university in the state to hold both designations.

As the senior public doctoral-level institution in the state's major urban area, UAB is also committed to providing comprehensive programs in continuing education consistent with the quality and diversity of its other offerings. The university's faculty, staff, and students also serve as resources to the area through activities related to professional, economic, and cultural growth and development.

### Cultural Opportunities

UAB's urban location offers students unique cultural opportunities. Located within walking distance of the campus is the Five Points South district, where ethnic-style restaurants, shops, art galleries, and music clubs are located. Not far from campus are the Birmingham Museum of Art, the Civil Rights Institute, the historic Alabama Theater, and the Birmingham-Jefferson Convention Complex. Other nearby sites include Sloss Furnace, a post-Civil War iron foundry which has been converted into a museum and informal music hall, and Oak Mountain Amphitheater, an outdoor facility that features music-industry headliners during the spring and summer concert season.

UAB also has a flourishing arts program. As many as 30 major music events are produced each season at UAB, in addition to numerous theater productions and student and professional art exhibitions. The Alys Robinson Stephens Performing Arts Center is a state-of-the-art facility which now houses a 1,400-seat concert hall, a 350-seat theater, and a 150-seat recital hall, and eventually will house a fine arts computer center, a band room, electronic music laboratories, practice rooms, and rehearsal hall. The Center regularly schedules nationally and internationally known artists and orchestras and features faculty and student productions and concerts.

### Student Life

Graduate students at UAB have many opportunities to become involved in the life of the university. Information about additional groups, both on and off campus, can be found in the UAB Student Handbook, *Direction* at <http://www.uab.edu/handbook>. Such organizations include: Graduate Student Association (GSA), Black Graduate Student Association (BGSA) and Graduate Career Awareness and Trends (GCAT).

### The University of Alabama System

The University of Alabama was foreseen in the Constitutional Convention in Huntsville, Alabama Territory, on July 5, 1819. At the second session of the General Assembly, December 18, 1819, an act was passed establishing a seminary of learning "to be denominated the University of Alabama." The university opened for admission of students on April 18, 1831, in Tuscaloosa. All public buildings except the observatory were burned by federal cavalrymen on April 4, 1865. Erection of new buildings began in January 1867 and classroom instruction resumed in April 1869.

During the first half of the twentieth century and in addition to its regular educational programs at the Tuscaloosa campus, the university began to offer additional educational opportunities to residents in urban communities throughout Alabama. Extension centers, offering both day and evening classes, were established in Birmingham, Huntsville, Montgomery, Mobile, Dothan, and Gadsden. The Birmingham and Huntsville centers evolved into new university campuses, which were established in addition to the Tuscaloosa campus.

In September 1966, all university operations in Birmingham were designated as the University of Alabama in Birmingham (UAB) by the University of Alabama Board of Trustees. This action established the University of Alabama in Birmingham as one of the three major campuses

of the university. The University of Alabama in Huntsville had been initiated as a four-year school in 1964.

In June 1969, the campuses were given autonomy within the framework of the University of Alabama System, each having its own administrative structure with a president as the chief executive officer. A chancellor was appointed in June 1976 as chief administrative officer of the system. In 1984, the name of the University of Alabama in Birmingham was changed to the University of Alabama at Birmingham.

## Schools and Degrees

This catalog contains information about graduate programs in the College of Arts and Sciences, School of Business, School of Dentistry, School of Education, School of Engineering, School of Health Professions, School of Nursing, School of Optometry, School of Public Health and the Joint Health Sciences.

Most UAB graduate students are working toward a degree; however, some have other educational goals. Graduate level degrees are usually characterized by the level of master's, specialist or doctoral.

## College of Arts & Sciences

### Master of Arts

English  
 Anthropology<sup>5</sup>  
 Art History<sup>1</sup>  
 Communication Management  
 History  
 Sociology  
 Psychology

### Master of Public Administration

### Master of Science

Biology  
 Chemistry  
 Computer and Information Sciences  
 Computer Forensics and Security Management  
 Criminal Justice  
 Forensic Science  
 Mathematics  
 Physics

### Doctor of Philosophy

Applied Mathematics<sup>2</sup>  
 Biology  
 Chemistry  
 Computer and Information Sciences  
 Medical Sociology  
 Physics  
 Psychology

## School of Education

### Master of Arts in Education

Arts Education  
 Early Childhood Education  
 Educational Leadership  
 Elementary Education  
 English as a Second Language

Health Education  
 High School Education  
 Physical Education  
 Reading  
 Special Education

### Master of Arts in Counseling

Counseling

### Educational Specialist

Educational Leadership  
 Education

### Doctor of Education

Educational Leadership<sup>1</sup>

### Doctor of Philosophy

Early Childhood Education  
 Educational Leadership<sup>1</sup>  
 Health Education Promotion<sup>1</sup>

## School of Business

### Master of Accounting

### Master of Business Administration

## School of Engineering

### Master of Science

Biomedical Engineering  
 Civil Engineering  
 Engineering  
 Electrical Engineering  
 Materials Engineering  
 Mechanical Engineering

### Doctor of Philosophy

Biomedical Engineering  
 Civil Engineering<sup>3</sup>  
 Computer Engineering<sup>4</sup>  
 Interdisciplinary Engineering  
 Materials Engineering<sup>1</sup>  
 Materials Science<sup>2</sup>

## School of Health Professions

### Master of Science

Biotechnology  
 Clinical Laboratory Science  
 Genetic Counseling  
 Nutrition Sciences  
 Occupational Therapy

**Master of Science in Health Administration**  
**Master of Science in Health Informatics**  
**Master of Science in Physician Assistant Studies**  
**Doctorate of Physical Therapy**  
**Doctorate of Science**

Administration Health Services

**Doctor of Philosophy**

Administration Health Services  
Nutrition Sciences  
Rehabilitation Sciences

**School of Nursing**

**Master of Science in Nursing**  
**Doctor of Nursing Practice**  
**Doctor of Philosophy**  
**School of Optometry**

**Master of Science**

Vision Sciences

**Doctor of Philosophy**

Vision Sciences

**School of Public Health**

**Master of Public Health**

Master of Science in Public Health  
Clinical Research  
Environmental Health Sciences  
Epidemiology  
Outcomes Research

**Doctor of Public Health**

Public Health Management  
Outcomes Research  
Maternal & Child Health Policy

**Doctor of Philosophy**

Environmental Health Sciences  
Epidemiology  
Health Behavior  
Bio-statistics

## Non-Academic Policies

**Equal Opportunity and Discriminatory Harassment Policy** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=52&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2Fdefault%2Easpx>)

UAB is committed to equal opportunity in education and employment, and the maintenance and promotion of nondiscrimination and prevention of discriminatory harassment in all aspects of education, recruitment and employment of individuals throughout the university.

**Immunization Policy** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=86&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DI>)

UAB requires that first-time entering students, international students and scholars, and students in health-related schools provide proof of immunization against certain diseases.

**Non-Resident Tuition Policy** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=109&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DN>)

This policy addresses non-resident tuition, certification of residency status by campus officials, and establishment of campus policies to administer an appeals process.

**Drug-Free Campus Policy for Students** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=46&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DD>)

Unlawful possession, use, manufacture, distribution, or dispensing of illicit drugs, controlled substances, or alcoholic beverages by any UAB student is prohibited.

**Drug-Free Campus Policy for Students - Attachment A** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=632&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DD>)

This attachment for the Drug-free Campus Policy for Students outlines the Federal penalties and sanctions for the illegal possession of a controlled substance.

**Drug-Free Campus Policy for Students - Attachment B** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=626&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DD>)

This attachment to the Drug-free Campus Policy for Students outlines the health risks associated with the use of drugs and alcohol.

**Drug Free Campus/Workplace Policy - Attachment B.1** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=627&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DDhttp%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DD>)

This Attachment to the Drug-Free Campus and Drug-Free Workplace Policies outlines effects related to the consumption of alcohol.

**Drug-Free Campus Policy for Students - Attachment C** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=628&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DD>)

This attachment to the Drug-Free Campus Policy describes available programs through UAB offering counseling and assistance for drug and alcohol abuse.

**Copyright Policy** (<http://www.uab.edu/handbook/f-policies-procedures/f-copyright>)

The University of Alabama at Birmingham (the "University") is dedicated to instruction, research and service to benefit society and encourages its faculty, staff and students to carry out scholarly endeavors in an open

and free atmosphere, and to publish the results of such work without restraint, consistent with applicable law and policy.

**Patent Policy** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=115&Source=http%3A%2F%2Fsppublic.ad.uab.edu%2Fpolicies%2FPages%2Fkeywordlookup.aspx%3FpAN%3DI>)

UAB encourages the development of procurement and licensing of patents for inventions in the interest of the public, the inventor, and the university.

**Data Protection and Security Policy** (<http://sppublic.ad.uab.edu/policies/Pages/LibraryDetail.aspx?PID=38&Source=http%3A%2F%2Fsppublic%2Ead%2Euab%2Eedu%2Fpolicies%2FPages%2FPolicyListName%2Easpx%3FpAN%3DD>)

Data (electronic) created at UAB must be protected and maintained in accordance with all applicable federal and state laws and university policies.

**Student E-Mail Address Policy**

November 10, 2003

**See also:**

*Electronic Data Processing Security Policy*

*Acceptable Use Policy*

*Network Usage Guidelines*

**Purpose**

UAB provides electronic mail resources in support of its instruction, research, and service activities. The purpose of this policy is to establish the use of electronic mail (e-mail) as one of the official methods for communicating with UAB students.

**Official Communications Using E-Mail Addresses**

In a similar manner as mail distribution of paper communiqués to a student's "permanent" address is considered an official method for distributions to students, so also are official e-mail messages sent by UAB to a student's "@UAB.EDU" e-mail address considered an official distribution method. For purposes of this policy, "official" communiqués or e-mails as used here are those established as "official" through other approval mechanisms in place at UAB.

**Student Requirements and Responsibilities**

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 (BlazerID World Wide Web site). 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 re-directed, it is the student's responsibility to make the changes in the UAB e-mail registering system.

## UAB Responsibilities

UAB will ensure that all students have access to an e-mail account and will provide means for students who do not otherwise have access to e-mail-capable computers to be able to check their e-mail through such mechanisms as computer labs, the UAB libraries, and public terminals. UAB will provide mechanisms to allow students to request that their e-mail addresses not be published in a similar way that other student directory information is not published. However, unpublished e-mail addresses will be used for sending official UAB communiqués to students including communications to a group of students such as a course e-mail list. Students also will be provided mechanisms for requesting that their e-mail addresses not be used for general UAB mailings that are not official communications with students. UAB is not responsible for the handling or mishandling of students' e-mail by non-UAB providers or by unofficial (non-@UAB.EDU) e-mail servers.

## Student Records Policy (<https://www.uab.edu/students/academics/honor-code/item/1050-policies-student-records>)

The University of Alabama at Birmingham student records policy complies with the Family Educational Rights and Privacy Act of 1974, as amended. All students enrolled or previously enrolled at UAB have certain rights with regard to information included in their education records. These rights are the subject of this policy.

Request to Withhold Directory Information PDF  
([http://images.main.uab.edu/stuaff/pdf/Registrar/Withhold\\_Directory\\_Info.pdf](http://images.main.uab.edu/stuaff/pdf/Registrar/Withhold_Directory_Info.pdf))

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# Academic & Student Resources

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## Admission

UAB welcomes applications from all individuals whose preparation and abilities give them a reasonable chance of success in its programs. All applicants must offer acceptable evidence of ability and intent to meet the academic standards of the university. Degree-seeking graduate students are those accepted into a specific graduate program to work toward a specific advanced degree. In addition to the completed online application, the application procedure includes the submission of official transcripts, standardized test scores, and letters of recommendation. Each application is reviewed by the graduate program faculty, who make an admissions recommendation to the Graduate School Dean or a representative of the Graduate Dean.

Credentials and documentation required for admission vary by program. To be considered official, all academic documents required for admission must be mailed to UAB directly from the colleges/universities attended, and testing agencies. All credentials submitted as part of the application for admission become and remain the property of the university and will not be returned to the student, duplicated, or transferred to another institution.

Any change in a student's record prior to enrollment will necessitate a new review of the application. Any omissions or misrepresentations on a student's application for admission will automatically invalidate consideration by and acceptance to UAB. If, after a student is admitted to the university, information comes to light that indicates an applicant did not meet all admission requirements, the applicant's offer of admission will be rescinded.

The application for admission, application instructions, and application deadlines can be accessed at [www.uab.edu/graduate](http://www.uab.edu/graduate).

## Readmission

The records of students, who have not registered for courses for one year or more, will be removed from the UAB computerized registration system. Such students must apply for readmission before they may register again. Degree-seeking students who

1. Were admitted to a UAB Graduate Degree-Seeking Program within the last five years, and
2. Have not registered for courses for one academic year (3 semesters) or more BUT have registered for and successfully passed at least one graduate course at UAB after being admitted to a UAB Graduate Degree-Seeking Program, and
3. Have not attended any other university or college in the interim, and
4. Wish to return to the graduate program to which he or she was earlier admitted, must fill out the Application for Readmission to Graduate Degree Program form and pay the appropriate fee.

These readmitted students must meet the degree requirements operative at the time of readmission. Students who wish to return to the non-degree category after an absence of one or more years must submit a new non-

degree online application, together with the required processing fee. These forms can be obtained online at <http://www.uab.edu/graduate/online-forms>.

## Admission as a Non-Degree Student

The non-degree category serves students who do not wish to pursue a graduate degree at UAB, as well as those who wish to begin graduate study before being admitted to a degree program. Not all graduate courses are open to non-degree-seeking graduate students. Although there is no limit to the number of credit hours that may be earned as a non-degree seeking student, should a student later wish to pursue an advanced degree at UAB, the credit earned while in non-degree-seeking status is not automatically acceptable toward the degree. A request for transfer of non-degree seeking credits will not be considered until the student has completed at least 9 semester hours of graduate credit in the current UAB program and is in good academic standing. **In no case can more than 12 semester hours earned as a non-degree graduate student be applied toward an advanced degree at UAB.**

Because of U.S. immigration requirements, international applicants (i.e., those who are neither U.S. citizens nor permanent residents) cannot normally be considered for the non-degree category unless already residing in the United States. Immigration laws should be consulted to determine eligibility of international students. Unless otherwise stated, the policies in this section apply to both degree-seeking and non-degree seeking graduate students. Information on applications for admissions can be found on the Graduate School Web site (<http://www.uab.edu/graduate/current-students/prospective-students>).

## Change from Non-Degree to Degree Status

A student with a non-degree classification who wishes to change to a degree-seeking classification must apply via the degree-seeking application and submit the required documents (transcripts, entrance test score, recommendation letters, etc.). Degree-seeking admission of non-degree students is neither automatic nor guaranteed.

## Concurrent Degrees

Students who do not qualify for a combined degree program but wish to begin work toward a second advanced degree may earn up to 12 semester hours in the additional program (without special permission) while simultaneously earning credit toward the original degree. However, **no more than 12 semester hours earned in the first degree program may ever be applied toward the second degree.**

## Admission as an Auditor

Applicants who wish to audit credit courses must follow standard admission procedures and meet minimum admission requirements.

## Equal Opportunity Policy

UAB administers its educational programs and activities, including admission, without regard to race, color, religion, sex, sexual orientation, age, national origin, disability unrelated to job performance or Vietnam-era or disabled veteran status. The full text of this policy can be found <http://sppublic.ad.uab.edu/policies/Pages/default.aspx>.

## Office of Graduate Admissions

**Mailing Address for Documents and Credentials:**

G03 Lister Hill Library  
1720 2<sup>nd</sup> Avenue South  
Birmingham, AL 35294-0013

**Physical Address:**

1700 University Boulevard  
Birmingham, Alabama 35294-0013  
(205) 934-8227  
gradschool@uab.edu

## New Student Orientation

### *Invitation from Dean Bryan Noe*

Irrespective of whether you are a new or a continuing graduate student at UAB, learning everything you will need to know from the first day in your graduate program to the day your degree is granted will often seem like a daunting task. In addition to what is provided by your graduate program, the links on the "Grad Info" web page include a lot more information that will be helpful both as you start your graduate studies, and later as you work toward completing your degree requirements. We hope that you find the information in this online tool useful throughout your sojourn at UAB

The new graduate student orientation "Grad Info" page can be found at <http://www.uab.edu/graduate/current-students/grad-info>.

## Student Life Activities and Organizations

Graduate students at UAB have many opportunities to become involved in the life of the university. Information about additional groups, both on and off campus, can be found in the UAB Student Handbook, *Direction* at <http://www.uab.edu/handbook/> as well as the *Graduate Student Handbook* at [http://www.uab.edu/graduate/images/acrobat/publicaitons/UAB\\_Grad\\_Handbook.pdf](http://www.uab.edu/graduate/images/acrobat/publicaitons/UAB_Grad_Handbook.pdf)

UAB graduate students are represented by the Graduate Student Association (GSA), which works closely with the Graduate School and other offices of the university administration in formulating policies and meeting student needs. All graduate students are automatically members of the GSA, and the GSA Senate is composed of student representatives from the various graduate programs. The GSA provides partial funding for graduate student travel to professional meetings. The organization co-sponsors a variety of services and activities, including the Honors Convocation, Graduate Student Research Days, Graduate Student Orientation, and the GSA Emergency Loan Fund. Information on the Graduate Student Medical Assistance Fund and travel grants may be obtained on the GSA Web site ([www.uab.edu/gsa](http://www.uab.edu/gsa)).

The Black Graduate Student Association (BGSA) was founded in 1993 and is dedicated to the pursuit of academic excellence and social and political awareness with respect to African-Americans at UAB.

The BGSA sponsors social events, pertinent forums dedicated to issues of interest in the African-American community at our Black Lecture Series "Meeting of the Minds," activism opportunities, and an annual conference.

For detailed information about the BGSA, visit the Web site at <http://www.uab.edu/bgasa/>.

The UAB GCAT, previously called the Industry Roundtable, is sponsored by the UAB Graduate School. The GCAT is a student-initiated and student run informal discussion group open to all graduate students and dedicated to fostering a greater awareness of career opportunities outside academia. Its goals are to provide a forum for networking with industry representatives; establish an interface between academia and industry; introduce students to the process of making industry contacts; encourage students to comment, ask questions, and seek advice from non-academics; stimulate students to begin career development early in their educational experience; and provide information to students about career opportunities outside academe. More information regarding the GCAT can be found at <http://www.uab.edu/gcat/>.

Graduate Student Research Days (GSRD) is an annual competition in which graduate students present their original research in an open forum. Information regarding participating in the GSRD competition is available at the GSRD Web site ([www.uab.edu/graduate/researchday](http://www.uab.edu/graduate/researchday)).

## Student Services & Facilities

This page contains a list of facilities and services available to UAB students. For further information on these and other facilities and activities, contact the UAB Information Center (see "Information Center" under the above Student Services tab) or refer to the UAB student handbook, *Direction*, available at <https://www.uab.edu/students/student-life>, and on BlazerNET on the Student Resources tab.

### Barnes & Noble at UAB

Barnes & Noble at UAB is located on 12th Street and 6th Avenue South. The bookstore posts official lists of UAB courses and stocks the textbooks and all other items necessary for successful UAB coursework. Most textbooks can be purchased new or used. The option to rent textbooks is also available for some courses. The bookstore has entered into an agreement with Microsoft to offer name brand computer software to students, faculty and staff at substantially reduced prices. The bookstore carries study aids, reference materials, school and office supplies; the largest assortment of medical reference books in the Southeast; medical instruments, lab coats, and scrubs; and the largest assortment of UAB logo apparel and gifts available. Contact Barnes & Noble at UAB at (205) 996-2665 or visit the store online at <http://uab.bncollege.com>

### Birmingham Area Consortium for Higher Education (BACHE) Library Cooperation

The Birmingham Area Consortium for Higher Education (BACHE) consists of UAB, Birmingham-Southern College, Miles College, the University of Montevallo, and Samford University. Students, faculty, and staff at BACHE institutions may access the resources of all member libraries by simply presenting their valid ID cards. It is best for students to discuss research projects first with the reference staff at UAB's library before using other member libraries. The rules and regulations of the lending library are in effect.

## Campus Restaurants

Craving the sort of canned fruit, mystery meat and slightly doughy roll glop you struggled to choke down all the way through elementary school? Sorry, we can't help. Instead, think delicious food, wide variety, good prices, and lots of places. Conveniently located within walking distance of classes, residence halls, many off-campus apartments and the Campus Recreation Center, UAB Campus Restaurants offers delicious food at a great value with an inviting atmosphere where you can hang out with friends. Just off the Hill Center's main lobby you'll discover **HUC Cafe**, featuring Starbucks branded coffee, refreshing smoothies from Island Oasis along with hot soup and quick and easy grab and go snack options.

Overlooking the campus green and located between the Campus Recreation Center and Blazer Hall, the **Commons on the Green** offers something for everyone! The Commons isn't just a dining hall, y'all—it's a dining experience. It is at once a source of nourishment and of entertainment. Choose your cuisine from the Commons' offerings of grilled foods, deli favorites, pizza and pasta, classic home-style flavors, international delicacies, vegan offerings, and soups and salads. Breakfast and lunch are priced a la carte—eat what you want, pay for what you eat—and dinner and weekend brunches are all-you-care-to-eat. And it's pretty! A modern yet comfortable interior, a panoramic view of the Campus Green, and free wi-fi give you a reason to linger over lunch, stop by for a study session, or just relax after class and/or hang out with friends. Upstairs **The Diner** is the ideal late night hang out open from 2pm until 2am daily. Enjoy a burger and a milkshake or shop for snacks and room essentials in the C-Store.

Walking around campus, stop in at **ZeBi** in the Business and Engineering Complex to pick up a freshly made sandwich, organic fruit teas, or a snack on the go. Take a study break and visit **Starbucks** in Mervyn Sterne Library for a quick coffee fix. Heading to the gym? Make sure to stop at the **PowerZone** to grab a bottle of water and stay properly hydrated. Visit the Learning Resource Center and stop in **Einstein Bros Bagels** for fresh baked bagels, schmears, coffee, sandwiches and more.

For more information about Campus Restaurants, please stop by the UAB Campus Restaurants office located on the top floor of the Commons on the Green next to the Diner, or call (205) 996-6567. You can also visit us online at <http://www.uab.edu/dining/>.

## UAB Campus Restaurants Locations

For updated hours of operation visit: <http://www.uab.edu/dining/locations>

### Mervyn H. Sterne Library

The Mervyn H. Sterne Library is located at 917 South 13<sup>th</sup> Street. Named in memory of the late Birmingham philanthropist and civic leader Mervyn H. Sterne shortly after it opened in 1973, the facility has special collections, seminar rooms, group study rooms, lockable study carrels, computers, color and black and white printers, copiers, and seating for 1,350 users. Sterne Library houses a collection of more than a million items selected to support teaching and research at UAB. In addition to books and periodical subscriptions, the collection consists of microforms and other print and non-print materials. Sterne Library provides electronic access to the contents of over 35,044 serials and 72,000 electronic books.

Sterne Library's Web site is a portal to everything library related. The online catalog provides rapid access to the Sterne Library collection as well as other major library collections in Alabama. There are many

resources on Sterne Library's Web site, such as the subject- and course-specific research guides, and a list of FAQs.

The first floor of Sterne Library was renovated in 2010 to make it even more patron-friendly. The Library now has additional computers, collaborative study spaces, more group study rooms, the University Writing Center, and a Starbucks. Sterne Library is open until 2:00 A.M. most days, and during final exams, it is open for 24-hour periods to accommodate students' late hours. See Sterne Library's home page for the week's hours of operation.

Reference services are provided by general and subject-specialist librarians. The Reference Desk is staffed during most library hours to assist patrons in identifying and locating materials and information. Reference services include research assistance, citation clinics, scheduled classes, help locating and using microforms, and interlibrary loan.

The User Services Department, through its automated circulation system, tracks materials continuously and can determine the location or status of a book. This department is also responsible for managing the individual and group study rooms. The Reserve Desk circulates high-use materials placed on reserve by instructors.

Through reciprocal borrowing agreements, UAB students and faculty may use library facilities at a number of other colleges and universities in the area. For additional information, inquire at the Reference or Circulation Desks.

Telephone numbers: (205) 934-6364 (Reference Services) and (205) 934-4338 (User Services)

Library home page: <http://www.mhsl.uab.edu/>

### Lister Hill Library of the Health Sciences

The Lister Hill Library of the Health Sciences, established in 1945, is the largest biomedical library in Alabama and one of the leading such libraries in the South. It serves as a resource library in the National Network of Libraries of Medicine for the Southeast/Atlantic Region. Access to electronic resources is available across campus and remotely to authorized users. The library provides a variety of reference and educational services plus extensive educational opportunities through one-on-one instruction at point of need or in scheduled workshops on using library resources or searching for information. To contact the library for assistance, see <http://www.uab.edu/lister/ask/>.

### Reynolds Historical Library

The Reynolds Historical Library, located on the 3rd floor of the Lister Hill Library of the Health Sciences, was a gift of Dr. Lawrence Reynolds, a distinguished radiologist and editor. The growing collection includes over 13,000 rare books and manuscripts pertaining to the history of medicine and science, dating from the 14th to the early 20<sup>th</sup> centuries.

### Physical Education and Recreation Facilities

Physical education and recreation facilities are open to all UAB students upon presentation of a valid UAB ID card. Faculty, staff and alumni have the option to purchase memberships at the Campus Recreation Center. Students, faculty, staff, and alumni may also purchase household memberships for those residing in their immediate household.

## Tennis Courts

UAB maintains 4 lighted tennis courts on campus at the block of 16<sup>th</sup> Street and 11<sup>th</sup> Ave. South. Students, faculty, and staff can access the courts by using their UAB ID card. All cards must be programmed by the campus card office for students and at UAB Physical Security for faculty and staff. For more information concerning the courts please call 934-5008.

## Track Field

Also enclosed and lighted, this field covers the entire block of 12<sup>th</sup> Street and 6<sup>th</sup> Ave. South. This field primary serves the Blazer Football and Track team practices, Intramural flag football, Ultimate Frisbee competition and physical education classes. It is surrounded by a quarter mile, synthetic running track and is also equipped with a field events area. For further information concerning this area please call 934-5008.

## George C. Wallace Physical Education Complex

Primary function is for physical education credit classes and athletic department practices and training. It is located at 608 13<sup>th</sup> Street South. For more information please call 934-5008.

## Smolian International House

The Bertha and Joseph Smolian International House, 1600 10th Avenue South, offers services and activities for international students and scholars. Known as the I-House, it provides a focal point for programs and activities designed to foster a free exchange of information and international understanding. The facility includes meeting space for campus groups, as well as community groups having an international purpose. For additional information or a schedule of activities, call (205) 934-3328.

## University Writing Center

Dedicated to helping students improve those critical writing and communication skills, the Writing Center assists students across all UAB disciplines at all levels, from freshmen to dissertators. Located on the first floor of Sterne Library, the center offers one-on-one and group tutoring sessions. Making an appointment is recommended, though walk-ins are welcomed. Additional resources through the center include computer stations, small-group workrooms, and a large classroom for writing workshops.

## CampusCard

The UAB ONE Card serves as the official student ID and offers access to a variety of services and resources on campus. Students use their ONE Card to enter residence halls and the Campus Recreation Center, attend UAB athletic and cultural events and check out materials from UAB libraries. With their ONE Card, students can enjoy discounts on software purchases at the Barnes & Noble UAB Bookstore and tickets to a variety of on and off-campus events through the UAB ticket office. The ONE Card also functions as a debit card, allowing students a convenient and secure way to pay for goods and services at a variety of on campus and local area merchant locations.

The ONE Card office is located in the Residence Life Center of Blazer Hall. A photo ID is required to have a ONE Card made. Further

information can be obtained at <http://www.uab.edu/onecard/>, or by contacting the ONE Card staff at [ONECard@uab.edu](mailto:ONECard@uab.edu).

## Career & Professional Development Services

UAB Career & Professional Development Services exists to engage students in the career development process of **exploring** career options, gaining **experience** in a chosen field, **preparing** for the job search, and **succeeding** in their career goals. Our services begin the moment students are admitted to UAB and extend to alumni status. Career & Professional Development Services offers the following resources and programs to successfully prepare you to enter the competitive job market or graduate school:

- Career Consulting
- Career Action Plan
- Job Listings & On-Campus Interviews
- Career Assessments
- Career Fairs, Seminars & Workshops
- Experiential Education (co-op, internships, mentoring, job shadowing & volunteering)
- Career Management Courses

Managing your career is a lifelong, exciting process you need to begin NOW! Please visit us at the main office at 936 19th Street South, or the four satellite offices in the School of Business, Engineering, Health Professions, and Public Health or visit us online at <http://www.uab.edu/careerservices/index.php>.

*Explore ~ Experience ~ Prepare ~ Succeed*

## Counseling & Wellness

The UAB Counseling & Wellness Center assists in developing students' potential in physical, academic, spiritual, psychosocial, emotional, and vocational areas. In addition to individual and couples counseling, the staff offers a variety of wellness programs, group opportunities, and educational resources. Confidential counseling services are available to all currently enrolled UAB students at no cost. Psychiatric services are also available. The director of the Counseling & Wellness Center also serves as the university liaison to the Campus Ministry Association. For more information contact the Counseling & Wellness Center, Room 150, Holley-Mears Building, 924 19<sup>th</sup> Street South, (205) 934-5816.

Counseling services are also provided by the UAB Women's Center.

## Disability Support Services

Disability Support Services (DSS), located in the 9th Avenue Office Building, serves as the central campus resource for students with disabilities. The goal of DSS is to provide a physically and educationally accessible university environment that ensures an individual is viewed on the basis of ability, not disability. DSS staff members work individually with students to determine appropriate accommodations. To be eligible for services, students need to complete an application, submit documentation of their disability and meet with our counseling staff.

For more information, contact Disability Support Services at (205) 934-4205 (voice) or 934-4248 (TTY) or <http://www.uab.edu/students/services/disability-support-services> E-mail contacts are welcome at [dss@uab.edu](mailto:dss@uab.edu).

## Student Health Services (SHS)

Community Health Building  
930 20th Street South, Suite 221  
Birmingham, Alabama 35294-2042

*Free parking available on the right side of the building (the arm bar will automatically rise when you pull up and you will be given a code by SHS staff to exit).*

All graduate UAB students have access to UAB Student Health Services (SHS) Plan at no additional cost\* This access is included as part of tuition and replaces Tier I, Tier II, optional student, and Single Visit Option plans.

All students have access to the SHS regardless of insurance coverage. However, access to SHS does not replace the major medical insurance requirement (BC/BS, VIVA, etc.) for student groups defined below. Health Insurance coverage is part of each program's requirements and is necessary to help cover hospital and ER visits, specialty care, and lab/x-ray costs which are not included in the basic Student Health Services Plan.

Some students at UAB are required to have major medical insurance. More information about these students is available at the following website, <http://www.uab.edu/studenthealth/insurance-and-waiver/mandatory-insurance-waivers>

To learn more about Student Health Services and/or print an enrollment form, please visit <http://www.uab.edu/studenthealth>.

**Appointments: (205) 934-3581**

### Office Hours

Day	Hours
Monday - Thursday	8:00 a.m. - 12:00 p.m. and 1:00 - 5:00 p.m.
Friday	8:00 a.m. - 12:00 p.m. and 1:00 - 4:30 p.m.

### Immunizations

Day	Hours
Monday - Thursday	8:00 - 11:30 a.m. and 1:00 - 4:30 p.m.
Friday	8:00 - 11:30 a.m. and 1:00 - 4:00 p.m.

### Urgent Care Walk-In Hours (acute illnesses only)

Day	Hours
Weekdays	8:00 - 9:00 a.m. and 1:00 - 2:00 p.m.

## International Recruitment and Student Services

The mission of International Recruitment and Student Services (IRSS) is to provide quality services, programs, and activities that enhance cultural awareness, international educational and research opportunities, and global perspectives for students, faculty and staff.

IRSS advises international students and assists visiting international faculty and students in matters of immigration, federal and state taxation, and orientation to the Birmingham community. IRSS also serves as a collaborative resource center that facilitates, promotes, and strengthens international understanding on campus and throughout the Birmingham community.

International Recruitment and Student Services also operates the Smolian International House. For additional information, call (205) 934-3328 or visit our Web page at <http://www.uab.edu/students/international>.

## Parking

All students who desire to park in UAB student parking facilities must purchase a permit from Parking and Transportation Services. Permits can be purchased by the term or for the academic year (September through August). Location and fees vary according to lot. Contact Parking and Transportation Services at (205) 934-3513, for details, or visit online at <http://www.uab.edu/parking/>.

Both the university and the City of Birmingham issue citations in student lots to vehicles illegally parked or not displaying a proper permit. Students are responsible for paying all fines and fees imposed. If a student is a member of the parking system, any delinquent ticket payments will be added to his or her account in the Student Accounting Office. If a student is not a member of the parking system and accumulates three or more delinquent tickets, the student's vehicle may be immobilized or impounded at his or her expense.

Handicapped spaces are conveniently located throughout campus. A valid handicap permit must be displayed to park in a handicapped space in addition to the applicable parking permit. All state issued handicap parking permits MUST be registered with the UAB Parking Office in order to park in a restricted UAB lot or deck.

For additional information and a campus parking map, contact:

### UAB Parking and Transportation Services

608 Eighth Street South  
Telephone (205) 934-3513  
E-mail: [uabparking@uab.edu](mailto:uabparking@uab.edu)  
Website: <http://www.uab.edu/parking/>

## Veterans Services

UAB Veterans Services (UAB-VS) assists veterans, reservists, guardsmen, and dependents of disabled or deceased veterans to access their educational benefits. UAB-VS serves as a liaison between the student and the local and federal agencies, including the State Department of Education, Department of Defense, and the Department of Veterans Affairs. The office staff assist students in applying for educational benefits, securing tutorial assistance and obtaining veterans work-study positions. For further information, contact UAB Veterans Services, Smolian International House, 1600 10th Avenue South, telephone (205) 934-8804.

## Women's Center

The Women's Center offers personal (non-academic) counseling services to currently enrolled UAB students. The services are confidential and are provided by a Licensed Professional Counselor at no cost. In addition to counseling, the center provides educational programs on sexual assault, sexual harassment, eating disorders, and other mental health issues that

affect women. The Women's Center supports and encourages women seeking a balanced and meaningful life. For further information, contact:

#### **Women's Center**

Suite 150  
Holley-Mears Building  
924 19th Street South  
Telephone (205) 934-6946

## **Financial Information**

### **Tuition and Fees**

#### **Graduate Courses**

The 2013-2014 Detailed Tuition and Fee Schedule is available online <https://www.uab.edu/students/current/paying-for-college/detailed-tuition-and-fees> > Graduate Programs.

#### **Estimated Tuition and Fees**

To ascertain Tuition and Fees Fee Schedule please visit BlazerNET located online at [www. \(http://www.uab.edu/blazernet\)uab.edu/blazernet](http://www.uab.edu/blazernet)

#### **Deadlines**

Student account payment deadlines are available on the Academic Calendar for each term. Fifty percent of your total student account must be paid by the first payment deadline and the entire account balance must be paid in full by the second payment deadline. Payment deadline dates are available on the Academic Calendar located online at <http://www.uab.edu/academiccalendar>.

#### **Penalties**

Students who fail to pay by the deadline are subject to substantial late fees. Students with delinquent accounts will not be allowed to register at UAB, and transcript requests will not be honored until all accounts are paid in full. The list of penalties is available online at <http://www.uab.edu/whentopay/penalties>.

#### **How to Pay**

Payments can be made via the web with a Blazer ID and Password at [www.uab.edu/blazernet](http://www.uab.edu/blazernet). For detailed instructions please visit the website [http://www.uab.edu/images/stuaff/pdf/Making\\_a\\_payment\\_in\\_BlazerNET.pdf](http://www.uab.edu/images/stuaff/pdf/Making_a_payment_in_BlazerNET.pdf). Payments can also be made in Student Accounting Services located on the ground level of the Lister Hill Library. All fees are due by the published deadline, as indicated on the UAB Academic Calendar at <http://www.uab.edu/academiccalendar>. For tuition questions please call Student Accounting Services at (205) 934-3570.

#### **Contact**

Student Accounting Services  
1700 University Blvd.  
GROU Lister Hill Library  
Birmingham, AL 35294-0013  
(205) 934-3570

#### **Withdrawing from Courses**

To avoid academic penalty, a student must withdraw from a course by the withdrawal deadline shown in the academic calendar and the UAB Class

Schedule and receive a grade of W (withdrawn). The withdrawal period ends at approximately 75% of the academic term. Failure to attend class does not constitute a formal drop or withdrawal.

Withdrawal from courses can only be accomplished using official procedures. The official withdrawal must be completed online in BlazerNET. The student must submit a completed withdrawal form to the Office of the Registrar. This office will date stamp the form and return a copy. These documents should be carefully retained by the student. The date printed on the receipt is the official date of withdrawal.

In extraordinary circumstances, if it is impossible for the student to withdraw online or obtain an official withdrawal form, the student may mail a withdrawal letter to the Office of the Registrar. The official date of withdrawal will be the date the letter is received in this office. If the official date of withdrawal is after the last day to drop without paying, no tuition or fees will be refunded.

For financial aid purposes, the date of last class attendance will be the official date of withdrawal unless otherwise documented. Note that individual schools may have withdrawal rules in addition to the above.

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.

#### **Exceptions**

All students are responsible for adhering to UAB's academic policies, as published in the UAB Graduate Catalog and the current UAB Class Schedule. The Graduate Dean may make exceptions to policies. Exceptions will only be made in extraordinary circumstances. Only in cases of serious illness, which precludes a student from attending classes, or a call to active military service, can a student qualify under this policy for either administrative or academic withdrawal from courses from that semester. In such instances, students requesting an exception to policy must provide the cause specific documentation in order for the request to be considered.

Requests are evaluated only from written documentation and not through appointments or telephone calls. Information and forms are available online at <http://www.uab.edu/graduate/images/acrobat/forms/acadappeal.pdf>. Requests for exceptions must be submitted at the earliest possible time. Consideration will not be given to any request submitted later than the term immediately following the term for which the exception is being requested. A full reduction in tuition and associated fees will be made for appropriately documented serious illnesses or military service activation, which preclude a student from continuing his/her studies at UAB. For students receiving refunds, such refunds will first be applied to any outstanding obligations and to any scholarship, grant, or loan the student has received for that term. A student who is receiving any form of Federal Title IV Financial Aid will be liable for any unearned funds received as determined by the Federal Return of Funds Policy (check with Student Accounting Office for details.)

Failure to adhere to the published drop and withdrawal deadlines (as outlined in the UAB Catalog and the UAB Class Schedule) does not qualify under this policy as an Academic Exception.

#### **Contact**

Graduate School  
1700 University Boulevard  
G03 Lister Hill Library

Birmingham, AL 35294-0013  
(205) 934-8227

## Financial Aid to Students

Students should apply for financial aid if they need assistance in paying for the cost of education. Students applying for financial aid are considered for all programs for which they are eligible.

Assistance generally takes the form of a combination of grant, loan, and employment. The amount of the award is based on the financial need of the student, taking into consideration the student's total expenses and the family's financial circumstances. A nationally recognized method of analysis approved by the federal government is used to determine the family's ability to pay toward the cost of education.

## Applying for Financial Aid

Students are encouraged to complete the Free Application for Federal Student Aid (FAFSA) available online at <http://www.fafsa.gov/> in early February. The earliest students can submit the FAFSA is January 1. Instructions and UAB forms are available online at <https://www.uab.edu/students/paying-for-college>. Since some of the aid programs have limited funding, students are encouraged to submit all required forms to the financial aid office by March 1 for financial aid for the following fall to ensure they receive aid from all programs for which they are eligible. In order to meet the tuition and fee deadlines, completed applications should be submitted no later than 45 days prior to the tuition due date. Students must reapply for financial aid each academic year.

Since procedures and rules are subject to change, students interested in applying for financial aid can receive further information online at <https://www.uab.edu/financialaid>.

## Contact

Student Financial Aid  
317 Hill University Center  
1400 University Boulevard  
Birmingham, Alabama 35294  
[finaid@uab.edu](mailto:finaid@uab.edu)  
(205)934-8223

## Mailing address

1530 3<sup>rd</sup> Ave. So., HUC 317  
Birmingham, AL 35294-1150

## Financial Aid Programs

### Federal Pell Grants

The federal government has allocated funds that currently provide grants up to \$5,550 per year for eligible students. All undergraduate students needing financial assistance should apply.

### Federal Supplemental Educational Opportunity Grants

Federal Supplemental Educational Opportunity Grants provide assistance for undergraduate students who demonstrate financial need. The maximum annual grant at UAB is \$1,500.

## Federal College Work-Study Program

Eligible undergraduate and graduate students may work part time and earn money to help pay their educational expenses while attending school. On-campus and off-campus jobs are available in areas related to the student's educational interests.

## Federal Perkins Loan

Perkins loans are available to undergraduate and graduate students on a long-term, low-interest basis and are repayable in monthly installments. The total amount available for a student's undergraduate study is \$27,000; the total amount of loans made to a graduate student for all years, including any loans received as an undergraduate, may not exceed \$60,000. The interest rate is five percent, and repayment of principal and interest begins nine months after graduation or withdrawal from school.

## Federal Direct Stafford/Ford Loan

The Federal Direct Stafford Loan is a need-based loan with a fixed rate of 6.8%. Repayment begins six months after the student's enrollment level drops below half time. Annual loan limits are \$3,500 for freshmen, \$4,500 for sophomores, \$5,500 for juniors and seniors. The aggregate limits are \$23,000 for dependent undergraduates and \$46,000 for independent undergraduates.

## Federal Direct Unsubsidized Stafford/Ford Loan

This is a non-need-based loan with a fixed rate of 6.8%. Interest must be paid while the student is in school or must be capitalized as agreed upon by the borrower and lender. Repayment of the principal and any capitalized interest begins when the student's enrollment status drops below half time. The maximum annual loan amount is the Federal Direct Stafford Loan annual limit minus the student's amount of eligibility for a Federal Direct Stafford Loan.

## Additional Federal Direct Unsubsidized Stafford/Ford Loan

Independent students or dependent students whose parents cannot borrow under the Federal Direct PLUS Program may borrow \$4,000 as freshmen and sophomores, \$5,000 as juniors and seniors

## Federal Direct Parent Loan for Undergraduate Students

This is a non-need-based loan with a fixed rate of 7.9%. Repayment of principal and interest begins immediately after the loan has been disbursed. Annual loan limits are the cost of living minus other aid.

## Federal Direct PLUS Loan for Graduate and Professional Students

This is a non-need-based loan with a fixed rate of 7.9%. Annual loan limits are the cost of living minus other aid.

Student and Faculty Educational Opportunities (<http://www.orau.gov/orise/educ.htm>)

Research participation and science education programs administered by Oak Ridge Institute for Science and Education (ORISE).

## UAB Financial Information

UAB Graduate Family Assistance Scholarship (<http://www.uab.edu/graduate/images/acrobat/funding/FAS.pdf>)  
Scholarship funds will be provided to graduate students who have family-related financial commitments that would, if not resolved, prevent them from enrolling in a degree-granting graduate program. **ONLY INCOMING STUDENTS WHO ARE ALREADY ACCEPTED INTO A RESEARCH BASED DOCTORAL PROGRAM ARE ELIGIBLE TO APPLY.**

Lister Hill Center for Health Policy fellowship program (<https://www.soph.uab.edu/listerhill/fellowship>)  
The purpose of the Fellowship is to assist in the transfer of health policy and health services research skills to the policy making setting. For 2010, the Center will fund up to two individuals with a stipend amount of \$28,800 per Fellow.

Comprehensive Minority Faculty and Student Development Program (CMFSDP) Fellowships (<http://www.uab.edu/equityanddiversity/studentawardscmfspd2.html>)  
Graduate Fellowships are available to qualified African American students, newly enrolled at UAB and seeking to earn a Ph.D. degree.

Howard Hughes Medical Institute-funded UAB Hughes Med to Grad Fellowship Program (<http://www.uab.edu/gbs/medgrad>)  
Graduates of the UAB Howard Hughes Med-Grad Fellowship Program will enter the workforce with the necessary experience in translational research and leadership training to move discoveries effectively between the bench and bedside.

License to Learn Scholarship (<http://www.uab.edu/alumni/students/scholarships/61-l2l>)  
UAB National Alumni Society License To Learn Scholarships are designed to provide additional financial aid to currently enrolled, undergraduate and graduate level UAB students.

Joseph F. Volker Alumni Scholarship (<http://www.uab.edu/alumni/students/scholarships/60-volker>)  
In an effort to recognize the accomplishments of currently enrolled UAB students, the UAB National Alumni Society established a scholarship award program named in honor of the late Dr. Joseph F. Volker.

Distinguished Alumni Scholarship (<http://www.uab.edu/alumni/students/scholarships/58-distinguished>)  
Distinguished Alumni Scholarship The Student Relations Committee established a new scholarship endowment in 1994 to honor the Society's Distinguished Alumni Award recipients.

Dr. Charles A. McCallum International Scholarship (<http://www.uab.edu/alumni/students/scholarships/59-mccallum-international>)  
This scholarship is awarded annually to recognize UAB National Alumni Society international chapters located in Thailand and Taiwan, and to honor Dr. Charles "Scotty" McCallum, UAB president emeritus, who helped to establish these two chapters.

BBVA Compass Mortgage Graduate Student Scholarship (<http://www.uab.edu/alumni/students/scholarships/65-compass-bank>)  
For graduate students.

Other Sources of Financial Aid (<http://www.finaid.org>)

## Funding Links

Revised PHS 398 and PHS 2590 Forms (<http://grants.nih.gov/grants/forms.htm>)

Community of Science (<http://www.cos.com>)  
The Foundation Center (<http://www.fdncenter.org>)  
National Science Foundation (<http://www.nsf.gov>)  
NSF Graduate Research Fellowship Program (<http://www.fastlane.nsf.gov>)  
GrantsNet  
ScienceCareers (<http://www.sciencecareers.org>)  
Academic Position Network  
Employment Resources from the Alabama Department of Rehabilitation Guidance on job searching and lists of available state jobs  
NIH Research Training Opportunities (<http://www.nih.gov/training>)

## Progress toward a Degree

### Steps Toward a Graduate Degree

All UAB graduate students should be aware of Graduate School policies and procedures. Therefore, all graduate students should become familiar with the UAB Graduate Student Handbook. The Handbook is updated annually and is located at [http://www.uab.edu/graduate/images/acrobat/publications/UAB\\_Grad\\_Handbook.pdf](http://www.uab.edu/graduate/images/acrobat/publications/UAB_Grad_Handbook.pdf)

Part of a student's progress toward a degree is the selection of a graduate faculty chair and thesis/dissertation committee (Plan I only). Graduate faculty membership may be granted by the Dean of the Graduate School to UAB faculty members who demonstrate a high level of competence in teaching and scholarship. Graduate faculty membership is required (a) of all individuals teaching courses for graduate credit and (b) of members of graduate study committees. The faculty members listed within this Catalog may not necessarily have graduate faculty status. A complete official listing of the graduate faculty may be found on the Graduate School website at <http://www.uab.edu/graduate/gradfaclist>.

Upon approval by the Graduate School Dean and payment of any outstanding financial obligations to the university, the President confers students' degrees by authority of the Board of Trustees.

Graduate students are generally expected to complete all degree requirements with **5 years of matriculation for master's and 7 years of matriculation for doctoral students**. One extension of these time limits can be requested when mitigating circumstances preclude completion of requirements within 5 years (master's) or 7 years (doctoral). The request for an extension should include a plan and timeline for completion. Such requests require the approval of the student's dissertation committee and graduate program director and must be presented in writing to the Dean of the Graduate School for consideration and approval. Courses taken more than 5 years (master's) or 7 years (doctoral) before graduation may not be applied toward a degree without the approval of the graduate program director and Graduate Dean.

Steps to both the master's and doctoral degrees can be found in the tabs above.

### Steps Toward Earning the Master's Degree

- Admission to master's degree program
- Selection of faculty advisor
- Maintenance of good standing

- Appointment of graduate study committee—Plan I (Thesis) only
- IRB and/or IACUC approvals obtained and renewed annually
- Admission to candidacy—at least one semester before graduation is expected—Plan I (Thesis) only
- Application for Degree—no later than 3 weeks after the beginning of the semester in after the beginning of the semester in which graduation is expected (see <http://www.uab.edu/graduate/deadline-dates>)
- Production of preliminary version of thesis (Plan I only)
- Defense of thesis (for Plan I only) (see <http://www.uab.edu/graduate/deadline-dates>)
- One PDF of the defended committee approved thesis (Plan I only) submitted online no later than 2 weeks (10 business days) after the public defense
- Recommendation for degree
- Conferring of degree

## Steps Toward Earning the Doctoral Degree

- Admission to doctoral degree program
- Selection of faculty advisor
- Maintenance of good standing
- Appointment of graduate study committee
- Passing of comprehensive examination
- IRB and/or IACUC approvals obtained and renewed annually
- Admission to candidacy—no later than two semesters before expected graduation
- Application for degree—no later than 3 weeks into the expected semester of graduation see <http://www.uab.edu/graduate/deadline-dates>)
- Draft of preliminary version of dissertation
- Review of the draft by committee members
- Revisions made to dissertation in response to committee feedback
- Defense of dissertation (see <http://www.uab.edu/graduate/deadline-dates>)
- A PDF of the defended committee-approved dissertation to UAB/ ProQuest submission web site --no later than 2 weeks (10 business days) following the public defense
- Recommendation for degree
- Conferring of the doctoral degree

## Completion of a Degree

Completing your graduate degree requires completing all paperwork before the semester deadlines.

During your academic career, it is also important that you are aware of Graduate School policies and procedures that are detailed in the Graduate Student Handbook. The Handbook also provides a detailed checklist for completing a graduate degree.

Graduate School Minimum Course Credit Requirements. In order to earn a master's or a doctoral degree, the Graduate School requires minimum course credits for both Plan I (thesis or dissertation) or Plan II (non-thesis or non-dissertation) paths. These requirements are detailed in

the Graduate Student Handbook ([http://www.uab.edu/graduate/images/acrobat/publications/UAB\\_Grad\\_Handbook.pdf](http://www.uab.edu/graduate/images/acrobat/publications/UAB_Grad_Handbook.pdf)). Graduate program requirements may exceed the Graduate School minimums. Therefore, you should check with your program director for additional program requirements.

**Program requirements.** It is your responsibility to consult the graduate catalog and meet with your advisor to ensure that you have completed the requirements of your program. Questions about Graduate School requirements not satisfactorily answered on the web site should be addressed to the Graduate School (934-8227)

**Application for Admission to Candidacy form. Doctoral students** must submit this form before the first day of classes at least two semesters before the semester of intended graduation and be enrolled in research hours during those two semesters. (If you pre-register, this form must be completed before that date.) **Master's students** must submit this form before the first day of classes at least one semester before the semester of intended graduation and be enrolled in research hours during that semester. Admission to candidacy must be submitted and approved by the Graduate School before you can register for research hours (699 or 799). The graduate study committee must be appointed and approved by the Graduate School dean.

**IRB and IACUC Approval.** If the research involves human or animal subjects, approval from IRB or IACUC must be documented before admission to candidacy can be approved and must be kept current until the research is completed. The student's name must appear on all IRB Approval Forms. For more information regarding IRB (human subjects) requirements, visit <http://www.uab.edu/research/administration/offices/IRB/Pages/home.aspx>. For more information regarding IACUC (animal subjects) requirements, visit <http://www.uab.edu/research/administration/offices/IACUC/Pages/default.aspx>.

**Application for Degree (Master's and Educational Specialist)** (<http://www.uab.edu/graduate/images/acrobat/forms/app-for-degree-masters.pdf>) or **Application for Degree (Doctoral)** (<http://www.uab.edu/graduate/images/acrobat/forms/app-for-degree-doctoral.pdf>). The application for degree must be received in the Graduate School Records Office by the deadline date listed on the Graduate School's website, <http://www.uab.edu/graduate/deadline-dates>; **however, check with your department as some programs have earlier deadline dates for the application for degree and may require the form to be submitted directly to the department (i.e. School of Education).** The \$50 fee will be charged to your student account. This form is your official notification to the Graduate School that you intend to complete graduation requirements that semester. The process of clearing your records for graduation begins with the receipt of this application.

- If your public defense will be held before the 3rd week of classes, you must submit your application for degree earlier. Approval forms, which must be requested 2 weeks before the public defense, cannot be completed until the Application for Degree is processed.
- This application does not carry over into the following semester. Students who do not complete graduation requirements as expected must reapply for the following semester and must register for course hours in that semester. The new application for degree form (approved at the departmental level and submitted to the Graduate School) must be submitted by the posted deadline for that semester. Your records must be checked again, and a new diploma will be ordered. The reorder fee is \$25 and will be charged to your student account.

**The following requirements and procedures apply only to students who are completing a thesis or dissertation (Plan 1)**

**Plan 2 students (non thesis/dissertation) should consult your department concerning requirements for final projects and papers.**

**Final, public defense.** Some programs hold private and public defense meetings; however, the Graduate School is concerned only with the public defense, which must be held **by the posted semester deadline**. An earlier defense date is strongly recommended in order to allow time for completing the final requirements before graduation (i.e., format approval and submission of final document to the Graduate School). Set the date and time of your final defense well in advance and at a time when **all** committee members can attend. Determine from your committee members how far in advance of your defense date they require a completed copy of your manuscript for review.

**Thesis or dissertation approval forms. No later than 2 weeks before your final defense**, submit the on-line request for your approval forms. (Approval forms cannot be completed before the Graduate School has received your application for degree). Fill out this form carefully. Be certain to list the correct **graduate program name** (which often differs from the academic department name). If there have been changes to your committee, these changes must be entered on the Change of Committee Form before your approval forms can be completed. You will be notified via e-mail when your forms are ready to be picked up in the Graduate School office (LHL G03). Check your printed approval forms carefully for accuracy. Your name, the names of your committee members, your program name, and the title of your thesis/dissertation must precisely match your official UAB records.

**As soon as possible after your defense, complete any changes or corrections to your manuscript that were requested by your committee** and obtain signatures of all committee members and your program director in blue or black ink on your approval form.

**No later than 2 weeks following your public defense**, your committee approved thesis or dissertation and all applicable forms are due in the Graduate School. Your document will be reviewed for adherence to format requirements and for consistency in format and style. (See the UAB Format Manual). If you are reprinting a published article or previously published illustrations, you must also submit permission to reprint from the copyright holder. (see Publishing Your Thesis or Dissertation and Editing).

**Doctoral Dissertations and Master's Theses** are submitted online at <http://dissertations.umi.com/uab/> Follow the online instructions. The UAB Publication Agreement is submitted online. All applicable forms must be received before the document will be reviewed.

Doctoral students are required to take the Graduate School's Exit Survey before the degree will be conferred. After the completed dissertation has been turned in, the student will be notified to complete the survey via Blackboard.

**If you have no outstanding fees or grades, the email notification of final approval of your thesis or dissertation completes your graduation requirements.** Approximately midway through your final semester, you will receive a letter that contains your Graduation Checklist. Review this letter carefully and keep it for your records to ensure that all graduation requirements are being met. If you have questions about unpaid fees, contact Student Accounting. If you have

questions about grades, contact your department. Grades for the final semester are not submitted until the end of the semester.

**After your document has been approved by the Graduate School you may...**

- Order bound copies of your thesis or dissertation for your personal use. If you want a copy of your signed approval form to be included in your personal copies, you must make copies after they are signed and place them in the copies you send to be bound. The original form is kept in the Graduate School.
- Request a letter of degree verification if required for employment or a post-doctoral appointment. Your grades and student account will be checked at that time and, if appropriate, a letter indicating that you have completed all degree requirements and the date on which your degree will be conferred will be mailed. Details concerning degree verification are included in the instructions you receive with your approval forms.

**Note: Students who leave the Birmingham area before the approval process is complete are STILL responsible for ensuring that their own requirements are met before semester deadlines.**

**Degree is officially conferred** when the final copy of your document has been cleared by the Graduate School office and when all records have been cleared. Grades are not cleared until the end of exams in the semester in which you graduate. Once the degree has been officially awarded, degree verification can be obtained through Student Clearinghouse (<http://www.studentclearinghouse.org/>). Official transcripts can be requested through the UAB Registrar's Office (934-8222 or <http://www.uab.edu/students/one-stop/transcript-request>)

Here are additional sources of information about graduation requirements:

- UAB Format Manual for Theses and Dissertations
- Requirements for the Doctoral Degree
- Requirements for the Master's Degree
- Graduate School staff
- Graduate School Deadlines
- Graduate School Forms

# College of Arts and Sciences

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**Dean:** Dr. Robert E. Palazzo

The College of Arts and Sciences includes departments in the arts, humanities, mathematics, social, behavioral, natural and physical sciences.

The College offers 15 degree programs leading to a master's degree and 7 programs leading to a doctoral degree. Traditional programs as well as interdisciplinary and graduate level certificate programs help to keep the College on the leading edge of progressive academic offerings. Situated at the center of an internationally renowned research university and academic medical center, students and faculty in the College of Arts and Sciences have unparalleled opportunities to be part of the innovative and ground-breaking research and creative work that is the signature of UAB.

We offer a student-centered, experiential curriculum designed to prepare students not only for the careers and challenges of the 21st century, but also to be the leaders in the global marketplace of ideas. Students within arts and sciences programs develop the ability to understand diverse perspectives making them better prepared to work creatively and productively with others to solve the most important problems of our times.

## Interdisciplinary Programs

Interdisciplinary programs of study are increasingly popular as we realize the benefits of multiple perspectives and methods to advance understanding and improve solutions. Students in the College of Arts and Sciences may pursue formal interdisciplinary programs such as the Master's degree in Computer Forensics and Security Management, which involves faculty from the departments of Computer & Information Sciences and Justice Sciences (College of Arts and Sciences), and the Departments of Management, Information Systems Quantitative Methods, and Accounting & Finance (School of Business).

The Departments of Mechanical Engineering and Art & Art History bring their collective expertise and experience together to offer an interdisciplinary Category A certificate program involving an integrated art and engineering curriculum. The Leonardo Art & Engineering Graduate Certificate program provides cross-disciplinary training in simulation, art, visualization, and virtual reality to students with a BS/BA degree in Arts and Sciences, Engineering, Business, or Healthcare-related disciplines for addressing marketing, education/training, entertainment, product development, and design application demand of the 21st century growth area in 3D and VR technologies.

## Computer Forensics and Security Management

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/computer\\_forensics\\_security\\_management](http://catalog.uab.edu/graduate/admissionchecklists/computer_forensics_security_management)) to obtain specific admissions requirements on how to apply to Graduate School.

## Program Contact Information

Program Co-Directors:

Dr. Nitesh Saxena  
Department of Computer and Information Sciences  
CH133  
1300 University Blvd.  
Birmingham, AL 35294-1170

[saxena@cis.uab.edu](mailto:saxena@cis.uab.edu)

Dr. John Sloan  
Department of Justice Sciences  
UBOB 210  
1201 University Blvd.  
Birmingham, AL 35294-4562

[prof@uab.edu](mailto:prof@uab.edu)

Dr. Molly Wasko  
Department of Management, Information Systems, and Quantitative Methods  
BEC 319  
1150 10th Ave. South  
Birmingham, AL 35294-4460

[mwasko@uab.edu](mailto:mwasko@uab.edu)

## Faculty:

Hasan (Computer and Information Sciences), Johnston (Management, Information Systems, and Quantitative Methods), Pirkelbauer (Computer and Information Sciences), Saxena (Computer and Information Sciences), Savage (Accounting and Finance), Skjellum (Computer and Information Sciences), Sloan (Justice Sciences), Solorio (Computer and Information Sciences), Warner (Computer and Information Sciences, Justice Sciences), Wasko (Management, Information Systems, and Quantitative Methods), Wheeler (Justice Sciences)

## Program Information

The Master of Science in Computer Forensics and Security Management (MSCFSM) is an interdisciplinary professional practice graduate program involving faculty from the Departments of Computer & Information Sciences and Justice Sciences (College of Arts and Sciences), and the Departments of Management, Information Systems Quantitative Methods, and Accounting & Finance (School of Business). The program prepares graduate students with backgrounds in criminal justice, computer and information sciences, information systems, information technology, and forensic accounting to practice in the fields of computer forensics and security management, including cybersecurity, information security, IT auditing, and forensic accounting. The program develops in students required skills, including familiarity with industry practices, innovative methods, critical thinking, and problem solving, that are crucial for competitiveness and success in entry- or advanced-level positions in the areas of computer forensics, cybersecurity, information security management, IT audit and fraud detection, and forensic accounting. The program is designed to increase the pipeline of prospective, high-quality, entry- and advanced level employees involved with protecting physical and virtual systems vital to the U.S., whose incapacitation or destruction would have debilitating effects on national security and/or the nation's economy. The program also provides current public and private sector employees an opportunity to obtain advanced high-quality training in the core areas of computer forensics, cybersecurity, information security

management, IT auditing, and forensic accounting, to facilitate career advancement.

The program is modeled after traditional MBA programs, where students complete a set of core courses and then choose an area of specialization. In the MSCFSM program, students first complete a set of required courses which include courses in computer forensics/cybercrime investigation, information security management, and ethics. Students then choose an area of specialization in either computer forensics/cybercrime investigation or IT audit/fraud examination. Both specializations include a required field practicum (internship) that is completed with an appropriate public or private sector agency or organization.

## Admission Requirements

Students accepted into the program will have graduated with a bachelor's degree from a regionally accredited college or university or recognized university from abroad. Most students accepted into the program will have achieved a minimum overall undergraduate grade point average (GPA) of 3.0 or higher on a 4.0 scale and will have earned a combined score of 310 or higher on the verbal and quantitative sections of the Graduate Record Examination (GRE) or a total score of 550 or higher on the Graduate Management Aptitude Test (GMAT). An Admissions Committee consisting of the Program Directors will screen applicants and make a recommendation to the Graduate School for admission into the program.

Students seeking admission to the program will be accepted from undergraduate programs including criminal justice, computer science, electrical and computer engineering, MIS, IT, business, accounting, as well as other science and social science fields. Students seeking admission to the program, regardless of their specific undergraduate preparation, should have some formal exposure to the core areas of the program including cybercrime and its investigation, IT auditing/forensic accounting; fundamentals of computer and Internet literacy, probability and statistics, computer programming, networking, discrete mathematics/logic, and information security management. Students lacking requisite backgrounds but who meet other minimum admission requirements may be admitted to the program on a contingency basis but required to take a series of prerequisite courses – including courses in computer programming and information systems – that allow them to develop necessary backgrounds to be successful in the program. These courses may include the following (or their equivalent):

Requirements	Hours
CS 201 Introduction to Object Oriented Programming	4
AND the following accompanying laboratory	
CS 201L Introduction to Object Oriented Programming Laboratory	0
CS 250 Discrete Structures	3
IS 204 Introduction to Business Programming	3
AC 200 Principles of Accounting I	3
AND	
AC 201 Principles of Accounting II	3
<b>Total Hours</b>	<b>16</b>

## Degree Requirements

A minimum total of 36 semester hours of credits are required for the degree, including 24 hours of required courses, a field practicum (internship) for 3-6 hours, and 9 hours of electives taken in one of

two tracks: Cybercrime and Computer Forensics or IT Audit/Fraud Examination.

The curriculum includes:

Requirements	Hours
<b>Required Core Curriculum (27-30 hrs.)</b>	
MBA 613 Information Security Management	3
JS 530 Ethics and Computer Forensics	3
JS 502 Introduction to Computer Forensics	3
JS 675 Law Evidence and Procedure	3
CS 534 Internetworking with TCP/IP	3
CS 536 Computer Network Security	3
CS 636 Computer Security	3
CS 592 Special Topics	3
AC 574 Forensic Accounting Practicum	3-6
or JS 696 Graduate Internship in CJ	
<b>Select one of the following elective tracks:</b>	
<b>The Cybercrime/Computer Forensics Track includes the following courses (9 hrs.):</b>	
JS 515 Investigating Online Crimes	3
CS 537 Cybercrime & Forensics	3
OR	
JS 537 CyberCrime and Forensics	3
CS 594 Special Topics	3
<b>The IT Audit/Fraud Examination track includes the following courses (9 hrs.):</b>	
AC 572 Forensic Accounting and Information Technology Auditing	3
AC 573 Fraud Examination	3
LS 571 Legal Elements of Fraud Investigation	3

## Leonardo Art & Engineering Graduate Certificate

### Contacts

Christopher Lowther, MFA  
 Assistant Professor of Time Based Media  
 digital@uab.edu  
 Department of Art & Art History  
 HB 113  
 900 13th Street South  
 Birmingham, AL 35294-1260  
 (205) 934-4941

Kim Hazelwood  
 Program Manager II  
 khazelwood@uab.edu  
 Department of Mechanical Engineering  
 BEC 257  
 1150 10th Avenue South  
 Birmingham, AL 35294-4461  
 (205) 934-8460

Prospective students should use this checklist (<http://catalog.uab.edu/graduate/admissionchecklists/>)

leonardo\_art\_\_engineering\_certificate\_admissions\_checklist) to obtain specific admissions requirements on how to apply to Graduate School.

## Program Description

Leonardo da Vinci is recognized as embodying the concept of the Renaissance Man as he was a painter, sculptor, architect, musician, scientist, mathematician, engineer, and inventor - an accomplished artist of the 16th century and a perfect example of interdisciplinary endeavors.

In this spirit of the Renaissance Person, the Departments of Mechanical Engineering and Art & Art History bring their collective expertise and experience together to offer a new interdisciplinary Category A certificate program involving an integrated art and engineering curriculum.

The Leonardo Art & Engineering program crosses traditional boundaries between academic disciplines and forges new collaborations to create a scholar/scientist/artist ready to meet the demands of the 21st century.

The objectives for the program are to:

- Provide cross-disciplinary training in simulation, art, visualization, and virtual reality to students with a BS/BA degree in Arts and Sciences, Engineering, Business, or Healthcare-related disciplines for addressing marketing, education/training, entertainment, product development, and design application demands of the 21st century growth area in 3D and VR technologies.
- Offer a mechanism for the large number of practicing artists, engineers, healthcare professionals, business managers, and game developers in Alabama and Birmingham to acquire additional training and education in simulation, 3D visualization, and VR.
- Provide a specialized education suitable to the needs of in-state, out-of-state, and international students interested in the application of 3D visualization, VR, and simulation to the industry or business segment of their preference. The program will provide the students with highly specialized and marketable skills.

## Program Requirements

- Students must be admitted to either Department in either the undergraduate or graduate program or to the UAB Graduate School as a non-degree seeking student. (Undergraduates may begin work on the certificate in their senior year provided they have satisfied prerequisite requirements and obtained approval from the Graduate School to take graduate level courses. A certificate can only be awarded after completion of the BA or BS degree requirements.)
- Students must be admitted to the Leonardo Art & Engineering Certificate program using the degree-seeking application found on the UAB Graduate School Apply Yourself ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=uab-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=uab-grad)) website.
- Certificate requires a minimum of 18 semester hours.
- Relevant courses taken towards the certificate may be applied to the MS degree offered by the Department of Mechanical Engineering or MA degree offered by the Department of Art & Art History.
  - One course, up to three semester hours, may be transferred from another institution. This may be the required course or one of the graduate level courses.
  - Courses taken from UA and UAH by IITS may be applied to certificates

## Course Requirements

Total of 18 credit hours, as follows:

Requirements	Hours
ME 521 Introduction to Computational Fluid Dynamics Basics or ME 564 Introduction to the Finite-Element Method	3
ARS 520 Sculpture	3-6
ARS 561 3D Modeling	3
ME 698 Non-Thesis Research	1-12
ARS 588 Seminar in Time Based Media	3
<b>Total Hours</b>	<b>13-27</b>

## Anthropology

You must apply for admissions through The University of Alabama (Tuscaloosa) at <http://anthropology.ua.edu/>. In order for a student to enroll in courses at UAB (after applying for admission through UA Tuscaloosa), this process must be followed:

1. Student completes the Cooperative Admission form at <http://www.uab.edu/graduate/images/acrobat/forms/cooperativeadmission.pdf>.
2. Student submits the Cooperative Admission form to the University of Alabama's Graduate Registrar, Beth Yarbrough. Ms. Yarbrough's contact information is [beth.yarbrough@ua.edu](mailto:beth.yarbrough@ua.edu) or (205) 348-8285 or (205) 348-5921.
3. The UA Graduate Registrar then faxes a copy of the approved Cooperative Admission form and a copy of the student's UA admission letter to the UAB Graduate Admission Office to the attention of Susan Banks at (205) 934-8413. Mrs. Banks may be contacted at (205) 934-8227 or [snoblitt@uab.edu](mailto:snoblitt@uab.edu).
4. After UAB receives the approved Cooperative Admission form from UA, the student will be added to UAB's record system and will then be allowed to register for UAB courses online after obtaining a Blazer ID and creating a strong password.

\* Degree awarded by the University of Alabama, UAB's partner in the cooperative degree program

Degree Offered:	M.A.*
Director:	Dr. Chris Kyle
Phone:	(205) 975-6181 or (205) 934-3508
E-Mail:	<a href="mailto:kyle@uab.edu">kyle@uab.edu</a>
Web site:	<a href="http://anthropology.ua.edu/">http://anthropology.ua.edu/</a>

## Degree Requirements

The M.A. degree program includes the basic course requirements, a foreign language or research skill requirement, and the fulfillment of the requirements for either a Plan I (Thesis) or Plan II (Nonthesis) degree.

## Basic Course Requirements

### Course Work

Each student must complete a minimum of 30 credit hours of courses numbered 500 or above. Without special prior approval of the student's advisor, committee, and the director of graduate studies Special Problems courses, including ANTH 691, ANTH 692, ANTH 693, and ,

cannot be counted towards the minimum 30 hours. (Note that there are additional course requirements for two of the three options outlined below).

## Core Curriculum

All students are required to complete satisfactorily a core curriculum composed of one graduate course in at least three of the four fields of anthropology. These three should be chosen from among:

1. Linguistics - ANTH 608 Advanced Linguistic Anthropology (or, at UA, ANT 501 Anthropological Linguistics)
2. Archaeology - ANTH 609 Advanced Archaeological Anthropology (or, at UA, ANT 625 Survey of the History of Archaeology)
3. Socio-cultural anthropology - ANTH 605 Advanced Cultural Anthropology (or, at UA, ANT 636 Social Structure or ANT 641 Culture)
4. Physical anthropology - ANTH 610 Advanced Physical Anthropology (or, at UA, ANT 670 Principles of Physical Anthropology)
5. Additionally, a course in research methodology (e.g., ANT 600 at UA or ANTH 615 at UAB) is required.

Entering students must provide evidence of having passed introductory level courses in each of the four subfields before taking the graduate courses. A student who has not had an introductory course may be required to take or audit the appropriate undergraduate course before enrolling in graduate course in the same subfield. Credits earned from such preparatory course work may not be applied to the 30 credit hour requirement.

**Language/Research Skill Competency:** Each student is required to demonstrate competency in a foreign language or research skill. This requirement may be satisfied in several ways including:

- Successful completion (meaning a grade of B or better) of at least the second course in a language course sequence such as FR 101/FR 102, GN 101/GN 102, or SPA 101/SPA 102
- Certification of competency by examination from the appropriate language department
- Successful completion of a graduate level statistics course such as SOC 701 or another statistics course subject to the approval of the chair and the program director.
- Students must get the approval of their advisor before undertaking any of these options. The student will be responsible for furnishing evidence of completion of this requirement to the graduate program director.

## M.A. Committee

By the start of the second year of academic work each graduate student will be required to have identified a faculty member willing to serve as permanent advisor and at least three additional faculty members to comprise an M.A. jury. This committee is subject to final approval by the chair and program director and functions as the principal advisory and research project approval board. The committee may include an external member of the Graduate Faculty. (The form for the appointment of a master's thesis committee can be found at [http://graduate.ua.edu/academics/forms/committee\\_thesis.pdf](http://graduate.ua.edu/academics/forms/committee_thesis.pdf).)

## Comprehensive Examinations

All students must take and pass comprehensive examinations on their knowledge of the field of anthropology. The student will take written

exams in at least three of the four sub-disciplines. The selection of the three areas will be made in collaboration with the faculty advisor. The entire anthropology faculty will participate in composing the exam questions and evaluating each student's responses. The faculty's evaluations will be communicated to the director of graduate studies and to the department chair. Once the student has successfully completed the comprehensive exams, he or she may file for admission to candidacy (see [http://graduate.ua.edu/academics/forms/candidacy\\_ms.pdf](http://graduate.ua.edu/academics/forms/candidacy_ms.pdf)).

## Interinstitutional Requirement

Students must take at least 6 hours of graduate credit at the University of Alabama (Tuscaloosa) as required by the Interinstitutional MA.

## Three Plans of Study for the Master's Degree

In addition to choosing one of the two program options outlined above, the student must satisfy the requirements for one of the following three plans of study. Choice of the plan of study must be made by the student in consultation with the M.A. Committee and the faculty advisor.

### Thesis Option

Thirty (30) hours of non-thesis course work, successful completion of the comprehensive examinations, plus a master's thesis. A student electing this plan of study will be required to conceive and execute a research project under the direction of his or her M.A. committee. The student's advisor will convene the committee as necessary to discuss, refine, and approve this plan. After twenty hours of course work are completed, the student may enroll in ANTH 699 Thesis Research. The purpose of this coursework is to provide a structure for supervised contact hours with the student's faculty advisor. Such coursework, including the decision as to the number of contact hours required, must be pre-arranged in consultation with the faculty advisor. Hours completed in ANTH 699 must be over and above the 30-hour minimum.

In preparing a thesis, the student should consult graduate school's guidelines for the preparation and submission of theses and dissertations (at <http://graduate.ua.edu/etd/>).

Students who take the thesis option will present a departmental colloquium based on the results of their research in the final semester in residence. Students should consult their faculty advisor and the director of graduate studies in scheduling and posting advance notice of their colloquia.

### Non-thesis Research Project Option

Thirty-six (36) hours of non-thesis course work plus successful completion of one of the following:

- Presentation of a research paper at a national meeting which has been approved in advance by the student's M.A. Committee;
- Acceptance for publication of a research paper submitted to a refereed journal which has been approved in advance by the student's M.A. Committee.

In either case, it will be the responsibility of the student's committee to approve a written draft of the research paper. Approval of the paper will be conveyed in writing to the director of graduate studies and to the department chairman by the student's advisor. Final approval of the research project requirement is at the discretion of the M.A. committee.

Students who elect the research project option will present a departmental colloquium based on the results of their research in the final semester in residence, as specified above under the heading of Thesis Option.

## Non-thesis Option by Examination

Thirty-six (36) hours of non-thesis course work and successful completion of written examinations.

## Additional Information

Deadline for Entry Term(s):	Consult Program Director for information
Deadline for All Application Materials to be in the Graduate School Office:	Rolling admission
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.
Comments	See UA catalog and <a href="http://www.as.ua.edu/ant">www.as.ua.edu/ant</a> ( <a href="http://www.as.ua.edu/ant">http://www.as.ua.edu/ant</a> )

## Contact Information

For detailed information, contact Dr. Chris Kyle, Graduate Program Director, UAB Department of Anthropology, HHB 317, 1401 University Blvd, Birmingham, Alabama 35294-1152.

Telephone 205-975-6181 or 205-934-3508.

E-mail: [kyle@uab.edu](mailto:kyle@uab.edu).

## Art History (M.A\*)

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/art\\_and\\_history\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/art_and_history_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.A.*
Director:	Dr. Jessica Dallow
Phone:	(205) 934-4941
E-mail:	<a href="mailto:jdallow@uab.edu">jdallow@uab.edu</a>
Web site:	<a href="http://www.uab.edu/art">www.uab.edu/art</a>

\* A program leading to the Master of Arts degree in art history is offered jointly by UAB and the University of Alabama (Tuscaloosa). The MA degree in Art History prepares students for further academic study at the doctoral level or for professional careers in museums, galleries, and other arts-related fields.

## Admission Requirements

Applicants may seek admission to either UAB or the University of Alabama (Tuscaloosa), but admission is upon recommendation of the joint art history faculty of the two institutions. For admission in good standing, applicants to UAB must meet Graduate School requirements for scholarship and GRE General Test scores. A Minimum GPA of 3.0

(B) is required for acceptance into the program. The applicant should have completed 24 semester hours in art history and related areas such as history, aesthetics, archaeology, and anthropology, although this requirement may be reduced depending on the applicant's background and preparation. It is desirable that an applicant be able to read a foreign language related to the proposed field of study. Students may apply for admission for either the fall or spring semester.

## Degree Requirements

### Courses

Students must complete 24 semester hours in art history.\* Students must take courses in **two** of the following **six** general areas: Renaissance Art, Baroque Art, Nineteenth-Century Art, Twentieth-Century/Contemporary Art & Criticism, South Asian Art, and East Asian Art. A maximum of 3 semester hours of independent study will be permitted. Each student must take ARH 680 Literature of Art. Each student must take at least 6 semester hours of coursework at the University of Alabama (Tuscaloosa).

\* Note: A maximum of 6 of the required hours in art history may be taken in a related field with the concurrence of the joint faculty.

### Foreign Language Requirement

Students must demonstrate reading knowledge of French or German by passing a translation examination administered by the Department of Foreign Languages or by passing FR 201 or FR 202 or GN 201 or GN 202 with a grade of B or better. Note: For students specializing in Asian art or other areas, a relevant language may be substituted with the approval of the faculty advisor and the Graduate Program Director. This requirement should be satisfied in or before the term in which the student has passed 15 semester hours of coursework. A reading knowledge of a second foreign language is strongly recommended.

### Comprehensive Examination

For admission to candidacy, the student must pass a comprehensive examination prepared and graded by the joint art history faculty. Written examinations are scheduled twice a year, fall and spring.

### Thesis

The student must present a thesis under the direction of a member of the joint art history faculty. Each student will register for ARH 699 for 6 semester hours of credit. Students must be registered for at least 3 hours of thesis credit (ARH 699) in the semester of graduation.

### UAB Faculty:

Cummings, Cathleen  
Dallow, Jessica  
McIver, Katherine  
McPherson, Heather  
Turel, Noa

### UA-Tuscaloosa Faculty:

Curzon, Lucy  
Jones, Tanja  
Nancarrow, Mindy  
Pagani, Catherine  
Stephens, Rachel

## Additional Information

Deadline for Entry Term(s):	Fall or Spring Semester
Deadline for All Application Materials to be in the Graduate School Office:	April 1 for Fall, October 1 for Spring
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applications whose native language is not English.)
Additional Requirements:	Students must provide a writing sample

## Contact Information

For detailed information, contact Dr. Jessica Dallow, Graduate Program Director, UAB Department of Art and Art History: Humanities Building, Room 113, 900 13th Street South, Birmingham, AL 35294-1260.

Telephone 205-934-8974; Fax (205) 996-6986.  
E-mail [jdallow@uab.edu](mailto:jdallow@uab.edu)

Prospective students should use this checklist to obtain specific admissions requirements on how to apply to Graduate School.

## Biology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/biology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/biology_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered	Ph.D., M.S., 5th Year M.S.
Director:	Stephen A. Watts, Ph.D.
Phone:	(205) 934-9685
E-mail:	<a href="mailto:sawatts@uab.edu">sawatts@uab.edu</a>
Web site:	<a href="http://www.uab.edu/biology/">http://www.uab.edu/biology/</a>

## Program Information

### Areas of Specialization

Graduate students in the M.S. and Ph.D. programs in biology may specialize in research activities at all levels of biological organization, with emphases on ecophysiology, cellular and molecular biology, endocrinology, and ecology of aquatic organisms, or on models related to human disease.

### Admission

For admission in good standing, applicants must meet the following requirements, in addition to the Graduate School's standards: an undergraduate degree in a biological science, B-level scholarship in all biology courses, two semesters of organic chemistry, two semesters of physics, mathematics through calculus, and a minimum of 152 on both the verbal and quantitative portions of the GRE General Test, and a personal statement of career goals. The graduate program director in biology must approve admission on probation or with deficiencies in one of the above requirements. Three letters of evaluation from individuals who have a thorough knowledge of the applicant's academic abilities and

potential are also required. Students may enter at the beginning of any semester, with deadlines of March 1 for summer and fall applicants and October 15 for spring applicants.

## Coursework, Thesis, and Dissertation

A dissertation embodying the results and analysis of an original experimental investigation is required for Ph.D. candidates. Students in the M.S. program may write a thesis based on a research project (Plan I) or, alternatively, may elect to submit a nonresearch project incorporating a review and analysis of one or more topics of current or historical interest in biology (Plan II).

Since scientific problems encountered today are multifaceted and require multidisciplinary approaches, students are expected to acquire a broad background in the physical and life sciences. Doctoral students must complete formal course work in or have equivalent training related to six of the following seven areas: ecology, physiology, cell biology, developmental biology, genetics, microbiology, and molecular biology. Master's students must have competency in five of these life-science areas. Each student is also expected to satisfactorily complete a course or sequence in biometry and any advanced courses designated by the student's graduate study committee consistent with the chosen area of specialization.

Each student must also enroll in three seminar courses approved by his or her graduate study committee, and one of the seminars must be outside the student's primary area of specialization. Also, each student is required to demonstrate proficiency in teaching by delivering formal course lectures or by conducting instructional laboratories. Certificates for advanced training in teaching are also available.

## Examinations

To qualify for candidacy, a student in the Plan I master's program must satisfactorily complete either a written or an oral comprehensive examination. A doctoral student must take both written and oral comprehensive examinations. As part of a student's final defense of his or her dissertation or thesis, a public departmental seminar must be presented.

## Class A Teaching Certification

Under the Alabama Department of Education's "Strengthened Subject Matter Option," students who complete requirements for the master's degree in biology can also receive class A teaching certification, providing that certain prerequisites and requirements are met. Complete details are available from the School of Education Certification Office, EB 100, 1530 3rd Avenue South, Birmingham, Alabama 35294-1250 (Telephone 205-934-5423).

## Additional Information & Mailing Address

Deadline for Entry Terms:	Each semester
Deadline for All Application Materials to be in the Graduate School Office:	March 1 for summer and fall; October 15 for spring admission
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

## Contact Information

For detailed information contact Dr. Stephen A. Watts, Graduate Program Director, UAB Department of Biology, CH 375, 1530 3rd Avenue South, Birmingham, Alabama 35294-1170.

Telephone 205-934-9685

Fax 205.975.6097

E-mail [sawatts@uab.edu](mailto:sawatts@uab.edu)

Web <http://www.uab.edu/uabbio>

## Physical Address

UAB Department of Biology, Campbell Hall, Room 464, 1300 University Blvd., Birmingham, Alabama 35294-1170.

## Chemistry

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/chemistry\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/chemistry_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D., M.S.
Director:	David E. Graves
Phone:	(205) 975-5381
Fax:	(205) 934-2543
E-mail:	<a href="mailto:dgraves@uab.edu">dgraves@uab.edu</a>
Web site:	<a href="http://www.uab.edu/cas/chemistry">www.uab.edu/cas/chemistry</a>

## Program Information

The UAB Department of Chemistry offers graduate programs leading to the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees that are designed to ensure disciplinary quality and research competency in targeted research areas that are unique to UAB. The Department of Chemistry has an outstanding research active faculty and highly collaborative culture that is conducive to stimulating graduate studies. The graduate program in the Department of Chemistry provides opportunities for research mentors to provide personalized attention to the academic and research progress of each of our graduate students.

Key features of the Department of Chemistry Graduate Program:

- Students are quickly integrated into research laboratories (ideally in first semester)
- Research is highly collaborative, both within the Department of Chemistry and the UAB biomedical research complex
- Interdisciplinary programs to broaden research interests, including structural biology, bio-nanomaterials, drug discovery
- Strong record of career success for graduates in academia, industry, and government

All graduate students are required to pursue a graduate curriculum that provides the general knowledge-based foundation through a series of six core curriculum courses (18 semester hours). All students are required to pass the Foundations Courses (CH 600/CH 700, Foundations I (Analytical and Physical); CH 601/CH 701, Foundations II (Organic and Inorganic). At least four additional chemistry core courses (12 semester hours) are selected by the student and the student's graduate committee. The graduate student and the graduate research mentor (in consultation with the student's graduate research committee) select additional graded graduate courses to complete a minimum of 24 semester hours. There is

no semester hour requirement for additional course work but the student must complete a minimum of 24 semester hours of graduate coursework with an overall GPA of 3.0 or higher. Chemistry graduate students may also participate in and enroll in interdisciplinary graduate programs, requiring enrollment in courses in other departments throughout the UAB campus that will broaden the students background in selective areas and greatly strengthen their ability to carry out interdisciplinary research.

All graduate students are to demonstrate communication skill competency. Adequate performance is required on the departmental literature seminar, written responses to essay questions, dissertation defense, teaching, written publications, and professional presentations at scientific meetings. All chemistry graduate students are required to complete GRD 715 (Graduate Teaching Assistantship Training) during their first term in the program. Students with English as a second language enroll for 3 semester hours. All others enroll in this course for 2 semester hours. This course is required but is not counted toward the 24 semester hour minimum.

During the Fall semester, first year graduate students are required to enroll in CH 790 (Introduction to Graduate Research). The student will be introduced to the graduate research faculty and their research interests. The student is required to meet with prospective research mentors to discuss interest in the prospective mentor's laboratory and if needed, schedule a 3-4 week rotations in research laboratories of interest. The process of selecting the graduate research mentor must be completed by the end of the student's first year.

Core Courses:

Requirements	Hours
CH 600/700 Foundations of Physical and Analytical Chemistry	3
CH 601/701 Foundations of Organic and Inorganic Chemistry	3
CH 629/729 Special Topics in Physical Chemistry	3
CH 631/731 Organic Reactions and Their Mechanisms	3
CH 632/732 Organic Reactions and Synthesis	3
CH 633/733 Reactive Intermediates and Conservation of Bonding	3
CH 639/739 Special Topics in Organic Chemistry	1-3
CH 642/742 Organometallic Chemistry and Catalysis	3
CH 649/749 Special Topics in Inorganic Chemistry	1-3
CH 659/759 Special Topics in Analytical Chemistry	3
CH 664/764 Biophysical Chemistry	3
CH 669/769 Special Topics in Biochemistry	3
CH 671/771 Medicinal Chemistry and Drug Discovery	3
CH 689/789 Special Topics in Polymer Chemistry	3
<b>Total Hours</b>	<b>38-42</b>

Substitutions are permitted with the approval of the student's research advisory committee and director of the graduate program. Master's students choose from the 600 courses, Ph.D. students from the 700 courses.

## M.S. Program

### Plan I

Plan I is a research program that requires a minimum of 24 semester hours (including 18 semester hours of core courses) of formal academic coursework approved by the student's graduate study committee. The progress of the student's research program is monitored by the graduate study committee. The student, having been admitted to candidacy and having completed an approved plan of research, will complete and defend a thesis.

## Plan II

Plan II is a non-thesis program that requires a minimum of 30 semester hours (including 18 semester hours of core courses) of appropriate graduate work that has been approved by the student's graduate study committee and Department of Chemistry Graduate Program Director.

## Ph.D. Program

For Ph.D. students, there are no specific course requirements beyond the core courses. The academic program is determined through the action of the student's graduate research mentor and graduate research committee. The student is required to successfully complete their departmental seminar by the end of their second year. A written qualifying examination must be passed in the student's area of specialization. If failure occurs, only one repeat exam is allowed. An original research proposal must be successfully defended within 12 months of completion of the written qualifying examination. If failure occurs, one repeat defense is allowed. Once admitted to candidacy for the Ph.D. degree, the student must write and successfully defend a research dissertation.

Entry Term	Deadline
Deadline for Entry Term(s)	Each semester
Deadline for All Application Materials to be in the Graduate School Office	Six weeks before term begins
Number of Evaluation Forms Required	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments	None

For detailed information, contact Ms. Laura J. Knighten, Graduate Recruitment Coordinator, 1720 2nd Avenue South, Birmingham, AL 35294-1240.

Telephone 205-934-8139 | E-mail [knighten@uab.edu](mailto:knighten@uab.edu) | Web [www.uab.edu/cas/chemistry](http://www.uab.edu/cas/chemistry)

## Communication Studies

The Department of Communication Studies is concerned with human interaction and communication in all its forms. The Communication Studies Department provides research, teaching and service to enable students to develop understanding and skills in order to thrive in a global communication environment of unremitting change and increasing diversity. To this end the department offers an undergraduate major in Communication Studies, and graduate courses leading to a Master of Arts in Communication Management.

## Communication Management

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/communication\\_management\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/communication_management_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## M.A. Program

The master's degree program in communication management is targeted at professionals in the fields of public relations, print and broadcast journalism, and other related areas. Students can explore practical and theoretical applications in professional communication fields. Classes are held primarily or exclusively at night and on the weekends to benefit working students. The program will award students a master's degree in communication management. Students in the program will need to complete 36 semester hours of graduate study. The range of courses is designed to allow students to customize their studies according to their career goals.

## Additional Information

For additional information, contact Dr. Jonathan H. Amsbary, Program Director, HHB, Room 335, 1401 University Boulevard, Birmingham, AL 35294-1152.  
Telephone 205-934-3877  
E-mail: [amsbary@uab.edu](mailto:amsbary@uab.edu)

Web <http://www.uab.edu/communication/graduate-program>

## Computer and Information Science

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/computer\\_and\\_information\\_sciences\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/computer_and_information_sciences_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D., M.S.
Director:	Dr. Purushotham Bangalore
Phone:	(205) 934-8604
E-Mail:	<a href="mailto:puri@uab.edu">puri@uab.edu</a>
Web site:	<a href="http://www.cis.uab.edu/graduate/">www.cis.uab.edu/graduate/</a>

## Program Information

The field of computer and information sciences deals with theory and methods for processing of information. Graduate programs leading to the M.S. and Ph.D. degrees are designed to prepare individuals for professional and research-level careers in industry, government, and academia. Prospective students should have substantial background in computer science and mathematics.

## M.S. Program

The M.S. program requires 30 semester hours of coursework and a thesis (Plan I) or 36 semester hours of coursework (Plan II). Specializations are available in bioinformatics, computer graphics, and distributed computing.

## Ph.D. Program

The Ph.D. program consists of three phases (with some overlap between phases). The first phase of the program is devoted primarily to formal coursework and preparation for the qualifying examination. The second phase consists of coursework and research in preparation for the comprehensive examination. This examination requires presentation of a dissertation research proposal. Successful completion of this phase leads to admission to candidacy. The final phase is the completion of

the dissertation research and its defense. Ph.D. student progress will be reviewed annually.

## Additional Information

Deadline for Entry Term(s): February 1 for Fall; September 1 for Spring.

## Contact Information

For detailed information, after first visiting the website below for basic information including application guidelines and prerequisites, contact Dr. Purushotham Bangalore, Associate Professor and Graduate Program Director, UAB Department of Computer and Information Sciences, Campbell Hall, Room 130, 1300 University Boulevard, Birmingham, Alabama 35294-1170.

Telephone 205-934-8604  
E-mail [puri@uab.edu](mailto:puri@uab.edu)  
Web <http://www.cis.uab.edu/graduate/>

## English

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/english\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/english_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.A.
Director:	Dr. Gale Temple
Phone:	(205) 934-8593
Email:	<a href="mailto:gtemple@uab.edu">gtemple@uab.edu</a>
Web site:	<a href="http://www.uab.edu/english">www.uab.edu/english</a>

## Admission Requirements

For admission in good standing, applicants must meet the Graduate School's requirements for scholarship and test scores (GRE General Test or MAT). The applicant should normally have finished the requirements for an undergraduate degree in English, including satisfactory completion of at least six semester hours in a foreign language. A generally well-prepared applicant who is lacking in some part of the undergraduate preparation may be admitted with the provision that any deficiencies be removed by a time specified by the graduate program director.

## Program Description

Students in the graduate program can concentrate their studies in any of three areas: Literature, Composition and Rhetoric, or Creative Writing. The requirements for each of these concentrations are explained below.

## Concentration in Literature

Most literature courses can be considered to fall into one of the following areas, each of which has its own reading list.

### Group I:

British Lit before 1500  
British Lit 1500-1660  
British Lit 1660-1790  
British Lit 1790-1900  
British Lit 1900-present

### Group II:

American Lit before 1800  
American Lit 1800-1900  
American Lit 1900-present  
African American Lit 1746-present  
African Diaspora Lit

### Group III:

Composition Pedagogy  
Rhetorical Theory  
Linguistics  
Critical Theory

## Concentration in Literature

### Plan I.

1. Students who write a thesis must take 3 hours in Bibliography & Methods, 3 hours of linguistics, 6 hours of thesis work, 12 hours of British/American literature, and 6 hours of electives. They must take at least 6 hours in Group I and 6 hours in Group II.
2. 15 hours of course work must be at the 600 seminar level in English. A maximum of 3 of these required 15 hours can be taken as EH 699 Thesis Research.
3. Students must choose a member of the English faculty to chair their Graduate Study Committee (GSC). In consultation with this chair, students must select at least two other faculty members to complete their GSC. All members of the GSC must be graduate faculty. Once constituted, membership of the GSC cannot be changed without the approval of the departmental graduate program committee.
4. Before students can be admitted to candidacy, they must have passed 18 hours of course work and had a thesis proposal accepted by their GSC and the Director of Graduate Studies.
5. Students must pass a Thesis Defense.

### Plan II.

1. Nonthesis students must take 3 hours in Bibliography & Methods, 3 hours of linguistics, 12 hours of British/American literature, and 12 hours of electives.
2. 15 hours of course work must be at the 600 seminar level in English.
3. Students must pass individual tests in 5 areas, but 1 of these tests may be replaced by earning a cumulative 3.5 or better G.P.A. in two English graduate courses in one of the listed areas OR by passing two creative writing courses at the 500 level or above.
4. All students must choose at least one test area from each Group.
5. By the time students have earned 24 credit hours toward the M.A., students must secure the agreement of a graduate faculty member to serve as chair of their Graduate Study Committee (GSC). Students are encouraged to secure this faculty mentor as early as possible since the chair of a student's GSC has primary responsibility for mentoring the student through the exam process. The Committee chair must coordinate the composition, administration, and evaluation of all area tests for that student. The chair is also responsible for informing the student (and graduate program director) of the criteria for evaluation of the subject area tests; for notifying the student of the results; and for meeting with the student afterwards to review the tests. The chair is also

responsible for keeping the graduate program director informed of the student's progress and maintaining a complete exam file on the student.

6. In consultation with the student and the graduate program director, the Committee chair will appoint at least three other faculty to serve on the student's GSC. All members of the GSC must be graduate faculty. Once constituted, membership of the GSC cannot be changed without the approval of the departmental graduate program committee.
7. Each two-hour area test must follow a standard format that allows students to demonstrate their ability to read closely and to synthesize ideas.
  - A. Area tests in literature and critical theory will give the following instructions based on selections from the area reading list:
 

Choose one of the following passages and write an essay that:

    - i Establishes—based on the chosen passage—some significant literary, intellectual, and/or cultural context and presents a thesis having to do with that context.
    - ii Explains, by a close reading of the text, why the chosen passage is important both to the work from which it is taken and to the thesis of the present essay.
    - iii Discusses the context and thesis in relation to at least two other works from the area reading list.
  - B. Area tests for Composition Pedagogy or Rhetorical Theory will give the following instructions based on selections from the area reading list:
 

Choose one of the following passages or set of passages and write an essay that:

    - i Indicates your understanding of the passage(s) and the work from which it is taken.
    - ii Identifies and explains the specific issues in rhetorical theory or composition pedagogy that are addressed by or related to the selection(s).
    - iii Discusses these issues in a broader context by drawing on at least two other works from the area reading list.
  - C. See the Director of the Linguistics Program for a sample area test in Linguistics.
8. Students must provide their GSC with a minimum of three weeks' notice in scheduling area tests, which must be taken Monday-Friday during the tenth week of each semester (sixth week during the shortened summer term).
9. Students are limited to three attempts at passing a test for the same area.
10. The GSC will hold a group grading session to evaluate individual tests as Failing, Passing, or High Pass (the latter designation must be a unanimous decision of the GSC). If a student earns four High Passes, this student will be passed "With Distinction."
11. There is no oral examination for nonthesis students.

## Concentration in Composition/Rhetoric

### Plan I.

1. Students who write a thesis must take 3 hours in Bibliography & Methods of Research, 3 hours of linguistics, 9 hours of literature electives, 6 hours of thesis research, 3 hours of rhetorical theory, and 6 additional hours of courses in the areas of Rhetorical Theory, Composition Pedagogy, or Professional Writing (total of 30 hours).
2. 15 hours of course work must be at the 600 seminar level in English. A maximum of 3 of these required 15 hours can be taken as EH 699 Thesis Research.
3. Students must choose a member of the Composition/Rhetoric faculty to chair their Graduate Study Committee (GSC). In consultation with this chair, students must select at least two other faculty members to complete their GSC. All members of the GSC must be graduate faculty and at least one (in addition to the chair) should be another composition/rhetoric specialist. Once constituted, membership of the GSC cannot be changed without the approval of the departmental graduate program committee.
4. Before students can be admitted to candidacy, they must have passed 18 hours of course work and had a thesis proposal accepted by their GSC and the Director of Graduate Studies.
5. Students must pass a Thesis Defense.

### Plan II.

1. Nonthesis students must take 3 hours in Bibliography & Methods of Research, 3 hours of linguistics, 9 hours of literature electives, 3 hours of rhetorical theory, and 12 additional hours of courses in the areas of Rhetorical Theory, Composition Pedagogy, or Professional Writing (total of 30 hours).
2. Guidelines 2-11 under Concentration in Literature, Plan II, apply to these students.

## Concentration in Creative Writing (Plan I only)

1. Creative writing students are required to take 12 hours of creative writing workshop courses, 6 hours of thesis research, 9 hours of literature, and 3 hours of English electives.
2. 15 hours of course work must be at the 600 seminar level in English including at least one section of a 600-level creative writing workshop. A maximum of 3 of these required 15 hours can be taken as EH 699 Thesis Research.
3. Students must choose a member of the Creative Writing faculty to chair their Graduate Study Committee (GSC). In consultation with this chair, students must select at least two other faculty members to complete their GSC. All members of the GSC must be graduate faculty and at least one (in addition to the chair) should be another creative writing specialist. Once constituted, membership of the GSC cannot be changed without the approval of the departmental graduate program committee.
4. Before students can be admitted to candidacy, they must have passed 18 hours of course work, including at least 3 hours in creative writing, and had a thesis proposal accepted by their GSC and the Director of Graduate Studies.
5. Students must pass a Thesis Defense.

## Additional Information

Deadline for Entry Term(s):	Each semester
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE or MAT (TOEFL and TWE also required for international applicants whose native language is not English.)

For detailed information, contact Dr. Gale Temple, Graduate Program Director, Department of English HB 220, 1530 3rd Avenue South, Birmingham, AL 35294-1260.

Telephone 205-934-8593

E-mail [EnglishGrad@uab.edu](mailto:EnglishGrad@uab.edu)

Web <http://www.uab.edu/english/graduate-studies>

## History

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/history\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/history_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.A.
Director:	Dr. Andrew W. Keitt
Phone:	(205) 934-7083
Email:	<a href="mailto:akeitt@uab.edu">akeitt@uab.edu</a>
Web site:	<a href="http://www.uab.edu/history">www.uab.edu/history</a>

## Program Information

The history graduate program provides opportunities for students to learn the techniques of research and broaden their knowledge of historical literature. Students may choose Plan I, which includes writing a thesis based on original research using primary sources, or Plan II, which requires the completion of MA exams in three historical topics. All students are required to enroll in HY 601 Historiography and HY 602 Historical Research and Writing and must take at least 30 hours of their course work in graduate seminars. Each student must take a minimum of 9 hours of course work in U.S. history and 9 hours in non-U.S. history (e.g., European, Asian, Latin America, World).

### Plan I (Thesis Plan)

Requirements	Hours
HY 601 Historiography	3
HY 602 Historical Research and Writing	3
U.S. History 3 seminars	9
Non-U.S. History 3 Seminars	9
Electives 2 courses	6
Thesis Research 2 courses or equivalent	6
<b>Total Hours</b>	<b>36</b>

No foreign language study credits can be counted toward the degree requirements. Where foreign language requirements are appropriate, it is recommended that students satisfy these requirements before commencing thesis research.

### Plan II: (Nonthesis Plan)

Requirements	Hours
HY 601 Historiography	3
HY 602 Historical Research and Writing	3
U.S. History 3 seminars	9
Non-U.S. History 3 seminars	9
Electives 4 courses	12
<b>Total Hours</b>	<b>36</b>

Students interested in Teaching Certification for Public Schools should contact the School of Education.

## Additional Information

Deadline for Entry Term(s):	Each semester
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments	Additional application for financial aid (fellowship or assistantship) is required by program

For detailed information, contact Dr. Andrew W. Keitt, History Graduate Program Director, Department of History, HHB 360, 1720 2nd Avenue South, Birmingham, Alabama 35294-1152.

Telephone 205-934-7083

E-mail [akeitt@uab.edu](mailto:akeitt@uab.edu)

## Government

The Department of Government offers a graduate program of study leading to the Master of Public Administration (MPA) degree.

UAB's nationally ranked Master of Public Administration (MPA) program has prepared students for successful careers in public service where they can serve the greater good. We have graduates locally and across the country who have become successful leaders and managers in local, state, and federal government positions, and in nonprofit organizations.

## Public Administration (M.P.A.)

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/public\\_administration\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/public_administration_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.P.A.
Director:	Dr. Akhlaque Haque
Phone:	(205) 934-2339 or (205) 975-3413
E-mail:	mpa@uab.edu
Web site:	http://www.uab.edu/mpa

## MPA Program Mission

In line with the mission of the University, the MPA program is committed to excellence in graduate education through teaching, research and service. The program focuses on building the next generation of responsible decision makers by enhancing their intellectual capacities through knowledge and skills provided within the NASPAA-based MPA curriculum. The Master of Public Administration Program prepares individuals for positions of leadership in the public and nonprofit sectors. It is a professional graduate degree for both pre-career students and in-service administrators. The program is designed to develop the insights and skills needed to plan and formulate policy, and to organize, manage, and implement programs and operations. The MPA program is accredited by the National Association of Schools of Public Affairs and Administration (**NASPAA**). Its Board of Advisors consists of internal and external stakeholders comprised of community members, alumni and students.

The MPA curriculum is designed to ensure that students achieve competency in five domains:

- To lead and manage in public governance.
- To participate in and contribute to the policy process.
- To analyze, synthesize, think critically, solve problems and make decisions.
- To articulate and apply a public service perspective.
- To communicate and interact productively with a diverse and changing workforce and citizenry.

## Degree Requirements

Students in the MPA program must complete a total of **39 semester hours** or the equivalent, with an overall grade average of at least B. The curriculum features a 9 course core sequence, plus 4 specialization/ elective courses in either of two tracks; Nonprofit Management (NPM) or Public Management and Planning (PMP). Students without professional public service experience are required to do a three hour internship in addition to required coursework. Previous graduate work at UAB or another NASPAA accredited MPA program may be credited toward the degree if it is directly applicable. Students may select the thesis option or the non-thesis option.

## Joint Degree and Certificate Programs

- For students who are interested in both public administration and the delivery of public health services, a coordinated **MPA/MPH dual degree** is offered.
- For students who are interested in both public administration and the law, a coordinated **MPA/J.D dual degree** is offered.
- For students interested in criminal justice and public administration a coordinated **MPA/MSJ dual degree** is offered.

- For non-traditional students interested in managing nonprofit organizations the program offers a **Graduate Certificate in Nonprofit Management**. Students seeking admission into the Nonprofit Certificate should apply through Graduate School by visiting <http://www.uab.edu/graduate/images/acrobat/forms/certificate-app.pdf>

## Admission Requirements

Because of its multidisciplinary nature, persons from all undergraduate majors are considered for admission to the program. Applicants must take the Graduate Record Examination (GRE) and submit scores. The following are eligible for a GRE Waiver:

Students with a graduate degree from an accredited college or university.

Students with at least 5 years professional, full-time, progressively responsible public sector or nonprofit career experience. The Statement of Interest and resume should provide clear evidence to for this waiver.

The LSAT may be substituted for the GRE only by JD/MPA applicants. Standardized GMAT score may be substituted at the discretion of the Program Director.

**\*\* IMPORTANT** Applicants who are applying for a waiver or substitution of other test scores must contact the MPA Director for the official approval. The applicant should submit a formal request accompanied by a resume to the MPA Program Director via postal mail or email attachment.

Two letters of reference are also required. Application for admission should be made online through the UAB ApplyYourself**Online official UAB Graduate School's admission site**. Admissions will be made fall and spring semester. Deadlines for submitting application for admission are listed on the UAB Graduate School website.

Deadline for Entry Term(s):	Each semester
Deadline for All Application Materials to be in the Graduate School Office:	Fall: July 1 Spring: November 1
Number of Evaluation Forms Required:	Two
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.). GRE waived for senior professional. See guidelines above.

## Financial Aid

The Department of Government has a limited number of graduate assistantships awarded on a competitive basis, which can be awarded during any semester as vacancies occur. The Department has two scholarships which are awarded on a competitive basis each spring. Other financial resources are available through the Office of Student Financial Aid.

## Curriculum

A total of 39 hours are required to complete the MPA program. For pre-career students an additional 3 credit hours of internship (20 hours/week) is also required. A full time student, taking 3 courses per semester, plus one additional course over the summer, should be able to complete

the program within two years. All courses are offered in the evenings to accommodate working professionals.

**Core Courses:** All students are required to take the following nine courses:

Requirements	Hours
MPA 600 Administrative Ethics	3
MPA 601 The Public Policymaking Process	3
MPA 602 Administrative Theory and Behavior	3
MPA 603 Public & Nonprofit Budgeting	3
MPA 604 Human Resources Management	3
MPA 605 Information Technology in the Public Sector	3
MPA 606 Foundations of PA Research	3
MPA 607 Quantitative Methods for PA *	3
MPA 697 Grad Res Paper or Portfolio Mt **	3

\* Pre-requisite MPA 606

\*\* Should be taken last term. Not required for students pursuing thesis option

\*\*\* Effective in 2012-13.

## Specializations

Students should select a specialization based upon their career goals and interests. The specializations are **Nonprofit Management or Public Management & Planning**. Students must take three courses in their specialization. In addition to three specialization courses, students must take one elective course. Generalists must take (2) courses from each specialization.

### Nonprofit Management Specialization Requirements (choose 3 courses)

Students interested in improving their organizational management, fundraising and grant management skills for nonprofits should select this specialization. This specialization prepares students for a wide range of careers within the nonprofit sector including middle and upper management positions, fundraising and development, grant management and program management/evaluation.

Requirements	Hours
MPA 671 Special Topics in Public Management	3
MPA 672 Nonprofit Management	3
MPA 674 GIS for Managers	3
MPA 678 Strategic Planning	3
MPA 684 Grants Management	3

### Public Management and Planning Specialization Requirements (choose 3 courses)

Students interested in public management or planning should select this specialization. This specialization prepares students for a wide variety of positions including federal, state and local government management, budget and financial management, planning, economic development, community development, program analysis and evaluation.

Requirements	Hours
MPA 662 State and Local Government Administration	3
MPA 667 Administrative Law	3
MPA 678 Strategic Planning	3
MPA 681 Local Government Planning	3

MPA 689	Program Evaluation	3
MPA 682	Economic Development	3

## Elective Courses

In addition to the elective courses listed below, any course from the specialization list can be used as an elective.

Requirements	Hours
MPA 668 Intergovernmental Relations	3
MPA 664 Women in Public Administration	3
MPA 665 Crisis Management	3
MPA 666 City County Management	3

## Generalist MPA Degree (2 courses from each specialization)

As an alternative to selecting one of the above specializations, students may pursue a generalist MPA degree. This degree should be chosen if the student desires a broadly based degree and some familiarity with subjects in each of the specializations. Students who desire a public administration education transferable to many different public or nonprofit settings may want to take this course of study. To complete this degree, students must take the core curriculum and at least two (2) required courses from each of the two specializations.

## Graduation Research/Portfolio Management Paper and Thesis Options

During the last semester of study, students opting for the non-thesis (Plan II) must register for MPA 697, Graduation Research Paper or Portfolio Management (effective fall 2012), and successfully complete a graduation research paper. Such a paper will require the student to synthesize material learned over the course of the program.

Students taking the thesis option (Plan I) must take three hours of Independent Study under the guidance of the thesis chair and six thesis hours.

## Internships and Placement

Students may apply for an internship placement at any time. A few paid opportunities do arise, although the majority of internships are non-paid. Typical placements are in city and county government, planning departments, public health agencies, social service agencies, state government agencies, and various nonprofit organizations. The Department has placed several students in the prestigious Presidential Management Internship Program, which provides an excellent opportunity for eventual employment in the federal government. Students are also encouraged to use the services of the UAB Student Development Office in the University Center for career planning and placement. The faculty in the program also assists students in job placement. Please [click here](#) to see what some of our graduates are doing now.

## Joint Degree Programs

### Coordinated MPA/MPH Program

The MPA/MPH is designed to train individuals for administrative positions in public health and related health organizations. The Master of Public Administration degree prepares students for careers as administrators in public and nonprofit agencies, and the Master of Public Health provides a background in public health principles and programs. Students must apply and be accepted into both programs, meeting each program's entry requirements. Students are required to complete a total of 60-64

semester hours for the coordinated degree. Core requirements of 21 hours from the MPA program and 39-43 hours from the MPH program are required. Full-time students should be able to complete all degree requirements within three years.

## Coordinated MPA/JD Program

The MPA program at UAB and the Cumberland School of Law at Samford University offer a coordinated MPA/JD program. The offering of this dual degree reflects recognition of the complex interrelationship between the legal system, public policy analysis, and public management. It will be particularly applicable to those pursuing careers in government and/or public interest law. Students must apply and be admitted to the MPA and JD programs separately. The requirements for each degree must be met. Close communication with both programs is required. Depending on prior experience, a field placement may be required.

## Coordinated MPA/MSJC Program

The MPA/MSJC is targeted toward individuals who wish to gain competencies in public management and the theory/practice of criminal justice. Students must apply and be accepted into both programs, meeting each program's entry requirements. Students are required to complete a total of 60 semester hours for the coordinated degree. Core requirements of 24 hours from the MPA program and 18 hours from the MSJC program; an additional 12 hours of electives, 3 hours of internship and a 3 hour capstone course are required. Full-time students should be able to complete all degree requirements within three years.

## MPA Alumni Association

An active alumni association welcomes graduates of the program into membership. The association makes both advisory and financial contributions to the program and seeks to elevate the level of professionalism in public administration through a variety of projects and services.

## Contact Information

For additional information refer to the web site of the UAB MPA program: [www.uab.edu/mpa](http://www.uab.edu/mpa). Inquiries concerning program admission or other questions about the program should be directed to the MPA Program Program Coordinator.

MPA Coordinator  
Graduate Studies in Public Administration  
Department of Government  
University of Alabama at Birmingham  
HHB 415, 1530 3rd Avenue South  
Birmingham, Alabama 35294-3350  
Telephone (205) 934-2339 or (205) 975-3413  
Email: [mpa@uab.edu](mailto:mpa@uab.edu)

## Justice Sciences

The department of Justice Sciences is home to multiple programs, including programs of study leading to the Master of Science in Criminal Justice (p. 33) (M.S.C.J.), the Master of Science in Forensic Science (p. 34) (M.S.F.S.), the Master of Science in Computer Forensics and Security Management (p. 20), and "A" and "B" graduate certificates in Computer Forensics. The department also co-sponsors a joint MSJC/MPA program (<http://www.uab.edu/cas/government/graduate-program/joint-degrees/#MPAMSCJ>) with the Department of Government.

## Criminal Justice

Degree Offered:	M.S.C.J.
Director:	J.H. Copes, Ph.D.
Phone:	(205) 934-2069
E-mail:	<a href="mailto:jhcopes@uab.edu">jhcopes@uab.edu</a>
Web site:	<a href="http://www.uab.edu/justice-sciences/">http://www.uab.edu/justice-sciences/</a>

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/criminal\\_justice\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/criminal_justice_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## Program Information

The criminal justice graduate program requires study in the overall discipline, with intensive focus on the areas of criminal justice policy, criminal justice administration, research methods and statistics, and criminological theory. Beyond a core set of required courses, the program features a **Pre-Doctoral Training Track** (Plan I) designed for students interested in pursuing a doctorate in criminal justice or criminology, and a **Practitioners' Track** (Plan II) designed for students interested in pursuing entry- or advanced-level positions in a criminal justice or related agency setting. Students selecting the Plan I option are **required** to complete a Thesis project under a faculty adviser, while students selecting the Plan II track are **required** to complete a Demonstration Project and are strongly encouraged to complete a field placement (Internship).

Each year, students are admitted to the M.S.C.J. program for the fall term. **The application deadline for receipt of all admission materials by the Graduate School is July 1 each year.** Students **may** be admitted to the M.S.C.J. program "in good standing" provided they meet all minimum admission criteria established by the program, which include having taken an introductory-level statistics course and an introductory-level research methods course in which a grade of "B" or better was earned, and the Graduate School. Most students admitted to the program have earned a cumulative undergraduate grade point of average (GPA) of 3.0 or higher on a 4.0 scale **and** earned a combined score on the verbal and quantitative sections of the Graduate Record Examination (GRE) of 305 or higher. Students who otherwise meet minimum admission criteria but who have not taken both the statistics and the research methods courses **may** be admitted to the M.S.C.J. program on a "contingency" basis. Students so admitted will **not** be allowed to register for graduate coursework until the contingencies are removed. Students meeting the minimum requirements for admission including taking the statistics and research methods courses but who lack a substantive background in criminal justice **may** be admitted to the M.S.C.J. program on a "contingency" basis, but will be required to take remedial coursework before they will be allowed to register for any graduate courses.

## Degree Requirements

### Plan I (Thesis)

Students selecting the Plan I option **must**:

1. Complete a minimum of 30 semester hours of credits (of which 18 hours are the required professional seminars JS 583, JS 600, JS 601, JS 604, JS 605, and JS 606);

2. Complete 9 semester hours of electives; and
3. Propose, and then complete and defend, a major research project under the direction of a thesis committee that is chaired by the student's major adviser (minimum 3 hours of JS 699 credit).

Students who select the Plan I option must establish and maintain a minimum GPA of 3.0 in all coursework undertaken (required and elective) while in the program. Students failing to do so may be dismissed.

## Plan II (Non-thesis)

Students selecting the Plan II option **must**:

1. Complete a minimum of 36 semester hours in coursework (of which 21 hours are the required professional seminars JS 583, JS 601, JS 603, JS 604, JS 605, and JS 606);
2. Complete 12 semester hours of electives (of which 3 hours of Internship (JS693/JS696) credit is strongly recommended); and
3. Complete a "Demonstration Project" in their area of substantive interest (3 hours JS 697). The demonstration project provides evidence of the student's proficiency in the core areas of research methods, statistics, and criminal justice policy. This research paper is done under the guidance of the student's advisor. The student will prepare and submit this research paper to his/her advisor. Students who select the Plan II option must establish and maintain a minimum GPA of 3.0 in all coursework undertaken (required and elective). Students failing to do so may be dismissed from the program.

## Financial Aid

Students who are admitted to the M.S.C.J. program "in good standing" are eligible to receive department-based financial aid in the form of research assistantships or scholarships that are awarded on a competitive basis. Students are typically notified of such awards in early June of each year for the following fall.

## Additional Information

Deadline for Entry Term(s):	Fall
Deadline for All Application Materials to be in the Graduate School Office:	June 1
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

## Contact Information

For detailed information contact Dr. Heith Copes, Department of Justice Sciences, University of Alabama at Birmingham, 1201 University Boulevard Office Building, Suite 210, Birmingham, Alabama 35294-4562. Telephone: 205-934-2069  
E-mail [jhcopes@uab.edu](mailto:jhcopes@uab.edu)  
Web <http://www.uab.edu/cas/justice-sciences/>

## Forensic Science

Degree Offered	M.S.F.S.
Director	Linville
Phone	(205) 934-2069
E-mail	<a href="mailto:jglinvil@uab.edu">jglinvil@uab.edu</a>
Web site	<a href="http://www.uab.edu/justice-sciences/">www.uab.edu/justice-sciences/</a>

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/forensics\\_science\\_admission\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/forensics_science_admission_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## Program Information

The Master of Science in Forensic Science program is designed to prepare individuals for careers in various forensic science and conventional analytical laboratories, emphasizing the application of scientific methods and technologies to legal proceedings. With thoughtful planning, many students have found the program offerings helpful in building a strong foundation to pursue doctoral (Ph.D. and M.D.) studies. The program also offers, in conjunction with the Department of Computer and Information Sciences, the opportunity for students to pursue a graduate certificate in computer forensics that involves additional, elective coursework.

The program support includes many UAB faculty members from other departments, personnel from the Alabama Department of Forensic Sciences' Birmingham laboratory, the Jefferson County Medical Examiner's Office, the Birmingham Police Department, and local forensic science-related private institutions. In addition, the program maintains a close working relationship with the DNA profiling laboratories of the Alabama Department of Forensic Sciences and hosts the editorial offices of the Forensic Science Review (the only review journal in forensic science). Faculty research and practice focus especially on forensic aspects of drug chemistry and DNA-based identification. Minimum admission requirements include a B.S. degree in Chemistry, Biology, or a related natural science. Coursework should include the completion of one year of general chemistry, one year of organic chemistry, and quantitative analysis. Coursework is designed for qualified students to begin in fall and complete the program in 21 months. Admission is granted for the fall term only.

According to the National Institute of Justice (2004), students wishing to pursue a career in forensic science should be aware that positions in these fields usually require extensive background checks similar to those required for law enforcement personnel, and are likely a condition of employment. (National Institute of Justice, 2004. Education and Training in Forensic Science: A Guide for Forensic Science Laboratories, Educational Institutions, and Students. NCJ Report 203099.

Washington, DC: United States Department of Justice, pp. 7-10).

Graduates from the UAB Master of Science in Forensic Science program are very successful in gaining employment within a year of graduating. During the period 2010-2012, 26 students completed the program. Of these, 21 are working in a laboratory, are teaching, or continuing their education (e.g., pursuing a doctorate, professional degree, or second master's degree). Thirteen of the graduates are employed in forensic science laboratories, ranging from those operated by the Alabama Department of Forensic Sciences to a toxicology laboratory in New Mexico.

## Additional Information

Deadline for Entry Term(s)	Fall
Deadline for All Application Materials to be in the Graduate School Office	January 31. Later applications will be considered before April 30th if vacancies are available
Number of Evaluation Forms Required	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

For detailed information, contact Dr. Jason G. Linville, UAB Department of Justice Sciences, University Boulevard Office Building (UBOB) Room 210, 1720 2nd Ave. S, Birmingham, Alabama 35294-4562.  
Telephone: 205-934-2069  
E-mail: jglinvil@uab.edu  
Physical Address: UAB Department of Justice Sciences, UBOB 210, 1201 University Blvd., Birmingham, Alabama 35294.

## Mathematics

The Department of Mathematics offers graduate programs of study leading to the M.S. degree in Mathematics or the Ph.D. in Applied Mathematics.

The master's program aims to give students the background to use mathematics in a variety of ways. We train students in mathematical rigor. This provides training in the ability to analyze and solve problems in all walks of life. We also emphasize the development of communication skills of our students (in the classes they take as well as in the classes they teach). Therefore the M.S. program prepares students not only for a career in secondary or junior college level teaching but provides also a very good preparation for students who go into business, industry, or government. In the past our students have been very successful in obtaining employment. Of course, the M.S. program will also prepare students who wish to pursue a Ph.D. in Mathematics but whose undergraduate education did not provide them with a sufficient background in advanced mathematics to directly enter a Ph.D. program.

The PhD program in Applied Mathematics prepares students interested in an academic career in a college or university as well as students interested in a career in business, industry, or government.

## Applied Mathematics

### Mathematics, Applied (Ph.D.)

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/applied\\_mathematics\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/applied_mathematics_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D.*
Director:	Dr. Ioulia Karpeshina
Phone:	(205) 934-2154
E-mail:	karpeshi@uab.edu
Web site:	<a href="http://www.uab.edu/mathematics/">http://www.uab.edu/mathematics/</a>

\* The Applied Mathematics graduate program is offered jointly by the University of Alabama at Birmingham, the University of Alabama (Tuscaloosa), and the University of Alabama in Huntsville.

### Program Information

Mathematics has always been divided into a pure and an applied branch. However, these have never been strictly separated. The Ph.D. program in applied mathematics stresses the interconnection between pure mathematics and its diverse applications.

### Admission

Only students with a firm foundation in advanced calculus, algebra, and topology are considered for immediate admission to the Ph.D. program. A student lacking this background will be considered for admission to the M.S. program. Upon passing the qualifying examination, a student may transfer to the Ph.D. program. We expect at least a B average in a student's previous work and a score above 550 on each section of the Graduate Record Examination General Test.

### Program of Study

Each student in the Ph.D. program has to take the following steps:

- Passing the Joint Program Exam (JPE), also called the Qualifying Exam. This is an exam in real analysis and applied linear algebra. It is administered by the Joint Program Committee, which includes graduate faculty from all three participating universities. A student that is admitted directly into the Ph.D. program is expected to take this exam by the end of the first year at the latest. This examination may be taken no more than twice.
- Completing 54 semester hours of graduate courses. The grade of each course has to be at least a B. The student's supervisory committee and the Joint Program Committee must approve the selection of courses. At least 18 hours must be in a major area of concentration, selected so that the student will be prepared to conduct research in an area of applied mathematics, while at least 12 hours have to be in a minor area of study, which is a subject outside mathematics.
- Passing a language or tool of research exam.
- Passing the Comprehensive Exam, which consists of a written part and an oral part.
- Preparing a dissertation, which must be a genuine contribution to mathematics.
- Passing the Final Examination (thesis defense).

## Additional Information

For detailed information, contact Dr. Ioulia Karpechina, Mathematics Graduate Program Director, UAB Department of Mathematics, CH 493B, 1300 University Boulevard, Birmingham, Alabama 35294-1170.

Telephone	205-934-2154
E-mail	karpeshi@uab.edu
Web	<a href="http://www.uab.edu/mathematics/">http://www.uab.edu/mathematics/</a>

## Mathematics

### Mathematics (M.S.)

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/mathematics\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/mathematics_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.
Director:	Dr. Ioulia Karpeshina
Phone:	(205) 934-2154
E-mail:	karpeshi@uab.edu
Web site:	<a href="http://www.uab.edu/mathematics/">http://www.uab.edu/mathematics/</a>

### Program Information

Mathematics has always been divided into a pure and an applied branch. However, these have never been strictly separated. The M.S. program in mathematics stresses the interconnection between pure mathematics and its diverse applications.

### Areas of Specialization

The student must choose a primary and a secondary specialization from a list of areas determined by the expertise of the faculty. As soon as the student is ready to choose specialization areas, he or she should contact the mathematics graduate program director, who will nominate a graduate study committee for the student. Courses offered to meet degree requirements must be approved by the mathematics graduate program director and the student's graduate study committee.

### Degree Requirements

#### Plan I (Thesis)

The student must complete 30 semester hours approved by the mathematics graduate program director and the student's graduate study committee. The grade in each course has to be a B or better. A minimum of 24 hours must be on the 600 level or above. See Course Descriptions for which courses at the 500 level may not be counted toward the M.S. degree. In addition the following specific requirements must be met:

- At least 9 hours must be in the primary area of specialization,
- At least 6 hours must be in the secondary area of specialization,
- At least 9 hours must be outside the primary area,
- At most 6 hours of research may be included in the 30-hour requirement,
- A thesis must be completed, and

- An examination must be passed on material in the primary area of specialization (the exam may be written, oral, or both, at the discretion of the student's graduate study committee).

The student's performance in all respects must be approved by the graduate program director and the student's graduate study committee.

#### Plan II (Nonthesis)

The student must complete 30 semester hours approved by the mathematics graduate program director and the student's graduate study committee. The grade in each course has to be a B or better. A minimum of 24 hours must be on the 600 level or above. See Course Descriptions for which courses at the 500 level may not be counted toward the M.S. degree. In addition, the following specific requirements must be met:

- At least 12 hours must be in the primary area of specialization,
- At least 6 hours must be in the secondary area of specialization,
- At least 9 hours must be outside the primary area,
- No research may be included in the 30-hour requirement,

Two examinations must be passed on material in the two areas of specialization. (The exams may be written, oral, or both, at the discretion of the student's graduate study committee.)

### Additional Information

Deadline for Entry Term(s):	Each semester
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments	None

For detailed information, contact Dr. Ioulia Karpechina, Mathematics Graduate Program Director, UAB Department of Mathematics, CH 493B, 1300 University Boulevard, Birmingham, Alabama 35294-1170.

Telephone 205-934-2154

E-mail [karpeshi@uab.edu](mailto:karpeshi@uab.edu)

Web <http://www.uab.edu/mathematics/>

## Physics

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/physics\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/physics_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D., M.S.
Director:	Dr. Mary Ellen Zvanut
Phone:	(205) 934-6661
E-mail:	<a href="mailto:mezvanut@uab.edu">mezvanut@uab.edu</a>

Web site: <http://www.uab.edu/cas/physics/graduate>

## Program Information

Students in the M.S. and Ph.D. programs may specialize in any of the areas of interest to the faculty, including experimental physics and astrophysics, theoretical and computational physics, or biophysics and medical applications of physics.

## Admission

Admission into the physics graduate program is by recommendation of the graduate admission committee of the Department of Physics. The committee takes into consideration GRE General Test scores, prior academic performance, personal statement, prior research experiences, and the letters of evaluation, usually from former instructors and research supervisors.

## Beginning the Program

All students must take a placement examination on basic physics concepts before registering for any courses. Upon arrival at UAB, international students may be required to take English as a Second Language course or Scientific Communication courses at UAB during their first year of study.

## M.S. Program

### Plan I

The student must successfully complete at least 30 semester hours of coursework, including at least four core courses selected from PH 610 - PH 650 PH 651, and PH 671 - PH 672 and 6 semester hours of Thesis Research PH 699). The student must also write and complete a successful oral defense of a thesis under the direction of a graduate faculty member. Additional coursework should be selected with the advice of the student's graduate study committee to meet the particular needs of the student.

An interdisciplinary track for an M.S. degree Plan I is also offered. Students admitted to this track will typically hold a bachelor's degree in a science area other than physics, such as astronomy, biology, chemistry, geology, mathematics, or psychology, or an engineering degree, including optics and materials science. Thesis research will be in an interdisciplinary area, including astrophysics, astrobiology, biophysics, chemical physics, geophysics, mathematical physics, neurophysics, optics, materials science, or engineering physics. Students awarded an M.S. degree within this track will be prepared for an Assistant Research Physicist position, including qualification for co authorship, and would typically work under the direction of a doctoral-level person. The acquired skill would be highly marketable, as individuals trained in multidisciplinary areas for basic and applied research are increasingly in demand in industry, government laboratories, and other research institutions.

Acceptance into this interdisciplinary track will be through a Physics Graduate Faculty member, who will be prepared to supervise the student's thesis research and develop a plan of study. This plan of study will include a core of courses (Classical Mechanics, PH 561 - PH 562; Electromagnetic Theory, PH 545 - PH 546; and Quantum Mechanics, PH 550 - PH 551), other physics graduate-level courses, and a minimum of 12 hours of graduate-level courses offered by other departments. The Department of Physics will establish a standing Physics Interdisciplinary Track Committee to review and concur in each student's plan of study. As

is current practice, thesis oversight will be by the student's M.S. Graduate Study Committee.

### Plan II

With approval of the physics graduate program director, a nonthesis option (Plan II) is available for all tracks in the Masters program. In this case, the graduate study committee requires an additional 6 semester hours of coursework instead of a thesis and gives the student an M.S.-degree exit examination.

## Ph.D. Program

Students may choose from a Physics Track or Applied Physics Track. All students are required to pass a written qualifying examination covering the core areas of classical mechanics, electromagnetic theory, and quantum physics. In addition, an examination is given in one selected topic recommended by the graduate committee. The core exams must be taken at the first offering after completion of the appropriate course: PH 710, PH 750 - PH 751, and PH 771. Students may take the exam two times, but no more than this. If the second attempt is required, it must be done so at the first offering following completion of the first attempt. Under no circumstances may any part of the examination be taken more than twice.

Following satisfactory completion of the core qualifying examinations and consultation with individual faculty members, the student selects a specific area for dissertation research under the supervision of an appropriate graduate faculty member. The student's Graduate Study Committee, chaired by the major advisor, will outline a program of study including graduate courses and appropriate tools of research, such as computer and/or foreign language competency. Also, the Graduate Study Committee will administer an oral selected topic examination to test the student's knowledge in the area of research. The student must pass this oral examination in no more than two attempts. Then, with direction from the major advisor, the student should focus on formulating and writing a formal research proposal that must be presented and defended before the Graduate Study Committee; this should lead to a recommendation from the committee for admission to candidacy. Dissertation research culminates in the successful oral defense of the dissertation.

Physics Track: 90 total credit hours

- Twenty semester hours of existing core course work chosen from classical physics, quantum physics, statistical physics, and electromagnetic theory. Two semesters of scientific communications is required.
- Nine semester hours of elective courses in physics
- Directed and Dissertation Research (at least 2 semesters of dissertation research are required to graduate)

Applied Physics Track: 90 total credit hours

- Fourteen semester hours of existing core course work chosen from classical physics, quantum physics, statistical physics, and electromagnetic theory. Two semesters of scientific communications is required.
- Twelve semester hours of elective courses in applied physics
- Three semester hours of applied physics internship
- Directed and Dissertation Research (at least 2 semesters of dissertation research are required to graduate)

Core and elective courses are listed at <http://www.uab.edu/cas/physics/graduate/programs-of-study>

The following doctoral fellowships are available to the graduate students enrolled in the PhD program in physics at UAB.

## Department of Education – Graduate Assistantship in the Areas of National Need (GAANN)

The U.S. Department of Education has funded the University of Alabama at Birmingham (UAB) Department of Physics for three years, 2012-15, to support the department's doctoral students in their academic pursuits. The funding released through the fiscal year 2014 Graduate Assistance in Areas of National Need (GAANN) program, will support four physics Ph.D. students at a stipend level up to \$30,000 depending on the financial need of the applicant as assessed by the UAB Office of Financial Aid. The GAANN program also makes an annual institutional payment of \$14,724 per student to cover educational expenses. The project title for the UAB physics program is "Doctoral Fellowships in Nanoscale Materials and Computational Physics at the University of Alabama at Birmingham". This distinctive program will lead to a Ph.D. degree in physics involving individualized academic course work, closely-supervised research experiences, optional industrial internships, continuous development of pedagogical and communication skills, and comprehensive supervision and evaluation of teaching performance.

## Additional Information

Deadline for Entry Term(s):	Each Fall semester
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments:	GRE General Test is required; in addition, subject test is recommended

For detailed information, contact Dr. Mary Ellen Zvanut, UAB Department of Physics, CH 384, 1720 2nd Avenue South, Birmingham, AL 35294-1170.

Telephone 205-934-4736

E-mail [mezvanut@uab.edu](mailto:mezvanut@uab.edu)

Web <http://www.uab.edu/cas/physics/graduate>

## Psychology

Director of Behavioral Neuroscience: Franklin Amthor  
 Director of Lifespan Developmental Psychology: Fred Biasini  
 Director of Medical/Clinical Psychology (APA Approved): Edwin Cook III

### Areas of Specialization

The Psychology Graduate Program offers three specialization options to doctoral students: Behavioral Neuroscience, Lifespan Developmental Psychology, and Medical/Clinical Psychology. A terminal master's degree is not offered. The Medical/Clinical Psychology Specialization is accredited by the American Psychological Association.

### *Behavioral Neuroscience*

Study in the Behavioral Neuroscience specialization is designed to prepare students for independent research and teaching in the neurobiology of behavior. Research training is provided by faculty in the Department of Psychology and in the UAB Schools of Medicine and Optometry, who share an interest in the biological basis of behavior. The course of study includes a core curriculum in neuroscience and recognizes the interdisciplinary nature of this field. Students obtain strong backgrounds in behavioral science and in neuroscience and gain expertise in the content and techniques of selected areas of neuroscience as they apply to the study of behavior.

Faculty laboratories are equipped for research in behavior, neuroanatomy, neurochemistry, neuroimaging, neuropharmacology, neurophysiology, and molecular biology. The research interests of the faculty include neuroanatomy and neurophysiology of the visual system; interactions between the central nervous system and the periphery in the control of feeding and energy balance; neural underpinnings of obesity and plasticity in participants in a weight loss program; autism; emotional substrates of conditioned fear; neurophysiology and neuropharmacology of pain.

### *Lifespan Developmental Psychology*

The Lifespan Developmental Psychology doctoral program trains scientists to conduct research to discover and apply basic principles of developmental psychology in an interdisciplinary context and to apply those principles to a variety of problems. Graduates are capable of taking positions in institutions of higher learning, medical schools, research institutions, government agencies, and other research and teaching positions. Research training is provided by the faculty of the Department of Psychology and may occur in collaboration with faculty at the Civitan International Research Center, the Center for Aging, the Center for Applied Gerontology, the Department of Pediatrics, The School of Public Health, and other centers and departments.

The research programs of faculty with interests in lifespan developmental psychology include a wide variety of topics from infancy to the elderly. Much of this research is funded by federal research grants. Research subareas include: developmental disabilities (with special interests in Autism Spectrum Disorders, prenatal development and exposure to toxic substances, early intervention, adolescent psychosocial development and mental health, and how family members adapt to the problems of a child with a disability); adolescence (with special interest in longitudinal studies, interactions between health and development, alcohol and drug use, predictors of depression and suicide, family and peer relations, those with special health care or education needs); and aging (with special interest in visual-perceptual problems of older adults with low vision, memory skills training with elderly populations, the psychological aspects of chronic illness in the elderly, chronically ill individuals, care giving in families of elderly persons, human factor issues in vision and aging).

Developmental Psychology students must complete a master's thesis. Admission to candidacy for the doctoral degree is based on satisfactory completion of coursework and completion of an area review in the form

of a Psychological Bulletin or Psychological Review article. The doctoral degree is awarded upon successful defense of the dissertation.

It is also possible to enroll in the Gerontology Certification Program concurrently with enrollment in the Lifespan Developmental Psychology Program. More information about this program may be found at: <http://www.aging.uab.edu/SubChannel/Training/pdf/gep-student-policy-2006.pdf>

### **Medical/Clinical Psychology**

The Medical/Clinical Psychology Graduate Program trains students using the scientist-practitioner model to become leaders in health promotion, disease prevention, risk reduction, and symptom assessment and amelioration in multidisciplinary and medical settings. Research, course work and clinical training emphasize behavioral and psychological factors associated with medical illness and injury as well as neurobehavioral disorders across the lifespan.

The program is co-sponsored by the UAB Department of Psychology (College of Arts and Sciences) and the School of Medicine. Program faculty are distributed across multiple academic departments and divisions, including but not limited to Psychiatry, Pediatrics, Neurology, Preventive Medicine, Clinical Immunology and Rheumatology, and Physical Medicine and Rehabilitation. Clinical psychologists and researchers in UAB-affiliated clinical and research centers, the Children's Behavioral Health System, the Birmingham VA Medical Center and throughout the community also play active roles in teaching as well as research and clinical supervision in this program.

A representative list of research programs in which faculty and students are currently involved includes: adolescent development (biological and psychosocial aspects, social and academic issues, and developmental psychopathology), aging (in relation to changes in cognitive abilities, mobility, physical and mental health, and financial competence), Alzheimer's disease (diagnosis, caregiver and financial competence issues), attention deficit hyperactivity disorder (subtyping and behavioral treatment), bulimia and binge eating disorders, cardiovascular reactivity, epilepsy (assessment and treatment), injury prevention, minority health issues (medical and health care access issues), neural plasticity, obesity (neurocognitive and addictive mechanisms; binge eating), chronic pain (neuropsychological and affective aspects; cognitive and pharmacological treatment), pediatric oncology (neuropsychological, psychological, behavioral, and caregiver aspects), rehabilitation (post-stroke, post-brain-injury, and with neurological disorders such as multiple sclerosis and cerebral palsy; use of technology to deliver and assess rehabilitation treatment), sleep and feeding problems of childhood, spirituality and coping with stress and illness, substance abuse (community-based treatment and evaluation related to nicotine, alcohol and cocaine addiction; cognitive aspects, and traumatic brain injury (assessment, treatment and caregiver issues). Most faculty research comes from the National Institutes of Health, private foundations, and the Centers for Disease Control and Prevention.

With the approval of both programs it is possible to complete the Master's in Public Health degree program concurrently with enrollment in the Medical/Clinical Psychology Doctoral Program.

### **Application**

The deadline for receipt of a complete application for admission is: **November 30 for the Medical/Clinical Psychology Program; December 6 for the Lifespan Developmental Psychology Program; and January 15 for the Behavioral Neuroscience Psychology**

**Program.** Applications are solicited both from students with bachelor's degrees and from those who may have already completed some graduate study. The GRE General Test is required. The GRE Subject Test in Psychology is required for the Medical/Clinical Psychology Program only.

### **Admission**

Admission to the Psychology graduate program is highly selective, but in all cases applications are evaluated as a whole without minimum criteria on single scores or other indicators. Transcripts are evaluated for the content and difficulty of the courses taken as well as grades received. All programs follow an affirmative action/equal opportunity process to ensure that all applicants are evaluated fairly and on the basis of their individual merit. Further information regarding admission to the three Psychology specializations appears below:

Because of the interdisciplinary nature of the Behavioral Neuroscience specialization, students with diverse backgrounds in psychology, biology, and physical science are encouraged to apply. All students are expected to have undergraduate training in psychology, biology, physics, chemistry, and mathematics. Students not trained in one or more of these areas may be required to make up deficits after enrollment.

Admission to the Lifespan Developmental Psychology specialization requires a solid background in psychology as well as some courses in the life sciences. Research experience is essential. Excellent grades in statistics and mathematics are also valued.

The Medical/Clinical Psychology specialization requires a minimum of 24 semester hours in psychology, including statistics and research design; cognitive, biological, and affective bases of behavior; learning; abnormal psychology and personality. A strong background in mathematics and natural science (especially anatomy, biology and chemistry) is also recommended. Relevant research experience is considered an important indication of the applicant's motivation and commitment to program goals, and prior experience with clinical populations is also advantageous. The relevance of the applicant's goals and interests to ongoing activities of program faculty are weighed heavily in admissions decisions. Please visit the program website for further information on admissions (including characteristics of admitted students) and program outcomes.

### **Advisement**

Behavioral Neuroscience students are advised by the Director of Behavioral Neuroscience in consultation with a graduate program steering committee and by their research preceptors until the dissertation committee is appointed, usually early in the third year of study.

Students accepted in the Lifespan Developmental Psychology specialization are matched with a faculty member who agrees to mentor that student. Therefore, applicants will need to identify faculty members with whom they share research interest and would like to study.

Students in the Medical/Clinical Psychology graduate program are advised by the Program Director during their first year. By the end of that year the student and director agree on a 3-member Graduate Study Committee, which serves as an advising committee as the student progresses through the program. Membership on the GSC can change to accommodate evolving interests, advising needs, research collaborations, etc.

### **Financial Aid**

All students admitted to the Behavioral Neuroscience, Lifespan Developmental Psychology, and Medical/Clinical Psychology specializations may expect to receive financial aid for at least 5 years. Sources of support include fellowships, tuition scholarships, and research, clinical and teaching assistantships.

#### Additional Information

For detailed information, contact the Graduate Programs Office, UAB Department of Psychology, Campbell Hall Room 201, 1300 University Blvd., Birmingham, AL 35294-1170. The program office and all of the specialization directors can be reached by telephone at 205-934-8723. Contact information for the individual programs is shown below:

Dr. Franklin R. Amthor, Behavioral Neuroscience Specialization Interim Director  
Telephone 205-934-2694  
Email [amthorfr@uab.edu](mailto:amthorfr@uab.edu)  
Web: <http://www.uab.edu/psychology/graduate/behavioral-neuroscience>

Dr. Fred J. Biasini, Lifespan Developmental Psychology Specialization Director  
Telephone 205-934-2610  
Email [fbiasini@uab.edu](mailto:fbiasini@uab.edu)  
Web: <http://crag.uab.edu/developmental/>

Dr. Edwin W. Cook III, Medical/Clinical Psychology Specialization Director  
Telephone 205-934-8723  
Email: [ecook@uab.edu](mailto:ecook@uab.edu)  
Web: <http://www.uab.edu/psychology/graduate/medical-psychology>

## Behavioral Neuroscience

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/behavioral\\_neuroscience\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/behavioral_neuroscience_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

The curriculum in Behavioral Neuroscience provides a student with advanced training that is broadly based in neuroscience. All students have a plan of coursework that includes Overview of Behavioral Neuroscience (PY 753), a two-semester statistics sequence (PY 716-PY 717), and an ongoing seminar in current research (PY 756). Advanced academic coursework is determined by the student and mentor. Each student must enroll in a research practicum directed by a member of the graduate faculty during each term in residence. The student initially rotates among faculty and laboratories during the first year to obtain breadth in points of view and experimental techniques. Student then chooses a mentor with whom they normally complete the remainder of their research training. Before admission to candidacy, each student must fulfill the pre-dissertation research requirement and pass the qualifying examination. Following acceptance of a proposal for dissertation research, the student is admitted to candidacy. The Ph.D. degree is awarded upon successful defense of the dissertation.

## Developmental Psychology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/developmental\\_psychology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/developmental_psychology_checklist)) to

obtain specific admissions requirements on how to apply to Graduate School.

Each student in the Lifespan Developmental Psychology specialization is encouraged to develop a systematic line of research that complements that of his or her advisor. With intense exposure to an important aspect of developmental research, the student acquires skills that can be generalized to a variety of problems. Students are required to complete a core curriculum which includes 21 hours of developmental psychology classes, 15 hours of research design and statistics, 9 hours of general psychology and related discipline classes; 6 hours of teaching practicum and teaching; and at least 48 credit hours of research.

Lifespan Developmental Psychology students must complete a master's thesis. Admission to candidacy for the doctoral degree is based on satisfactory completion of coursework and completion of an area review in the form of a *Psychological Bulletin* or *Psychological Review* article. The doctoral degree is awarded upon successful defense of the dissertation.

## Medical/Clinical Psychology

Prospective students should use this **checklist** to obtain specific admissions requirements on how to apply to Graduate School.

The Medical/Clinical Psychology specialization places strong emphasis on integration of biological and behavioral sciences. Thus, the research and clinical training that the program provides assumes an undergraduate background in both psychology and life science. The program engages students in continued pursuit of knowledge and skill fundamental to research and clinical practice. In addition, students focus their research and a clinical training in one or more of the several areas of clinical and health psychology that the program emphasizes, and pursue advanced scientific and applied coursework, clinical practica, and directed research activities that culminate in the doctoral dissertation.

Course requirements for the Medical/Clinical Psychology specialization include:

1. General Psychology and Neuroscience –a four-course sequence including cognitive, biological, social, emotional and developmental bases of behavior, as well as the history of the discipline
2. Statistics and Research Design--a four-course sequence
3. Foundations of Clinical and Health Psychology – including personality, psychopathology, health psychology and the ethics of professional practice
4. Psychological Assessment and intervention – five courses in cognitive and personality assessment, and empirically-supported interventions

Additional courses and/or seminars may be taken as electives and may be required depending on the student's area(s) of emphasis.

Students in Medical/Clinical Psychology are actively engaged in research throughout the time that they are enrolled in the program and typically complete a master's thesis project during their second or third year. Clinical practicum experiences begin in the summer of the first year, and in their final year students complete an APA-accredited clinical psychology internship in a medical facility. The doctoral degree is awarded upon successful defense of the dissertation and internship.

## Sociology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/sociology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/sociology_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.A. in Sociology, Ph.D. in Medical Sociology
Director:	Dr. Patricia Drentea
Phone:	(205) 934-2562
E-mail:	pdrentea@uab.edu
Web site:	<a href="http://www.uab.edu/sociology/graduate-programs">http://www.uab.edu/sociology/graduate-programs</a>

## Medical Sociology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/medical\\_sociology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/medical_sociology_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

### Medical Sociology Ph.D. Program

This program is designed to provide students with the coursework and research experiences to become leading researchers and practitioners in medical sociology. Doctoral training in medical sociology exposes students to the central issues of the field through a variety of methodological techniques encompassing both qualitative and quantitative approaches. Graduate students study the social and cultural bases of health beliefs and behaviors, organizational structures of health care delivery, and patient-practitioner relationships, to name just a few examples. Students acquire expertise in theory formulation and data analysis.

There are abundant opportunities for graduate students to work with faculty on research projects in medical settings across the campus.

### Admission

Admission to the Ph.D. program in medical sociology generally requires a minimum overall score of 1150 on the old GRE (verbal and quantitative), with a comparable percentage on the new version of the GRE; minimum GPA of 3.0 (A = 4.0), or a 3.2 GPA for the last 60 semester hours in a B.A. or B.S. program; and minimum GPA of 3.5 in all previous graduate coursework. Students should have completed at least 18 hours in social science courses, including social theory, statistics, and research methods. Students entering the program with a master's degree can receive up to 12 hours of transfer credit that were not used for any other degree program (see graduate school guidelines). They also have waived 6 credits of (thesis research credits). Because of the interdisciplinary nature of the Medical Sociology Ph.D. program, students with diverse backgrounds in social science and health-related fields are encouraged to apply. Students lacking adequate backgrounds in theory, research methods, or statistics may be required to make up deficits after enrollment.

### Advising

The Graduate Director and/or the student's faculty mentor will provide continuous advisement on academic progress during the student's graduate study, including assistance with course selection and recommendations for research experiences that are consistent with the

student's developing interests and abilities. In addition, each year the student will be formally evaluated by the Graduate Committee and will be provided with performance feedback.

Research supervision is provided by faculty whom students select to chair the master's thesis and doctoral dissertation committees. Typically, the student will select persons with whom a close, supportive relationship develops.

The placement of Ph.D. students in research sites within the Department and/or in areas across campus is an important part of the Medical Sociology Program. Such placements usually involve assisting faculty on research grants. Such experiences provide students with invaluable real-life exposure to medical sociology "in action." As such, they are important accompaniments to the coursework of the Ph.D. program. Teaching and research positions are offered to students based on department needs, funding available and student merit.

## Curriculum

The components of the Ph.D. program are as follows:

### 1. Required Coursework

#### Medical Sociology Core (9 hr)

Required:

Requirements	Hours
SOC 780      Advanced Medical Sociology	3

2 of 5 Required Electives:

Requirements	Hours
SOC 734      Global Health	3
SOC 735      Special Topics in Global Health	3
SOC 755      Race and Ethnic Relations	3
SOC 756      Gender and Health	3
SOC 775      Place and Health	3
SOC 781      Sociology of Health and Illness	3
SOC 783      Health Care Delivery Systems	3
SOC 785      Family and Health	3
SOC 786      Health Disparities	3
SOC 787      Sociology of Mental Health	3
SOC 788      Social Medicine	3

#### Theory Core (6 hr)

Required:

Requirements	Hours
SOC 720      Classical Theory	3
SOC 722      Contemporary Sociological Theory	3

#### Statistics and Research Core (15 hr)

Requirements	Hours
SOC 601      Data Management and Analysis	3
SOC 703      Regression Analysis	3
SOC 704      Categorical Data Analysis	3
SOC 705      Quantitative Methods	3
SOC 711      Qualitative Methods	3

## Research Hours

Master's Thesis Research Hours (6 hr)

Doctoral Dissertation Research Hours (24 hr)

**Sociology/Health Electives/Transfer Credits** (30 hr--up to 15 hours outside department)

## Proseminars (3 hr)

Proseminar, SOC 702 - 1 hr Fall Research

Proseminar, SOC 702 - 1 hr Spring Professionalization

Proseminar, SOC 702 - 1 hr Summer Teaching

\*students may take up to 3 790-793 classes for credit as electives.

\*students may take 2 in-department online courses towards their degree

## 2. Graduate Proseminar Functions

The graduate proseminar series (SOC 702) is required of all entering doctoral graduate students for their initial three terms in the graduate program. These classes familiarize new students with departmental policies and procedures, as well as various facets of the profession of sociology. This series should not only help students become situated within the graduate program, but also give them an opportunity to become better acquainted with the faculty and graduate student body. Students should also gain experience with basic professional skills such as identifying appropriate journals, creating a curriculum vitae, identifying one's own research interests, developing basic classroom skills, and addressing ethical issues associated with the profession of sociology.

## 3. The Master's Thesis

Students pursuing the doctoral degree must follow Plan I (Thesis Plan) of the existing master's degree program by producing a research-based thesis, but two types of documents will be acceptable. The first is a traditional thesis organized in the form of an extensive book monograph. This option is especially appropriate for qualitatively based research.

The second acceptable type of document is a manuscript in the standard form of a journal article with appended materials. Specifically, this journal article thesis will consist of:

1. A forward which places the research in context, specifying the journal to which the article is to be submitted, delineating the rationale for co-authorship (if appropriate), and making acknowledgments;
2. A journal article manuscript with a text no longer than the page limitations of a journal selected by the committee, plus footnotes, references, tables, and figures;
3. An appendix with an annotated bibliography of relevant literature;
4. An appendix that details, in full, the methodological procedures;
5. An appendix of measurement instrumentation (e.g., survey instruments, in-depth interview schedules, observational logs, etc.);
6. An appendix of additional tables and/or samples of observational notes;
7. An appendix of other research documentation such as survey cover letters, human subject review approval forms, and letters of support and approval from facilities at which the research was conducted.

The master's thesis process involves:

1. Formation of the thesis committee;
2. Oral defense of a written thesis research proposal;

3. Oral defense of the completed thesis;
4. Submission of the completed manuscript to the Graduate School,
5. Submission of the journal article for publication.

The thesis committee consists of a minimum of three full-time faculty members, including one from outside the Department of Sociology. This committee will be responsible for guiding the research process, evaluating the final draft of the thesis, presiding over the oral defenses of the thesis proposal and the completed manuscript, and approving the journal article for submission for publication. In addition to meeting general M.A. degree requirements, before being admitted to candidacy for the M.A. degree, a student in the Ph.D. program in Medical Sociology must have completed the master's level core courses in theory (SOC 707 and SOC 720) and two core methods courses (SOC 601 and SOC 703, or SOC 705 and SOC 711), completed two of the five courses in the medical sociology core, and made a successful oral defense of the thesis proposal.

For those students entering with a master's degree, the graduate director will review the student's transcript, evaluate course transfers (if any), and devise a course plan. This student's doctoral advisory committee also will handle the student's admission to candidacy and the requirement of submitting a journal article for review. The student with the master's degree will not be required to make oral defenses of his/her thesis work from another institution.

## 4. Comprehensive Exams

All doctoral students who enter the program in Fall 2010 or later must take a comprehensive examination no later than the end of the third summer after being admitted to the Ph.D. program.

The comprehensive examination should be taken in a specialty area chosen by the student. The specialty area must be a combination of health and one substantive area reflecting the specialties of the faculty (e.g., aging and health, health behaviors, community health, health and demography, health and family, health inequality, health policy, etc.). The advisory committee will consist of three faculty members selected by the Graduate Committee. Prior to taking the examination, the student should meet with the advisory committee to develop a reading list based on the specialty area.

The comprehensive examination will include five questions decided by the advisory committee reflecting major theoretical, methodological, and substantive issues in the student's chosen specialty area. The student will answer four of the five questions as a take-home exam, which will be distributed at 4:00 p.m. Friday and will be due the following Monday at 9:00 a.m. The members of the advisory committee will grade the examination on a pass/fail basis. Students who fail the examination but wish to continue in the program must take a make-up examination in the following Fall Semester. Students who fail the make-up examination will be terminated from the Ph.D. program.

## 5. The Doctoral Dissertation

The dissertation process is as follows:

1. Formation of the dissertation committee;
2. Oral defense of a written dissertation research proposal;
3. Oral defense of the completed dissertation;
4. Submission of the completed manuscript to the Graduate School.

In consultation with faculty, and near the completion of all substantive coursework, a student forms a dissertation committee consisting of at

least five members, with two from outside the Department of Sociology. This committee will be responsible for guiding the research process, evaluating the final draft of the dissertation, and presiding over the oral defenses of the dissertation proposal and the completed manuscript. A student is admitted to candidacy after successful oral defense of the dissertation proposal and no earlier than the term in which the required substantive coursework is completed.

## Financial Aid

All students admitted to the Ph.D. program will be considered for financial aid. Sources include graduate fellowships and assistantships.

## Additional Information

Deadline for Entry Term(s):	Fall
Deadline for All Application Materials to be in the Graduate School Office:	March 1
Number of Evaluation/recommendation Forms Required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

Ph.D. Program in Medical Sociology <http://www.uab.edu/sociology/>

For detailed information, contact UAB Department of Sociology, HHB 460A, 1401 University Boulevard, Birmingham, Alabama 35294-1152.

Telephone 205-934-2562

E-mail [pdrentea@uab.edu](mailto:pdrentea@uab.edu)

Web <http://www.uab.edu/sociology/>

## Sociology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/sociology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/sociology_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## Sociology M.A. Program

The Department of Sociology offers two plans (Plan I and Plan II) for the M.A. Degree

### Requirements for the M.A. Degree (Plan I)

Plan I students pursuing the M.A. degree in Sociology must have been admitted into the Medical Sociology Ph.D. program. To be admitted in good standing, candidates must meet all Graduate School admission requirements.

Plan I applicants lacking 18 semester hours in social science courses will be evaluated individually for academic deficiencies. Supplemental coursework may be recommended by the graduate faculty. The program provides a Plan I (thesis) option. The M.A. degree is conferred upon the fulfillment of the requirements outlined below.

All of the following core courses are required for all students:

Requirements		Hours
SOC 702	Proseminar: The Profession of Sociology (The Proseminar is a one credit course that needs to be taken three semesters in a row, adding to a total of 3 credits.)	1
SOC 720	Classical Theory	3
SOC 722	Contemporary Sociological Theory	3
SOC 705 or SOC 711	Quantitative Methods or Qualitative Methods	3
SOC 703	Regression Analysis	3
SOC 701	Intro to Soc Research Mthds	3

2 or more substantive courses (these may be in areas outside of Sociology, subject to approval by the Sociology graduate program director)

Additional requirements for the Plan I M.A. degree include the following:

- 6 semester hours of thesis research
- An acceptable research-based thesis
- A final oral examination based on the thesis

### Requirements for the M.A. Degree (Plan II)

Plan II is an Applied M.A. option which provides strong disciplinary training, along with internships and research experience, to prepare students for careers in business, non-profits, government agencies and the continued professional development of teaching careers. To be admitted in good standing, candidates must meet all Graduate School admission requirements.

The Plan II option is a non-thesis plan. A six-hour faculty-directed applied/community capstone project, undertaken at the conclusion of the program, provides an opportunity to synthesize all previous course material and meets the final requirement for the applied plan II MA degree in Sociology.

Students deciding to move into the Medical Sociology Ph.D Program will need to meet the core requirements from Plan I.

Students interested in learning more about the Plan II Applied Sociology MA should contact Dr. Jeffrey Clair, Director, Applied Sociology MA plan, 205-934-8680, or write [jclair@uab.edu](mailto:jclair@uab.edu).

All of the following core courses are required for all students (18 hours):

Requirements		Hours
SOC 713	Intro to Appli Soc Res Methods	3
SOC 723	Applied Sociological Theory	3
SOC 726	Applied Sociology	3
SOC 727	Applied Social Psychology	3
SOC 776	Capstone Project	6

Four additional classes are required for all students to fully matriculate. Choose FOUR classes from the following list, adding up to 12 hours:

Requirements		Hours
SOC 711	Qualitative Methods	3
SOC 715	Program Evaluation	3
SOC 728	Teaching Sociology	3
SOC 729	Consumer Culture	3
SOC 737	Pract Innov Creat Appli SOC	3
SOC 745	Sociological Practice	3
SOC 760	Sociology of Death and Dying	3

SOC 783	Health Care Delivery Systems	3
SOC 786	Health Disparities	3
SOC 789	Patient Care Relationships and Ethics	3

# Biomedical Sciences (Joint Health Sciences)

## Interdisciplinary Themes\*

Biochemistry & Structural Biology Theme

Cancer Biology Theme (p. 46)

Cell, Molecular, and Developmental Biology Theme (p. 47)

Genetics and Genomic Sciences Theme (p. 49)

Immunology Theme (p. 52)

Microbiology Theme (p. 54)

Neuroscience Theme (p. 55)

Pathobiology and Molecular Medicine Theme (p. 56)

\* **Completion of the training requirements in one of the above interdisciplinary themes provides eligibility for conferral of one of the following PhD degrees:**

- Biochemistry and Molecular Genetics
- Cell Biology
- Cellular and Molecular Physiology
- Genetics
- Microbiology
- Neurobiology
- Pathology
- Pharmacology and Toxicology

For more information regarding GBS Interdisciplinary themes and departments, visit the GBS website at <http://www.uab.edu/gbs/home/>

## Biochemistry & Structural Biology Theme

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/biochemistry\\_\\_structural\\_biology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/biochemistry__structural_biology_checklist)) to obtain specific admissions requirements on how to apply to the Graduate School.

Director:	Dr. David Schneider
Program Manager:	Kristin Boggs
E-mail:	bsb@uab.edu
Phone:	(205) 934-7810
Web site:	<a href="http://www.uab.edu/gbs/bsb">http://www.uab.edu/gbs/bsb</a>

## Theme Information

### Objectives

Biochemistry & Structural Biology is looking for students who have a strong desire to understand life at the molecular level. Our goal is to teach the skills, implant the inspiration, encourage imagination, and

nurture the dedication essential for our graduates to become world-class researchers.

Our faculty and students are dedicated to excellence in both coursework and research programs, and we are honored that our team's accomplishments and discoveries have been chronicled in (Nature, Structure, other names here) and other noted journals and publications of record. New students join a select family of faculty and students who work and study together within the Biochemistry and Structural Biology Theme at UAB. We teach you how to think- what questions to ask and where to search for answers. We give you the skills and background necessary to launch a successful scientific career as an independent researcher.

Whether you choose to pursue advanced studies in molecular genetics, stem cell biology, or many of the diverse areas of research within the Biochemistry and Structural Biology theme, you will find the work interesting, challenging and rewarding. It piques the curiosity, sparks the imagination, enlists your resourcefulness and brings a sense of fulfillment that comes from exciting research and exhilarating discovery.

## Admission Requirements

The BSB theme encourages applications from students interested in receiving a graduate degree in biomedical sciences. Applications are strongly encouraged from individuals with previous work experience, a master's degree in related area, or a professional degree such as the M.D., D.M.D., D.V.M. or O.D.

Applications will be reviewed by the Graduate Biomedical Sciences Admissions Committee. Acceptance will be based on undergraduate performance (both the curriculum and grade point average), letters of recommendation, GRE scores, a personal statement of research interests, performance in other graduate programs or research activities and, if possible, a personal interview.

Acceptance into the BSB theme requires a bachelor's degree including undergraduate coursework in calculus, general and organic chemistry, and at least one introductory course in zoology or biology by the time of entrance.

The general requirements for acceptance into the program are –

- Minimum GPA of 3.0 on a 4.0 scale
- Combined verbal/quantitative score on the GRE of 300 (new test) or 1100 (old test)
- A strong background in biology, chemistry, and/or mathematics. Undergraduate level courses in cell biology, biochemistry, developmental biology, and genetics are strongly encouraged. Undergraduate mathematics through calculus and physics are also recommended.

International students must submit scores from the Test of English as a Foreign Language (TOEFL) earned within the last two years. Applicants with scores of 600 (paper-based) or 80 (internet-based) or higher will be considered.

## Biochemistry and Structural Biology (BSB) Curriculum

### YEAR 1

Laboratory Rotations

- Three laboratory rotations - 10 weeks each
- Select dissertation advisor in the Spring following lab rotations.

#### Course Work

- August - October: GBS Core Course (<http://www.uab.edu/gbs/home/current-students>); 8:00 a.m. - 10:00 a.m. every weekday
- November - December: BSB Laboratory Methods Course; 8:00 a.m. - 10:00 a.m. every weekday

#### January - April: BSB courses - 1 month each:

- January - Molecular Enzymology
- February - RNA Biology
- March - Molecular Genetics
- April - Stem Cell Biology

#### YEAR 2

- Choose Thesis Committee - Mentor plus four faculty members
- Thesis Research
- Three Advanced Courses
- Journal Club
- Graduate Student Research Meeting (meets once a month)

#### YEARS 3 and 4

- Completion of advanced course work
- Thesis Research
- Journal Club
- Graduate Student Research Meeting (meets once a month)
- Qualifying Exam on thesis project - Written proposal and defense (3rd yr.)

#### YEARS 5+

- Dissertation research
- Dissertation Defense (public and private)

## Additional Information

Application Deadline	Refer to Theme website for deadline information: <a href="http://www.uab.edu/gbs/bsb">http://www.uab.edu/gbs/bsb</a>
Letters of Recommendation	Three letters required
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

For more information, contact:

#### **Kristin Boggs**

Program Manager, Biochemistry & Structural Biology Theme  
1825 University Blvd; SHEL 120-E  
Birmingham, AL 35294  
Tel: 205.934.7810  
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E-mail: [kboggs@uab.edu](mailto:kboggs@uab.edu)

## Cancer Biology Theme

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/cancer\\_biology](http://catalog.uab.edu/graduate/admissionchecklists/cancer_biology)) to obtain specific admissions requirements on how to apply to Graduate School.

Co-Directors:	Rosa Serra, Ph.D. Theresa Strong, Ph.D.
Phone:	(205) 934-7034
E-mail:	<a href="mailto:cancerbio@uab.edu">cancerbio@uab.edu</a>
Web site:	<a href="http://www.uab.edu/cancerbio">www.uab.edu/cancerbio</a>

## Theme Information

The goal of the Cancer Biology Program is to train the next generation of cancer biologists so that they will make significant contributions to basic and clinical research. Students will receive training over a broad base—integrating molecular, cellular, biochemical and biological experimental approaches. Combinations of courses, seminars, small group discussions and hands-on research provide each student with a customized dissertation experience. Students will have opportunities to work with outstanding investigators throughout the UAB campus in the areas of tumor microenvironment, metastasis, cancer genetics, stem cells, gene therapy of cancer, pharmacology/toxicology, signaling and tumor immunology. Successful graduates will have a firm foundation upon which they can build careers in academia, research institutions, industry or government.

Students are expected to complete the entire program in four or five years. During the first year, students will participate in the GBS core curriculum and will begin more specialized training by exploring potential laboratories in which they may do their dissertation research as well as courses representing the multiple disciplines involved in cancer research. A course focusing on "classic papers" in cancer research will set the stage for modern approaches to studying the disease. Following three laboratory rotations, each student will select a mentor for his/her dissertation research. Following the core curriculum, students will begin specialized cancer research electives.

During the second year, students will complete their specialized courses and will participate in journal clubs and special topics curricula. After the second year, cancer biology students will write a proposal for their dissertation research and presented to their graduate advisory committee for approval. The focus following advancement to candidacy is hands-on research, although students can elect to participate in other advanced courses that will round out their education or provide opportunities to expand the research.

## Admission Requirements

A baccalaureate degree in the natural or physical sciences is required. Undergraduate level courses in organic and analytical chemistry, cell biology, biochemistry and genetics are strongly encouraged. Undergraduate mathematics through calculus and physics are also recommended. See individual Program Admissions information for program-specific required or recommended courses.

The Graduate School recommends that entering students have a minimum grade point average (**GPA**) of 3.0 on a 4.0 scale and a minimum combined verbal/quantitative score on the Graduate Record Exam (**GRE**) of 1100. As the scoring system changes with the

implementation of the new GRE format, the Graduate School will make adjustments to reflect a minimum total score.

International students must submit scores from the Test of English as a Foreign Language (TOEFL) earned within the last two years. Applicants with scores of 600 (paper-based) or 250 (computer-based) or higher will be considered.

Undergraduate or postgraduate **research experience** is essential. Students considered for the program must have a minimum of 6 months bench research experience.

Applications are reviewed by the Admissions Committee, representing all GBS thematic programs. **Acceptance** will be based on a combination of factors including:

- Undergraduate performance (both the curriculum and grade point average)
- Letters of recommendation
- GRE scores
- A personal statement of research and career interests
- Previous research experience
- Personal interview, at program expense (international applicants may be interviewed by phone or video conference)

Admission to our Programs is very competitive and the number of positions is limited; thus not every qualified applicant can be offered a position.

## Financial Support

All students accepted into GBS programs receive a **competitive annual stipend and fully paid tuition and fees**. Single coverage **health insurance is also provided** at no cost to the student through VIVA Health UAB. **The annual stipend for the 2013-2014 academic year is \$26,000**. The total annual award value, including stipend, tuition, fees and health insurance is > \$37,500. Stipends are reviewed and updated regularly.

First-year students are funded through the Cancer Biology Graduate Program by Graduate School Fellowships and occasionally by other national and University fellowships. In subsequent years, students are supported through their advisor's research grants, institutional funds or training grants. In addition, highly qualified students are encouraged to apply for individual fellowship awards, with the guidance of their advisors. See Fellowships and Awards for additional fellowship information and resources.

### Additional Information

Deadline for Entry Term(s):	Consult Theme Website for information: <a href="http://www.uab.edu/cancerbio">http://www.uab.edu/cancerbio</a>
International Applications Deadline:	15 January 2013
Entrance Tests (University Code: 1856)	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

For detailed information, contact:

**Patricia Matthews**

Program Manager, UAB Cancer Biology Graduate Program  
205.934.7034 (office)

pm1@uab.edu

## Cell, Molecular, and Developmental Biology Theme

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/cell\\_molecular\\_\\_development\\_biology](http://catalog.uab.edu/graduate/admissionchecklists/cell_molecular__development_biology)) to obtain specific admissions requirements on how to apply to Graduate School.

Director:	Dr. Bradley K. Yoder
Phone:	(205) 934-0994
E-mail:	byoder@uab.edu
Web site:	<a href="http://www.uab.edu/cmdb">www.uab.edu/cmdb</a>

## Theme Information

### Objectives

The Cell, Molecular, and Developmental Biology (CMDB) graduate theme is part of an umbrella graduate program in Biomedical Sciences that focuses on basic process in cell, molecular and developmental biology and how defects in these processes result in human diseases and birth defects. CMDB students will receive comprehensive training and instruction in cell, molecular, and developmental biology using modern tools and approaches as well as a wide range of model organisms and cell culture systems. The overall goal of the theme is to develop well-rounded scholars with expertise applicable to multiple fields pertinent to a productive research and teaching career in academic science centers, research institutions, and industry.

### Admission Requirements

Students are admitted into UAB Graduate Biomedical Sciences (GBS) umbrella program and indicate a theme preference. Applicants to the UAB Graduate School are reviewed by the GBS Admissions Committee and will be evaluated on the basis of their undergraduate performance (both the curriculum and grade point average), letters of recommendation, GRE scores, a personal statement of research interests, performance in other graduate programs or research activities and, if possible, a personal interview. Although students select a theme on admission into the GBS program, they may change theme affiliation at anytime; however changes that occur late in the doctoral program may require additional fundamental course work related to the specific theme.

Acceptance into CMDB requires a bachelor's degree including undergraduate coursework in calculus, general and organic chemistry, and at least one introductory course in zoology or biology by the time of entrance. The CMDB theme invites applications from individuals committed to obtaining a graduate education in biomedical sciences. Once accepted into GBS, students must complete the GBS core curriculum and three scientific research rotations in GBS laboratories. CMDB students will then begin course work in areas related to his/her research interests and training needs determined through the advice of faculty mentors and staff.

### Overview of the CMDB Theme

The CMDB theme is comprised of over 60 primary and secondary faculty members with appointments in many of the academic departments and Centers at UAB including Cell Biology, Genetics, Biochemistry, Neurobiology, Medicine, Oral and Maxillofacial Surgery, Nutrition

Sciences, Cardiovascular Disease, Clinical Immunology, Rheumatology, Pathology, Environmental Health Sciences, Physiology and Biophysics, Psychiatry & Behavioral Neurobiology, Vision Sciences and Optometry. The scientific interests of the faculty are very diverse and interdisciplinary in nature. As such, the CMDB theme can provide students an individually tailored, comprehensive training program in cell, molecular, and developmental biology using modern tools and approaches in a wide range of model organisms. The research conducted by CMDB faculty addresses fundamental cellular and molecular questions that provide the basis for understanding and treating human disease.

In the first semester, all students accepted into the GBS program will complete a 14-week core course covering fundamentals in biochemistry, metabolism, genetics, molecular and cellular biology. After completion of the core GBS curriculum, CMDB students will complete a course entitled Cell Signaling.

In addition, starting early in the first semester each student will obtain research experience through three laboratory rotations that will be completed by the end of the first year. Laboratory rotations are for ten weeks and are an integral part of the first year curriculum. They are the first opportunity to truly experience what graduate level scientific research is all about. These rotations are highly structured and are meant for you to become acquainted with the laboratory and the mentor and to gain practical experience in a variety of the techniques and types of scientific questions being addressed within the different theme areas. At the end of each rotation the students will present their research in the form of a poster presentation that is open to the GBS community. After completion of the rotations, students choose a mentor and laboratory for their dissertation research.

In the second semester, CMDB students must attend Methods and Scientific Logic, a journal club designed to demonstrate how to critically evaluate data and experimental design in the scientific literature and research. In addition, beginning in the second semester CMDB students will complete a series of one month modules in areas related to cell, molecular and developmental biology that are in the general research and scientific interest of the individual student. The CMDB curriculum is tailored to the student's research and scientific interests. As such, the student will be able to select from modules in the CMDB theme as well as from other GBS themes approved by the student's mentor and the CMDB theme directors. The student must complete eight modules, five of which should be listed as a CMDB course. Additional course work may be required to fill gaps in the student's knowledge based on the recommendation of the mentor and the student's thesis committee.

All CMDB students must complete course in Biostatistics and Bioethics as well as conduct non-dissertation research in their selected laboratories. At the beginning of the second year, students will assemble a thesis committee in consultation with their mentors. This committee will be formed by anywhere between 4 and 6 members, 3 of which should be faculty associated with the CMDB theme.

In the second year, students continue non-dissertation laboratory research and take module course work to fulfill the requirements described above. By the beginning of the third year, CMDB students must complete their qualifying examination consisting of a written dissertation research proposal in the format of an NIH style grant and an oral defense. The examination will evaluate whether the student has gained a sufficiently broad knowledge necessary for successful academic research. To help in this process, the second year curriculum will include a course in scientific writing and grantsmanship with a mock NIH grant

review session. After successful completion of the exam the proposal will be submitted to a funding agency (if applicable) for possible support.

After the second semester, all students must participate in a CMDB approved Departmental Seminar Series and a weekly journal club until completion of the doctoral degree.

The curriculum of each Ph.D. candidate usually requires five years of training and is individually tailored to the interests and needs of the student by the advisor and a graduate committee chosen by the student. The Ph.D. degree is awarded upon successful defense of your dissertation, which includes an oral presentation of original, creative scientific investigations, and a written dissertation which is expected to include published manuscripts or manuscripts in preparation. Because pursuit of the Ph.D. degree is a full-time activity, all graduate students are supported by monetary stipends and do not have any required teaching duties. The level of activity required does not permit outside jobs or excessive extracurricular activities. Continuous registration and satisfactory academic standing during all terms is required.

## Additional Information

Deadline for Entry Term(s):	Refer to theme website for deadline information: <a href="http://www.uab.edu/cmdb">http://www.uab.edu/cmdb</a>
Deadline for All Application Materials to be in the Graduate School Office:	Consult theme website for deadline information: <a href="http://www.uab.edu/cmdb">http://www.uab.edu/cmdb</a>
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE

**For detailed information see Web [www.uab.edu/cmdb](http://www.uab.edu/cmdb) or contact:**

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**Nan Travis**

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Shelby Building, Room 120  
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Birmingham, AL 35294-2182  
205.934.1033  
205.996.6749 Fax  
[ntravis@uab.edu](mailto:ntravis@uab.edu)

## Course Descriptions - Cell, Molecular and Developmental Biology

**Cell Signaling** - This course covers major extracellular and intracellular signal transduction cascades that regulate animal development and physiology. The class meets every day for 2 hours and consists of two exams.

**Cellular Membranes and Organelles** - This class will cover molecular and cellular processes that are involved in the assembly and

maintenance of membranes and organelles and how defects in these processes contribute to human disease.

**Cell and Molecular Aspects of Developmental Biology** - The goal of this course is to provide an introduction to the fundamentals of vertebrate developmental biology. The course will consist of faculty lectures and research paper discussion groups covering a broad range of developmental issues from fertilization to organogenesis.

**Developmental Neuroscience**- The course will utilize the scientific literature and faculty lectures to cover a broad range of topics related to the mechanisms of building a brain. The topics covered range from neural induction in early development, to axonal guidance and synapse formation, to neuro-gial interactions in the adult nervous system. Grades will be based on two exams and student participation in class discussions.

**Stem Cell Biology** - This course will explore the derivation, manipulation, and differentiation of embryonic, fetal, and adult stem cells in both mice and humans. Topics to be discussed include stem cell self-renewal, teratoma formation, hematopoietic stem cells, neural stem cells, trans-differentiation, nuclear transfer, and reproductive and therapeutic cloning. The course will be a mixture of instructor lectures and interactive journal club style presentations from the current stem cell literature by the students. Students will be evaluated based upon their journal article presentations, participation in class discussions, quizzes, and attendance.

**Development and Evolution** – This course will cover the developmental mechanisms that drive evolutionary change and how body plans evolve through natural selection. The course consists of lectures and scientific literature discussions that will demonstrate developmental biology principles.

**Skeletal Development and Disease** - The primary goal of this course is to introduce graduate students to the basic and translational knowledge about development, maintenance and homeostasis of the mineralized tissues. Lectures in this course will focus on approaches and techniques that are utilized for understanding cellular and molecular mechanisms essential for the normal development, remodeling and patho-physiology of skeleton.

**Cell and Matrix Interactions in Disease & Development** - This course will cover a combination of basic mechanisms underlying extracellular matrix interactions with cells, and how these go wrong in several disease processes. It will be a series of seminars, followed in the final week with oral student presentations on the disease of their choice and submission of a one-page summary.

**Mechanisms of Birth Defects** - This class will provide an overview of the mechanisms of common birth defects. A review of the development of each organ system is followed by a discussion of molecular mechanisms leading to alterations in normal development. Genetic and environmental mechanisms are discussed. A recent paper on each topic is presented as part of the class. Depending on the number of students enrolled, each student will be required to present one or two papers.

**Grantsmanship and Scientific Writing** – The objective of the course is to teach students how to effectively write grant proposals. This course will provide hands on training in the preparation of a grant application and demonstrate effective strategies for assembling a successful proposal. With guidance from the faculty, the students will write a NIH style proposal on their dissertation research topic. After the proposal is complete, each grant will be reviewed in a mock NIH study section.

Based on the comments from the study section, the student will revise the application and submit the proposal to his/her thesis committee as part of the qualifying examination for admittance into candidacy.

**Laboratory Rotations.** Concurrent with the first year of course work, each student will perform laboratory research with mentors of his/her choosing in any of the GBS themes. Laboratory rotations are meant help students become acquainted with the laboratory and the mentor and to gain practical experience in a variety of the techniques and types of scientific questions being addressed within the different theme areas. Laboratory rotations last approximately ten weeks and each student will complete three rotations by the end of their first year. At the end of each rotation the students will present their research in the form of a poster. The performance in the laboratory and the poster presentation will be graded by the mentor of the laboratory and by two GBS faculty members respectively. A passing grade is required for all laboratory rotations. 1-6 hours.

**Non-Dissertation Research.** Laboratory research performed prior to admission to candidacy. 1-12 hours.

**Dissertation Research.** Prerequisite: Admission to candidacy. 1-12 hours.

**CMDB Approved Seminar Series** – All CMDB students must attend one of the weekly departmental based seminar series within the scientific interest of the student. The seminar series feature prominent speakers from both inside and outside of UAB and attendance is mandatory. Current approved seminar series include: Cell Biology, Neuroscience, Genetics, and Biochemistry. Additional seminar series may be included upon approval of CMDB and the mentor.

**CMDB Journal Clubs** - In the beginning of the second year until completion of the thesis defense, allCMDB students must participate in a journal club related to the student's research interests and to the CMDB theme. The purpose of the journal club is to give students valuable experience in critical assessment of the scientific literature and to keep up-to-date on the research activities emerging from CMDB related research. Current journal clubs associated with the CMDB theme are: Autophagy and Cell Death, Cell Biology, Cell-Matrix Interactions, Cancer and Developmental Biology, and Stem Cell Biology. Additional journal clubs may be included upon approval of CMDB and the mentor.

## Genetics and Genomic Sciences Theme

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/genetics\\_and\\_genomic\\_sciences](http://catalog.uab.edu/graduate/admissionchecklists/genetics_and_genomic_sciences)) to obtain specific admissions requirements on how to apply to Graduate School.

Director:	Daniel C. Bullard, Ph.D.
Phone:	(205) 934-7768
E-mail:	dcbullard@uab.edu
Web site:	<a href="http://www.uab.edu/ggs">www.uab.edu/ggs</a>

## Theme Information

### Objectives

The main goal of the **Genetics and Genomic Sciences Graduate Program (GGS)** is to provide students with an outstanding, flexible, didactic training experience to prepare them for independent and

innovative careers in research. The Program emphasizes a broad approach to the fundamental principles of genetics and genomics, and offers a large pool of mentors with expertise in a wide variety of areas. The GGS offers close day-to-day interactions between students and faculty, both in the classroom and the laboratory.

The research interests of our program faculty span the fields of genetics, genomics, cancer, biochemistry, cell biology, and developmental biology. Modern molecular approaches are used to study gene structure, expression, and function in diverse experimental systems including humans, mice, *Drosophila*, *C. elegans*, and other organisms such as bacteria. The GGS is also designed to permit close collaborations during the Ph.D. training period between graduate students, postdoctoral fellows, and faculty, while also encouraging full participation in the larger community of biological scientists at UAB.

## Admission Requirements

Students are admitted into UAB Graduate Biomedical Sciences (GBS) umbrella program and indicate a theme preference. Applicants to the UAB Graduate School are reviewed by the GBS Admissions Committee and will be evaluated on the basis of their undergraduate performance (both the curriculum and grade point average), letters of recommendation, GRE scores, a personal statement of research interests, performance in other graduate programs or research activities and, if possible, a personal interview. Although students select a theme on admission into the GBS program, they may change theme affiliation at anytime; however changes that occur late in the doctoral program may require additional fundamental course work related to the specific theme. Acceptance into GGS requires a bachelor's degree including undergraduate coursework in calculus, general chemistry, organic chemistry, and at least one introductory course in zoology or biology by the time of entrance. Doctoral students will receive financial aid in the form of a stipend/fellowship plus full payment of tuition, fees, and their insurance premium. Current stipend/fellowships are \$26,000 per year for 2011-2012 entering students.

The GGS theme invites applications from individuals committed to obtaining a graduate education in fields related to genetics or genomics. We recommend that applicants take prior courses covering basic concepts in genetics and biochemistry if possible; however, this is not required for admission. Applications are strongly encouraged from individuals with previous research experience, a master's degree in related area, or a professional degree such as the M.D. or D.V.M. Once accepted into GBS, students must complete the GBS core curriculum and three scientific research rotations in GBS laboratories. GGS students will then begin course work in areas related to his/her research interests and training needs determined through the advice of faculty mentors and staff.

## Overview of the GGS Program

The GGS theme is comprised of over 80 primary and secondary faculty members with appointments in many of the academic departments and Centers at UAB including Genetics, Cell Biology, Microbiology, Biochemistry, Neurobiology, Medicine, Pathology, Epidemiology, Biostatistics, Nutrition Sciences, Vision Sciences, and others. The scientific interests of the faculty are very diverse and interdisciplinary in nature. As such, the GGS theme can provide students an individually tailored, comprehensive training program in genetics and genomics through use of modern tools and approaches in a wide range of model organisms. The research conducted by GGS faculty addresses

fundamental cellular and molecular questions that provide the basis for understanding and treating human disease.

In the first semester, all students accepted into the GBS program will complete a 14-week core course covering fundamentals in biochemistry, metabolism, genetics, molecular and cellular biology. After completion of the core GBS curriculum, GGS students will then take the Principles of Genetics course that will cover Mendelian and nonmendelian inheritance mechanisms, cytogenetics and chromosome disorders, and basic epigenetic concepts. Students are also expected to attend a weekly journal club and seminar series, such as those offered by the Department of Genetics, during all years of their graduate training. These weekly events generally start in September and run through May of each academic year.

In addition, starting early in the first semester each student will obtain research experience through three laboratory rotations that will be completed by the end of the first year. Laboratory rotations are for ten weeks and are an integral part of the first year curriculum. They are highly structured and allow the student to become acquainted with the laboratory and the mentor, gain practical experience in a variety of the techniques, and to learn about the different scientific questions being investigated within the GGS theme. At the end of each rotation, the students will present their research in the form of a poster presentation that is open to the GBS community. After completion of all three rotations, students choose a mentor and laboratory for their dissertation research.

In the second semester, GGS students will complete a series of one month modules that cover a wide variety of subjects including genome structure and function, linkage and association analyses, bioinformatics, and model systems for genetic analyses. In the summer of the first year, all GGS students must complete course in Biostatistics and Bioethics and conduct non-dissertation research in their selected laboratories.

During the subsequent years of the program, GGS students will focus on their laboratory research, as well as take a small number of specialized courses related to genetics and genomic sciences, or their specific areas of investigation. At the end of the second year of graduate training, students will assemble a thesis committee in consultation with their mentors. This committee will contain 4-6 faculty members, 3 of which should be faculty associated with the GGS theme. By the midpoint of the third year, GGS students must complete their qualifying examination consisting of a written dissertation research proposal in the format of an NIH style grant and an oral defense. The examination will evaluate whether the student has gained a sufficiently broad knowledge necessary for successful academic research. To help in this process, the third year fall curriculum will include a course in scientific writing and grantsmanship with a mock NIH grant review session. After successful completion of the exam the proposal will be submitted to a funding agency (if applicable) for possible support. After passing the qualifying exam and the necessary advanced coursework, GGS students are accepted to candidacy for the Ph.D. degree.

The curriculum of each Ph.D. candidate usually requires five years of training and is individually tailored to the interests and needs of the student by the advisor and a graduate committee chosen by the student. The Ph.D. degree is awarded upon successful defense of your dissertation, which includes an oral presentation of original, creative scientific investigations, and a written dissertation which is expected to include published manuscripts or manuscripts in preparation. The pursuit of the Ph.D. degree is a full-time activity, therefore all graduate students are supported by monetary stipends and do not have any required teaching duties. The level of activity required does not permit outside

jobs or excessive extracurricular activities. Continuous registration and satisfactory academic standing during all terms is required.

## Additional Information

Deadline for Entry Term(s):	Please refer to the theme website for deadline information: <a href="http://www.uab.edu/ggs">http://www.uab.edu/ggs</a>
Deadline for All Application Materials to be in the Graduate School Office:	Please refer to theme website to verify deadline dates.
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE or MCAT

For detailed information, contact:

### Nan Travis

GGG Graduate Program Manager  
UAB, Graduate Biomedical Sciences Office  
Shelby Building, Room 120B  
1825 University Boulevard  
Birmingham, AL 35294-2182  
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Or

Daniel C. Bullard, Ph.D.  
GGG Program Director  
Department of Genetics  
KAUL 602B  
University of Alabama at Birmingham (UAB)  
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Telephone: (205) 934-7768  
Fax: (205) 975-4416  
E-mail: [dcbullard@uab.edu](mailto:dcbullard@uab.edu)

## Course Descriptions for Genetics and Genomic Sciences

### Required Courses

**GBS 720: Genome Structure & Function.** This course will cover a wide variety of topics related to this topic, including genetic variation and polymorphisms, alternative splicing, microRNAs, and novel sequencing and microarray technologies.

**GBS 722: Bioinformatics.** This course will cover a wide variety of different bioinformatics applications, which will be taught through use of available on-line bioinformatics resources. The topics covered will include: introductions to large-scale, generic databases at NCBI, European Bioinformatics Institute, SwissProt, PDB, UniProt and Ensembl; Sequence analysis systems such as BLAST, ORFFinder and GENSCAN, Multiple Sequence Analysis, gene identification in DNA and an introduction to the Human Genome Project; resources that are used in Microarray Data Analysis; Protein sequence analysis using Pfam, Prosite, Prints, Blocks, Protein structure analysis using SCOP, CATH; structural bioinformatics, secondary structure calculation, homology modeling, structure prediction, protein folding, protein-ligand docking and molecular dynamics.

**GBS 723 : Model Systems for Genetic Analysis.** The course will provide students with an in-depth knowledge of the different animal models used for analyses of gene function and genetic pathways. Topics include transgenic and knockout mouse technologies and strategies, large scale genetic screens in *C. elegans* and *Drosophila*, and modeling human genetic diseases in zebrafish.

**GBS 724: Principles of Human Genetics.** This course will address the basic principles of epigenetics and its involvement in many different biological/pathological processes. Epigenetic regulation refers to mechanisms that regulate gene expression without altering DNA sequences. Elucidation of epigenetic regulatory mechanisms has received great attention in the post genomic era. Topics include imprinting, X-inactivation, epigenetic mechanisms of gene regulation, and cancer epigenetics.

**GBS 725 : Grant Proposal Writing.** The objective of the course is to teach students how to effectively write grant proposals. This course will provide hands on training in the preparation of a grant application and demonstrate effective strategies for assembling a successful proposal. With guidance from the faculty, the students will write a NIH style proposal on their dissertation research topic. After the proposal is complete, each grant will be reviewed in a mock NIH study section. Based on the comments from the study section, the student will revise the application and submit the proposal to his/her thesis committee as part of the qualifying examination for admittance into candidacy.

### Elective Courses (Can be taken for advanced course credit)

**GBS 726 : Advanced Medical Genetics.** This course will focus on the medical application of advances in genetics and genomics. Topics include chromosome structure and function and major types of chromosomal abnormalities, cancer genetics and cytogenetics, inborn errors of metabolism, current strategies for detection of mutations associated with genetic disorders, genetic risk assessment and population genetics, and genomic approaches to diagnosis and risk stratification.

**GBS 727: Advanced Human Genomics.** This course will cover the conceptual basis, major discoveries, and unsolved problems in human genomics, with an emphasis on disease applications. The goal is to make students conversant with the structures, functions, and natural histories of human genomes, the computational and experimental methods used to establish that knowledge, the applications of genomics to medical research, and the broader impacts of genomic research on the community. Each topic will be covered by an approximately 90-minute lecture from a subject-specific PI coupled to reading of pieces of primary literature. Students will also participate in 3 student-led journal clubs in which one or more papers are discussed in detail with the help of the teaching faculty. We will also perform 3 interactive sessions to teach basic computational skills in Unix, Perl and R. Grading will be determined by: discussion interaction, computational problem sets due in weeks 4, 6, and 8, and a final project in which students perform a small but cohesive set of bioinformatic analyses to address a question of their choosing, subject to approval/discussion with the teaching faculty. Format: Each of the 7 weeks will include two, 90 minute lectures performed at UAB. In weeks 2, 4, and 6, we will convene at HudsonAlpha for four-hour sessions. Each four-hour session will include ~1 hour of paper discussion, ~1 hour of teaching on a relevant computational topic, and ~2 hours of hands-on interactive data manipulation with commonly

used data types and computational tools. Course meets both on UAB Campus and at Hudson-Alpha in Huntsville.

**GBS 746: Epigenetics.** Epigenetic regulation refers to mechanisms that control gene expression without altering DNA sequences. Elucidation of epigenetic regulatory mechanisms has received great attention in the post-tenomic era. This course will address the basic principles of epigenetics and its involvement in many different biological/pathological processes.

**Systems Biology.** Lectures will consider systems biology approaches in the context of the human genome project, and with an emphasis on simple model systems. Technologies, biological concepts, and the underlying motivation for this emerging area will be discussed using examples available in the literature. The central focus of systems biology is to acquire a more global and quantitative understanding of how living organisms function as complex genetic systems, and how this might provide a more complete understanding of phenotypic traits.

## Other GGS Educational Activities

**Department of Genetics Seminar.** The Department of Genetics Seminar series meets once a week from September through May of each academic year. This is a forum in which invited speakers from other institutions, as well as UAB faculty members, postdoctoral fellows, and advanced graduate students present and discuss their research.

**Genetics and Genomics Journal Club.** Faculty, students, and postdoctoral fellows meet once a week and present papers on a wide variety of topics related to genetics and genomics.

## Immunology Theme

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/immunolgy\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/immunolgy_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Director:	Dr. Peter Burrows
Phone:	(205) 934-6529
E-mail:	peterb@uab.edu
Web site:	<a href="http://www.uab.edu/gbs/immunology/">www.uab.edu/gbs/immunology/</a>

## Theme Information

### Objectives

The Immunology Graduate Theme is a part of the UAB Graduate Biomedical Sciences Program (<http://www.uab.edu/gbs/home>). We are an interdisciplinary program emphasizing the study of multiple aspects of the immune system, from basic molecular mechanisms to whole animal studies and human translational research. The remarkable breadth of our program can be seen in the primary departments of the almost fifty theme faculty members. Faculty from the Departments of Microbiology (<http://www.uab.edu/medicine/microbiology>), Cell Biology (<http://www.uab.edu/medicine/cdib>), Biochemistry and Molecular (<http://www.uab.edu/medicine/biochem>) Genetics (<http://www.uab.edu/medicine/biochem>), Genetics (<https://www.uab.edu/medicine/genetics>), Biology (<http://www.uab.edu/biology>), Pathology (<http://www.uab.edu/medicine/pathology>), Medicine (<http://www.uab.edu/medicine/dom>), Pediatrics (<https://www.uab.edu/medicine/peds>), Environmental Health Sciences (<http://www.soph.uab.edu/ehs>), Epidemiology (<https://www.soph.uab.edu/index.php?q=epi>), Surgery (<http://www.uab.edu/medicine/surgery>), Ophthalmology (<http://www.uab.edu/medicine/eyedoc>), Dermatology

(<http://www.uab.edu/medicine/dermatology>), and Dentistry (<http://dental.uab.edu>) are involved in internationally recognized research and in the training of PhD-level graduate students and postdoctoral fellows. Currently, forty-five students are in training in the laboratories of our immunology faculty. Primary areas of research include: Allergy, Autoimmunity, Cancer Immunology, Clinical/Translational, Developmental Immunology, Host Defense, Immunodeficiency, Immunogenetics, Inflammation, Mucosal Immunology, Neuroimmunology, Structural Immunology, and Transplantation Immunology. Students obtaining a PhD in the Immunology Graduate Theme will be well-versed in modern immunology and have the option to pursue diverse career pathways.

## Admission Requirements

Acceptance is based on undergraduate record (curriculum and grade point average [GPA]), Graduate Record Exam (GRE) scores, letters of recommendation, a personal statement of research and career interests, and past research activities. Domestic candidates who pass the first round of selection will be invited to visit UAB and meet the Immunology faculty and students.

The general requirements for acceptance into the Theme are:

- Minimum GPA of 3.0 on a 4.0 scale
- Combined verbal/quantitative GRE score #1100. New GRE scores should be at least 50% or better on each verbal/quantitative.
- A strong background in biology, chemistry, and/or mathematics. Undergraduate level courses in immunology, cell biology, biochemistry, physics, genetics, organic and analytical chemistry are strongly encouraged. Undergraduate mathematics through calculus is also recommended. International students must submit scores from the Test of English as a Foreign Language (TOEFL) earned within the last two years. Applicants with scores of 600 (paper-based), 250 (computer-based), or 100 (internet-based) or higher will be considered.

All students in the program receive a stipend (currently \$26,000), tuition and fees, and single coverage health insurance. Support is provided by the Theme, by the student's mentor, or through one of many fellowship programs.

## Overview of the Theme

The Theme emphasizes interdisciplinary training in all areas of modern immunology. The first year of the program involves fundamental coursework and three research-based rotations in laboratories of the student's choosing. A qualifying examination and admission to candidacy take place in the second to third year. Advanced coursework, journals clubs, and dissertation research occur in the second and subsequent years. It is expected that completion of the PhD will require five to six years. To broaden their training experience, students are introduced to research at the national and international levels through seminars presented by outside speakers and by attendance at national and international scientific meetings. Students take an active role in inviting and hosting speakers at UAB, and they are strongly encouraged to present their own results at outside meetings.

## Additional Information

Deadline for Entry Term(s):	Consult Theme Director for information
Deadline for All Application Materials to be in the Graduate School Office:	Please refer to theme website to verify deadline dates: <a href="http://www.uab.edu/gbs/immunology">http://www.uab.edu/gbs/immunology</a>

Number of Evaluation Forms      Three

Required:

Entrance Tests                      GRE

For detailed information, contact Dr. Peter Burrows, Theme Director, UAB Immunology Graduate

Theme, SHEL 406, 1825 University Blvd., Birmingham, Alabama 35294-2182.

Telephone (205)934-6529

Fax (205) 996-6749

E-mail peterb@uab.edu

## Course Descriptions

### Core Curriculum

#### BLOCK 1 - BIOCHEMISTRY/METABOLISM

- Amino acids and primary protein structure
- Protein secondary and tertiary structure
- Posttranslational modifications and allosteric changes
- Glycobiology
- Lipid structure and metabolism
- Thermodynamic principles of biochemical reactions
- Enzyme kinetics
- Enzyme mechanisms and regulation
- Amino acid/nitrogen metabolism
- Glycolysis, gluconeogenesis and citric acid cycle
- Glycogenesis, glycogenolysis and pentose phosphate pathway
- Electron transport/oxidative phosphorylation

#### BLOCK 2- GENETICS/MOLECULAR BIOLOGY

- DNA recombination
- Nucleic acids & DNA replication
- Prokaryotic transcription
- Prokaryotic translation
- Prokaryotic gene regulation
- Eukaryotic genome organization
- Eukaryotic DNA replication
- Eukaryotic transcription
- Eukaryotic translation
- Eukaryotic gene regulation I
- Eukaryotic gene regulation II
- Mendelian inheritance
- Genetic variation and polymorphisms

#### BLOCK 3- BIOLOGICAL ORGANIZATION

- Integrated systems: From organelles to organs
- Membrane structure/function
- Cytoskeleton
- Secretion
- Endocytosis, lysosomal targeting, protein degradation
- Biochemistry of signal transduction

- Cell cycle
- Cell-cell junctions and polarity
- ECM and ECM-cell interactions
- Cell motility
- Apoptosis
- Discipline of pharmacology
- Pharmacokinetics

### Theme Specific Courses

**Introductory Immunology.** Introductory Immunology is a team-taught survey course that covers basic concepts of innate and adaptive immunity. These integrated series of lectures provide a firm foundation in immunology, especially for those with minimal immunology background, and serve as an important refresher for the developing immunologist. Students actively participate in the course through weekly presentations of selected immunology topics based on the current literature.

**Lymphocyte Biology.** The objective of this class is to provide first year immunology students with the opportunity to gain a more in-depth understanding of selected aspects of lymphocyte biology. Possible topics include T cell subsets, B cell biology, lymphocyte activation, and transplantation immunology. The course is literature intense and students are required to read and present numerous scientific papers.

**Dendritic Cell Biology.** Understanding the biology and function of the immune system's professional antigen presenting cells, the dendritic cells, is a fast moving challenge. The course will cover the seminal papers in the field that have laid the groundwork for our current understanding of this group of complex cells. The major component of the class will emphasize student presentations of assigned reviews and journal articles. Presentations will include an overview (provided by the review article) and 2-3 papers per class.

**History of Immunology.** This course will examine the concepts that have shaped what we now consider pillars in our knowledge of the immune system. The course will cover the major events and discoveries that led to these established concepts and, where possible, the advent of technologies that facilitated these advances. The course will involve student participation in the form of presentations in selected areas as well as lectures by some individuals who were part of this history.

**Neuroimmunology.** The purpose of this course is threefold;

1. To provide students with a basic overview of immunology and neuroscience in conjunction with a specific focus on how neuro inflammatory processes affect the brain
2. To teach students basic neuroanatomy of the brain
3. To have students understand the clinical implications of neuroinflammatory diseases by attending rounds with clinicians.

How the immune system influences the brain is an emerging field in neuroscience research and is currently not being addressed in a graduate or medical course.

**Innate Immunity.** The study of innate immunity has made a resurgence in recent years and its critical role, not only in host defense against invading pathogens, but in the development of adaptive immune responses is now appreciated. This course will provide an in-depth look at selected aspects of the innate immune response including the cellular and molecular components critical to its development. The course will involve student presentations on selected topics.

**Mucosal Immunology.** The mucosal immune system is essentially the primary site of interaction between invading pathogens and the immune system. Mucosal immunity has always been a strength of the immunology community at UAB and is rarely covered at most other institutions. This class will provide in-depth analysis of the structural features that distinguish the mucosal immune system from the peripheral immune system. Features of innate and adaptive immunity as they relate to mucosal immune responses will also be covered. The course will involve student presentations on selected topics.

## Journal Clubs

MIC 797-00: Cellular and Molecular Immunology Journal Club (<http://www.microbio.uab.edu/CMIJournalClub/JC0809.html>)

MIC 796-00: Neuroimmunology Journal Club (<http://www.microbio.uab.edu/courses/NeuroIm.htm>)

MIC 737-VT: Mucosal Immunology Journal Club (<http://www.microbio.uab.edu/courses/MIC737.htm>)

MIC 772-VT: Bacterial Pathogenesis Journal Club (<http://www.microbio.uab.edu/courses/MIC772.htm>)

MIC 724-VT: Virology Journal Club (<http://www.microbio.uab.edu/courses/MIC724.htm>)

MIC 785-00: Post-Transcriptional Regulatory Mechanisms (<http://www.microbio.uab.edu/courses/MIC785.htm>)

MIC 786-00: Retrovirology Journal Club (<http://www.microbio.uab.edu/courses/MIC786.htm>)

MIC 789-00: Journal Club in Biological Crystallography (<http://www.microbio.uab.edu/courses/MIC789.htm>)

MIC 760: Autoimmunity Journal Club (<http://www.microbio.uab.edu/courses/MIC760.htm>)

MIC 701-00: Inflammation Journal Club (<http://www.microbio.uab.edu/courses/MIC701-00.htm>)

## Microbiology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/microbiology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/microbiology_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D.
Director:	Dr. Janet Yother
Phone:	(205) 934-9531
E-mail:	<a href="mailto:jyother@uab.edu">jyother@uab.edu</a>
Web site:	<a href="http://www.uab.edu/micro">www.uab.edu/micro</a>

## Theme Information

### Objectives

The Microbiology Graduate Program is a part of the UAB Graduate Biomedical Sciences Program (<http://www.uab.edu/gbs/home>). We are an interdisciplinary program emphasizing the study of bacteria, viruses, fungi, and parasites. Over 40 faculty members from the Departments of Microbiology (<http://www.uab.edu/medicine/microbiology>), Cell Biology (<http://www.uab.edu/medicine/cdb>), Biochemistry and Molecular Genetics (<http://www.uab.edu/medicine/biochem>), Genetics (<https://www.uab.edu/medicine/genetics>), Pathology (<http://www.uab.edu/medicine/pathology>), Medicine (<http://www.uab.edu/medicine/dom>), Pediatrics (<https://www.uab.edu/medicine/peds>), and Dentistry (<http://dental.uab.edu>) are involved in internationally renowned research and the training of Ph.D.-level graduate students. Currently, more than 70 students are in training in the laboratories of our faculty. Primary areas of

research interest include the genetics, physiology, and molecular biology of microbes and how microbial pathogens cause disease. Basic cellular processes, host-pathogen interactions, and the design of innovative strategies for the prevention and treatment of infectious diseases are under study in the laboratories of our faculty. Students graduating from the Program are well-versed in modern microbiology and have the experience to pursue a diversity of career opportunities.

## Admission Requirements

Acceptance is based on undergraduate record (curriculum and grade point average [GPA]), Graduate Record Exam (GRE) scores, letters of recommendation, a personal statement of research and career interests, and past research activities. Domestic candidates who pass the first round of selection will be invited to visit UAB and meet the Immunology faculty and students.

The general requirements for acceptance into the Theme are:

- Minimum GPA of 3.0 on a 4.0 scale
- Combined verbal/quantitative GRE score #1100. New GRE scores should be at least 50% or more on each verbal/quantitative.
- A strong background in biology, chemistry, and/or mathematics. Undergraduate level courses in immunology, cell biology, biochemistry, physics, genetics, organic and analytical chemistry are strongly encouraged. Undergraduate mathematics through calculus is also recommended. International students must submit scores from the Test of English as a Foreign Language (TOEFL) earned within the last two years. Applicants with scores of 600 (paper-based), 250 (computer-based), or 100 (internet-based) or higher will be considered.

All students in the program receive a stipend (currently \$26,000), tuition and fees, and single coverage health insurance. Support is provided by the Theme, by the student's mentor, or through one of many fellowship programs.

## Overview of the Program

The program emphasizes interdisciplinary training in all areas of modern microbiology. The first year of the program involves fundamental coursework and three research-based rotations in laboratories of the student's choosing. A qualifying examination is held in the second year. Advanced coursework, journals clubs, and dissertation research occur in the second and subsequent years. It is expected that completion of the program will require five to six years.

To broaden their research experience, students are introduced to research at the national and international levels through seminars presented by outside speakers and by attendance at national and international scientific meetings. Students take an active role in inviting and hosting speakers at UAB, and they are strongly encouraged to present their own results at outside meetings. An annual retreat held off-campus allows students to present their research and fosters collegiality between students, postdoctoral fellows, and faculty.

## Additional Information

Deadline for Entry Term(s):	Consult Program Director for information
Deadline for All Application Materials to be in the Graduate School Office:	Refer to theme website for deadline information: <a href="http://www.uab.edu/micro">http://www.uab.edu/micro</a>

Number of Evaluation Forms Required:	Three
Entrance Tests	GRE

For detailed information, contact Dr. Janet Yother, Program Director, UAB Microbiology Graduate Theme, University of Alabama at Birmingham, BBRB 661, Birmingham, Alabama 35294-2170.  
 Telephone (205)934-9531  
 Fax (205)996-6749  
 E-mail [jyother@uab.edu](mailto:jyother@uab.edu)  
 Web [www.uab.edu/micro](http://www.uab.edu/micro)

## Course Descriptions

### Microbiology Theme

#### Graduate Biomedical Sciences Core Curriculum

##### Block 1 - Biochemistry/Metabolism

- Amino acids and primary protein structure
- Protein secondary and tertiary structure
- Posttranslational modifications and allosteric changes
- Glycobiology
- Lipid structure and metabolism
- Thermodynamic principles of biochemical reactions
- Enzyme kinetics
- Enzyme mechanisms and regulation
- Amino acid/nitrogen metabolism
- Glycolysis, gluconeogenesis and citric acid cycle
- Glycogenesis, glycogenolysis and pentose phosphate pathway
- Electron transport/oxidative phosphorylation

##### Block 2 - Genetics/Molecular Biology

- DNA recombination
- Nucleic acids & DNA replication
- Prokaryotic transcription
- Prokaryotic translation
- Prokaryotic gene regulation
- Eukaryotic genome organization
- Eukaryotic DNA replication
- Eukaryotic transcription
- Eukaryotic translation
- Eukaryotic gene regulation I
- Eukaryotic gene regulation II
- Mendelian inheritance
- Genetic variation and polymorphisms

##### Block 3 - Biological Organization

- Integrated systems: From organelles to organs
- Membrane structure/function
- Cytoskeleton
- Secretion
- Endocytosis, lysosomal targeting, protein degradation
- Biochemistry of signal transduction
- Cell cycle

- Cell-cell junctions and polarity
- ECM and ECM-cell interactions
- Cell motility
- Apoptosis
- Discipline of pharmacology
- Pharmacokinetics

## Neuroscience Theme

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/neuroscience\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/neuroscience_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Co-Directors:	Dr. Scott Wilson, Dr. Tara Desilva
Phone:	(205) 975-5573
E-mail:	<a href="mailto:neuroscience@uab.edu">neuroscience@uab.edu</a>
Web site:	<a href="http://www.neuroscience.uab.edu">http://www.neuroscience.uab.edu</a>

### Theme Information

The UAB Neuroscience Graduate Theme is a portal into the comprehensive neuroscience research opportunities at UAB. Students entering the Neuroscience Graduate Theme will find a home and anchor for their entire graduate experience. Throughout a student's entire Ph.D. career, the faculty and staff of the Neuroscience Graduate Program provide continued support, encouragement, and guidelines for success. The theme-based UAB Neuroscience Graduate Program seeks to equip and train students to become tomorrow's innovative neuroscientists by

- Teaching basic neuroscience ideas that become stepping stones to more in-depth research
- Providing unique professional and scientific avenues through which they can develop their presentation skills, learn critical thinking and how to design experiments
- Offering students the opportunity to choose neuroscience research from a multitude of options available through labs all over campus, not limiting students to a department but, rather, a discipline
- Providing opportunities for informal interaction with other students to discuss research, scientific writing, as well as a social network of peers to assist students in staying grounded. Students enter the neuroscience theme either through direct admit into the program or after their first year when moving into the permanent lab of a neuroscience mentor. Neuroscience theme students follow the neuroscience curriculum and do not join a departmental graduate program nor follow a departmental graduate program curriculum. The student becomes affiliated with the department in which the mentor holds his/her primary appointment for the purpose of the awarding of the degree.

Departments affiliated with the Neuroscience Theme include:

- Neurobiology
- Cell, Developmental & Integrative Biology
- Neurology
- Psychiatry
- Pediatrics
- Pathology
- Vision Sciences

## ADMISSION TO THE PROGRAM

Admission to our program is highly competitive. We generally admit only 6-7 students each year. Students admitted to our students meet and usually exceed general requirements of:

- 3.0 or above undergraduate GPA
- GRE scores of 550 or better on each section for a minimum composite score of 1100 / > 300 on the new scoring system
- Strong background in biology, chemistry and/or mathematics
- Research experience, minimum 6 months bench research
- TOEFL (for international students) of greater than 500 on paper-based test and greater than 173 on computer-based test

**Only online application materials will be accepted.**

### Required Application Materials

#### Domestic students: (No application fee)

- Application and personal statement
- Official transcripts from all undergraduate institutions attended
- Official GRE scores (Institutional code 1856)
- 3 letters of recommendation

#### International students: (\$60 application fee)

- Application and personal statement
- Official transcripts from all undergraduate institutions attended
- Official GRE scores (Institutional code 1856)
- Official TOEFL scores
- 3 letters of recommendation

#### All students accepted into the program receive

- Free tuition
- Free health insurance
- \$26,000/year stipend

## CURRICULUM

All first year students follow the same curriculum, designed to provide them with the foundations they will need as they move into permanent labs and begin their own research projects. Students begin their year attending the Intro to Neurobiology course at the Dauphin Island Sea Lab on Dauphin Island, Alabama, on the Gulf of Mexico. While there, the student is exposed to a variety of learning opportunities, including lectures, hands-on experiments, and going out into the Gulf to "fish" for marine life. Students live at Dauphin Island, dorm style, for 2 1/2 weeks in late summer, working hard with UAB faculty and teaching assistants and playing hard during their downtime. This course provides a very unique opportunity for neuroscience students.

### Overview of General Requirements --

- Students are required to successfully complete 2 electives prior to their last semester.
- Registration for the Student Summer Seminar Series is required for each student each summer semester. Participation includes attendance, completion of an evaluation form for each speaker, and the presentation of a 20 minute PowerPoint talk and 10 minute Q-A session. Students will present once each summer. First year students are excluded from presenting.

- Students must register for and attend a seminar series of their choosing (with advice from their mentor) each semester until graduation.
- A biostatistics course is required - BY 755, and is taken during the spring semester.
- All students must successfully complete an ethics course. This is taken during the fall semester of the student's 2nd year (GRD 717).
- Students must register for a journal club of their choosing (with advice from their mentor) each fall and spring semester until graduation.
- Two first-authored papers accepted to an appropriate journal are required unless the student's committee recommends/approves differently.
- Students must be registered for a minimum of 9 hours during the Fall semester, 9 hours during the Spring semester, and 9 hours during the Summer semester each year.
- 18 credit hours of dissertation research are required before graduation. This means you must have a minimum of two semesters between the semester of your Qualifying Exam and your final defense semester.
- You must be registered for at least 3 credit hours during the semester in which you plan to graduate, unless told otherwise.

## Additional Information

Deadline for Entry Term(s):	Consult theme website for deadline information: <a href="http://www.neuroscience.uab.edu">http://www.neuroscience.uab.edu</a>
Deadline for All Application Materials to be in the Graduate School Office:	Consult theme website for deadline information: <a href="http://www.neuroscience.uab.edu">http://www.neuroscience.uab.edu</a>
Number of Evaluation Forms Required:	3
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

For detailed information, contact:

#### Patricia Matthews

Program Manager  
UAB Neuroscience Graduate Theme  
SHEL 120D / 1825 University Boulevard  
Birmingham, AL 35294-2182  
Tel: 205.934.7034  
Fax: 205.996.6749  
Email: [pm1@uab.edu](mailto:pm1@uab.edu)

## Pathobiology and Molecular Medicine Theme

Degree Offered:	Ph.D.
Directors:	Dr. Michelle V. Fanucchi and Dr. Rakesh P. Patel
Program Manager	Kristin Boggs
Phone:	(205) 934-7810
E-mail:	<a href="mailto:pbmm@uab.edu">pbmm@uab.edu</a>
Web site:	<a href="http://www.uab.edu/pbmm">http://www.uab.edu/pbmm</a>

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/pathobiology\\_molecular\\_medicine\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/pathobiology_molecular_medicine_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## Theme Information and Course Requirements

The Pathobiology & Molecular Medicine (PBMM) Graduate Program at UAB is the successor of the popular and highly successful Integrative Biomedical Sciences Graduate Program established in 1999. PBMM represents an expansion of the Integrative Biomedical Sciences Program and is designed to give students the very best multidisciplinary training within the emerging and exciting field of molecular medicine. The main objective of the program is to expose students to a diverse faculty with research interests that range from molecules - to whole organisms - to disease processes - to new therapies. Our premise is that students, when trained in basic principles of molecular and cellular biology, in addition to organ-based physiology, pharmacology and pathology, will be prepared to study biological processes at any level of organization. The important biomedical issues of today are sufficiently complex that the successful investigator must be able to tackle these issues using integrated, multifaceted approaches.

The advantage of joining PBMM is that students have full access to all 350 faculty within the GBS, including those not within PBMM. This gives students the broadest opportunity possible to move their studies in the direction that they find most interesting. In addition, PBMM faculty utilize state-of-the-art resources and ideas to drive the field of molecular medicine forward. Within PBMM, you will have the opportunity to immerse yourself at the leading edge of biomedicine and share in the excitement first-hand by working alongside research pioneers.

During your first year, you will complete a series of rigorous courses that includes training in biochemistry, molecular biology, genetics, cellular physiology and pathobiology. Due to the interdisciplinary nature of Graduate Biomedical Sciences, students have the option to select their advanced, elective courses from courses numbered at the 700-level and above in participating departments. Those include courses within the School of Medicine, School of Public Health, and other Joint Health Sciences. Courses should be chosen in consultation with the student's mentor and committee to ensure coursework supports his/her research. You will also have the opportunity to take courses within designated "Focus Areas." These Focus Areas are organized around specific research strengths represented by faculty within the PBMM and address important issues in diseases such as diabetes, heart disease and cancer among others. In addition, you will have full access to courses offered by other programs within the GBS where strengths exist in multiple fields including immunology, neuroscience, structural biology and others. There will also be ample time allotted for you to attend research seminars, learn to make scientific presentations and to perform 3 laboratory rotations. These rotations are designed to give the student a practical introduction to bench research and to help the student choose a faculty mentor. After the first year there will be additional coursework directed in your area of interest, but the main focus will be on intensive research training within the laboratory. Here, guided by your mentor and graduate advisory committee, you will develop critical technical and analytical skills that will form the basis of your dissertation research.

Graduates of the PBMM training program are fully prepared to address the most complex and challenging issues in disease biology and therapy and are positioned to pursue work in academic, industrial or government research or related positions. Training for the PhD degree is

generally completed within four to six years, depending on the student's background and training goals.

## Admission Requirements

### Undergraduate Education

A **baccalaureate degree in the natural or physical sciences** is required. Undergraduate level courses in organic and analytical chemistry, cell biology, biochemistry and genetics are strongly encouraged. Undergraduate mathematics through calculus and physics are also recommended.

### Grades & Scores

The Graduate School recommends that entering students have a minimum grade point average (**GPA**) of 3.0 on a 4.0 scale and a minimum combined verbal/quantitative score on the Graduate Record Exam (**GRE**) of 300 (new test) or 1100 (old test).

International students must submit scores from the Test of English as a Foreign Language (**TOEFL**) earned within the last two years. Applicants with scores of 600 (paper-based) or 80 (internet-based) or higher will be considered.

### Research

Most students admitted to the program have undergraduate or postgraduate **research experience**.

### Application Review

Applications are reviewed by the GBS Admissions Committee, representing all GBS thematic programs.

**Acceptance** will be based on a combination of factors including:

- Undergraduate performance (both the curriculum and grade point average)
- Letters of recommendation
- GRE scores
- A personal statement of research and career interests
- Previous research experience
- Personal interview, at program expense (international applicants may be interviewed by phone or video conference) Admission to our Programs is very competitive and the number of positions is limited; thus not every qualified applicant can be offered a position.

## Academic Program

### Year 1

#### Courses

Integrated, science-based teaching is the foundation of every PBMM course. You will learn from a team of faculty that will contribute their expertise in the basic biology and physiology of each topic coupled with an emphasis on understanding relevant diseases, clinical correlates, and therapeutic approaches. The lectures also emphasize the scientific techniques and experimental approaches that are essential to the concepts being discussed. In addition, many instructors assign journal readings and independent projects, which may include Web-based searches or literature reviews, to actively engage you in the learning process.

- First year students in all Graduate Biomedical Sciences Themes take a common 12-week core curriculum emphasizing the fundamentals of biochemistry, genetics, and cell biology. This coursework will include an overview of the principles of biochemistry, metabolism, molecular biology, genetics and biological organization. This will be followed by an integrated course in experimental medicine that focuses on mechanisms that drive specific diseases and exposes students to approaches being taken by UAB scientists who are addressing disease-based problems. Additional coursework in the first year will include integrative physiology, pathophysiology, endocrinology, immunology, pharmacology and molecular medicine.
- Journal Club

You will present relevant published research papers to help hone your presentation skills and to teach you to learn to think like a scientist.

- Seminar Series

Faculty from participating departments, other UAB faculty, and faculty from other institutions discuss their latest research.

- Lab Rotations (3 rotations of 10 weeks each)

Based on your specific interests, you will choose from a wide range of research laboratories available to you. This "hands on" research experience will provide you with the background to decide on a laboratory and mentor to guide you through your dissertation research.

## Second year and beyond - Qualifying examination, courses, journal clubs, research, completion of degree.

**Qualifying examination.** Students must pass a Qualifying Examination that assesses their general knowledge, ability to read the literature, and ability to formulate and defend testable hypotheses. The examination involves a written proposal and oral defense of the proposal.

**Journal Clubs.** From the second year until completion of the program, students participate in a Journal Club related to their specific area of interest. The purpose of the journal club is to enhance the ability to critically read the literature and to stay abreast of current findings in the field.

**Pathobiology and Molecular Medicine courses.** Advanced courses in areas relevant to the student's area of interest are required and may be completed anytime from the second year on. Students are encouraged to take these courses as early as possible in order to achieve the most benefit in their training.

**Dissertation research.** After completion of the Qualifying Examination, and no later than the third year, the student forms a dissertation committee comprised of five faculty members (including the mentor) whose expertise will be beneficial in helping direct the research and course of study.

**Awarding of the PhD degree.** The PhD is awarded upon completion of the academic requirements and defense of the dissertation. The dissertation consists of a written document that is expected to include published papers or manuscripts in preparation, along with a scholarly introduction and discussion of the work that has been completed. A successful private defense of the dissertation in front of the dissertation

committee is then followed by a seminar presentation and public defense of the dissertation as the final step in completion of the PhD degree.

## Student Support

All students accepted into PBMM receive a **competitive annual stipend** and **fully paid tuition and fees**. Single coverage **health insurance is also provided** at no cost to the student through VIVA Health UAB. **The annual stipend for the 2013-2014 academic year is \$26,000.** The total annual award value, including stipend, tuition, fees and health insurance is over \$37,000. Stipends are reviewed and updated regularly.

First-year students are funded through the PBMM Graduate Program by Graduate School Fellowships and occasionally by other national and University fellowships. In subsequent years, students are supported through their advisor's research grants, institutional funds or training grants. In addition, highly qualified students are encouraged to apply for individual fellowship awards, with the guidance of their advisors. See Fellowships and Awards (<http://www.uab.edu/graduate/area-3/current-students/90-funding-information-for-graduate-students>) for additional fellowship information and resources.

## Additional Information

Deadline for Entry Term(s):	Consult Program Director for information
Deadline for All Application Materials to be in the Graduate School Office:	Please refer to Theme Website: <a href="http://www.uab.edu/pbmm">http://www.uab.edu/pbmm</a>
Letters of Recommendation Required:	Three
Entrance Tests (University Code: 1856)	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

For detailed information, contact:

### Theme Director

Michelle V. Fanucchi, Ph.D.  
205.934.7230 (office)  
fanucchi@uab.edu

### Theme Co-Director

Rakesh P. Patel, Ph.D.  
205.975.9225 (office)  
rakeshp@uab.edu

Kristin Boggs  
Theme Manager  
Tel: 205.934.7810 (office)  
Fax: 205.996.6749  
Email: pbmm@uab.edu

# School of Business

**Dean:** Dr. Eric P. Jack

The School of Business includes departments in Accounting and Finance; Management, Information Systems and Qualitative Methods; and Marketing, Industrial Distribution and Economics.

The School offers traditional degree programs leading to a Master of Accounting (M.Ac.) and a Master of Business Administration (M.B.A.). Online degree programs leading to a Master of Accounting (M.Ac.) and a Master of Science in Management Information Systems (M.S.M.I.S.) as well as a Graduate Certificate in Social Media are also available through the School of Business.

Located in the heart of Alabama's business center, the UAB School of Business offers an engaging learning environment with classrooms extending well beyond the walls of the UAB campus. Our unique location allows our faculty to integrate the practical experiences of the State's leading companies - from Fortune 500 corporations to entrepreneurial startups - into the programs we offer. Our students gain valuable, real-world experience through a wide variety of internships and other opportunities in the business community.

## Accounting and Finance

The Department of Accounting & Finance (ACFN) at the University of Alabama at Birmingham offers a premier education in accounting and finance. We have a diverse and vibrant study body to which we provide resources found at large universities including a Bloomberg Finance Lab and international study abroad classes. We are committed to providing a quality, practice-oriented educational experience that prepares graduates for professional careers in business, finance and accounting, or to pursue graduate studies.

We are proud to offer nationally ranked and accredited undergraduate and graduate programs. Accreditation by the Association to Advance Collegiate Schools of Business (AACSB) (<http://www.aacsb.edu/AACSB-Accredited>) is the highest honor a business school or an accounting program can achieve and UAB has held this distinction over 30 years. UAB is among only 178 universities worldwide to achieve this seal of excellence in both business and accounting. In our accounting program, we offer both a Bachelor of Science in Accounting (<http://www.uab.edu/business/degrees-certificates/undergraduate/accounting-and-finance>) and Master of Accounting (MAc) (<http://www.uab.edu/business/degrees-certificates/master-of-accounting>) degrees. These degrees can be earned in the classroom in day and evening classes. Alternatively, these accounting degrees can be earned completely online. ([http://accounting.businessdegrees.uab.edu/?Access\\_Code=UAB-ACC-SEO2&utm\\_source=ap\\_traffic&utm\\_medium=referral&utm\\_campaign=s\\_searchengine](http://accounting.businessdegrees.uab.edu/?Access_Code=UAB-ACC-SEO2&utm_source=ap_traffic&utm_medium=referral&utm_campaign=s_searchengine)) Our dedicated and caring ACFN faculty are exceptional teacher scholars and teach in both degree programs; in the classroom and online. They excel not only as great teachers and mentors, but also as positive motivators. They have made and continue to make intellectual contributions to our disciplines and are extremely active in the professional business community.

## Accounting

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/accounting\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/accounting_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.Ac.
Interim Director:	Dr. Lary Cowart
Phone:	(205) 934-8501
E-mail:	lcowart@uab.edu
Web site:	www.uab.edu/business

## Mission and Objective

The mission statement of the Department of Accounting and Finance is as follows: "The Department of Accounting and Finance is committed to providing a high-quality, practice-oriented educational experience to a largely urban population. The Department will offer, through its accounting programs, an educational foundation that will prepare students for professional careers in business and accounting or enable them to pursue graduate studies. The Department will contribute to the understanding and application of accounting and business knowledge through the scholarship activities of the faculty. The Department will maintain a continuing relationship with the professional community while supporting the internal activities of the University."

The objective of the Master of Accounting Program is to further develop in students the skills required for success in the accounting profession. Offered primarily in an evening format, it is designed for those individuals with a knowledge base in accounting and business who desire to broaden their communication, interpersonal, technological, and applied research skills. The Master of Accounting Program is accredited by the AACSB International-The Association to Advance Collegiate Schools of Business (AACSB International, [www.aacsb.edu](http://www.aacsb.edu)).

## Admission Requirements

Requirements for admission to the program include the following:

1. A bachelor's degree in accounting from an institution accredited by AACSB International received within the five-year period immediately preceding the desired term of enrollment (or a bachelor's degree in any discipline from a regionally accredited institution). Applicants who do not have an undergraduate accounting degree will be required to complete up to nine foundation courses in addition to the classes listed in the Program Description section and will be required to maintain at least a B average in the foundation courses numbered 300 and above. The foundation courses that must be completed are as follows:

2. Requirements	Hours
AC 200 Principles of Accounting I	3
AC 201 Principles of Accounting II	3
AC 300 Financial Accounting I	3
AC 310 Financial Accounting II	3
AC 304 Accounting Information Systems	3
AC 401 Cost Accounting	3
AC 402 Income Taxation I	3
AC 423 External Auditing	3
AC 430 Financial Accounting III	3

- A minimum score of 500 on the Graduate Management Admission Test (GMAT) administered by the Graduate Management Admission Council (GMAC, [www.gmac.com](http://www.gmac.com)) within the five-year period immediately preceding the desired term of enrollment. **The GMAT is waived for UAB accounting graduates and other students who take all of the foundation accounting courses at the undergraduate level at UAB.**
- Satisfactory academic performance as measured by the undergraduate accounting grade point average. [Note: UAB undergraduates planning to pursue the M.Ac. degree should take and AC 423 as their two accounting electives. If they do not take AC 423, they should plan to take AC 523 as an elective in the M.Ac. program before taking AC 606.]

The following additional admission requirements may apply to international applicants:

A minimum composite score of 80 with a minimum score of 20 in each section of the Test of English as a Foreign Language (TOEFL) administered by the Educational Testing Service (ETS, [www.toefl.org](http://www.toefl.org)) within the five-year period immediately preceding the desired term of enrollment. An ILETS score

A "catalog match" transcript evaluation report prepared by Educational Credential Evaluators, Inc. (ECE, [www.ece.org](http://www.ece.org)).

Admission to the program is competitive. The number of qualified applicants admitted may be limited as deemed appropriate by the Master of Accounting Program Committee.

## Program Description—Master of Accounting

The Master of Accounting Program consists of 30 semester hours of graduate credit—21 hours of required courses and 9 hours of electives:

Requirements	Hours
<b>Required courses (7)</b>	
LS 557 Business Law for Accountants (Offered in Fall only)	3
AC 514 Governmental and Not-for-Profit Accounting (Offered Fall, Spring, Summer)	3
AC 580 Advanced Financial Accounting (Offered in Fall only)	3
AC 600 Current Topics Fin. Acct. (Offered in Spring only)	3
AC 606 Advanced Auditing and Attestation (Offered in Spring only)	3
AC 620 Tax Entities (Offered in Fall only)	3
AC 672 Advanced Information Technology Auditing (Offered in Spring only)	3
<b>Elective courses (3) *</b>	9
<b>Total Hours</b>	<b>30</b>

## Elective courses \* Course List

Requirements	Hours
LS 571 Legal Elements of Fraud Investigation	3
AC 513 Internal Auditing	3
AC 523 External Auditing	3
AC 564 Accounting Internship	3
AC 572 Forensic Accounting and Information Technology Auditing	3
AC 573 Fraud Examination	3
AC 574 Forensic Accounting Practicum	1-3
AC 590 Advanced Topics in Accounting	3

AC 612	Corporate Governance	3
AC 617	Technology Based Business Process Reengineering	3

Or MBA courses numbered 600 or above approved by the M.Ac. Program Director. Students **may not** take any of the following MBA courses as electives to be used towards their MAc degree including:

MBA 601	Accounting and Finance for Managers	3
MBA 608	Strategic Cost Analysis and Decision Making	3
MBA 637	Operations and Supply Chain Management	3

## Program Description—Master of Accounting with an Internal Auditing Concentration

Students who have not previously taken an internal auditing course at the undergraduate level can pursue a Master of Accounting degree with an Internal Auditing Concentration by pursuing the following program of study. The Master of Accounting Program with an Internal Auditing concentration consists of 30 semester hours of graduate credit—24 hours of required courses and 6 hours of approved electives:

## Required courses for Internal Auditing Concentration (8):

Requirements	Hours
LS 557 Business Law for Accountants	3
AC 513 Internal Auditing	3
AC 514 Governmental and Not-for-Profit Accounting	3
AC 580 Advanced Financial Accounting	3
AC 600 Current Topics Fin. Acct.	3
AC 606 Advanced Auditing and Attestation	3
AC 620 Tax Entities	3
AC 672 Advanced Information Technology Auditing	3

## Elective courses for internal auditing concentration (2):

Requirements	Hours
AC 564 Accounting Internship	3
AC 572 Forensic Accounting and Information Technology Auditing	3
AC 573 Fraud Examination	3
AC 612 Corporate Governance	3

Other internal audit related courses approved by the M.Ac. Program Committee.

## Fast-Track Master of Accounting Program

The Fast-track Master of Accounting (M.Ac.) Program is open to high-achieving undergraduate students pursuing a BS degree in accounting at UAB. Students admitted to the Fast-Track M.Ac. Program can take up to 12 hours of graduate courses at undergraduate tuition rates while they are completing their Bachelor's degree in accounting and have these graduate courses count toward the M.Ac. degree as long as A's or B's are earned in the courses. After earning the BS degree, students in the Fast-Track Program continue pursuing the M.Ac. degree as described above. Students in the Fast-Track M.Ac. program are not required to take the GMAT.

## Fast-Track M.Ac. Program Admission Requirements

To be admitted to the Fast-Track Master of Accounting Program, students must:

- Have completed at least 15 hours of coursework at UAB.
- Be within 45 hours of graduation.
- Have a cumulative GPA of 3.4 or higher.
- Have completed the following courses with at least a “B” in each course and have at least a 3.3 average in the three courses:

AC 300 – Financial Accounting I

AC 304 – Accounting Information Systems

AC 310 – Financial Accounting II

***Students who think they are eligible for the Fast-Track M.Ac. Program should contact the M.Ac. Program Director at [lcowart@uab.edu](mailto:lcowart@uab.edu).***

## Uniform CPA Examination

Eligibility requirements for sitting for the Uniform CPA examination vary among the states. The state of Alabama, through its Accountancy Laws and the Alabama State Board of Public Accountancy (ASBPA, [www.asbpa.state.al.us](http://www.asbpa.state.al.us)), requires that applicants for the Uniform CPA Examination hold a baccalaureate degree from an accredited institution and possess a total of 150 semester hours of postsecondary education, including at least 33 semester hours of accounting in specified areas at the upper-division or graduate level. UAB students can meet these requirements in several ways:

1. By obtaining an undergraduate accounting degree (or its equivalent) and completing certain additional course work as specified under the Board’s Accountancy Rules. Students interested in this option should contact Jessica Smith, the undergraduate accounting advisor in the School of Business, for specific guidance. Those interested in this option who already hold degrees from other institutions should also contact Jessica at [jessmith@uab.edu](mailto:jessmith@uab.edu).
2. By obtaining a Master of Accounting degree. Those who hold a Master of Accounting degree from an accounting program accredited by AACSB International (as is UAB’s) meet the academic requirements for taking the Uniform CPA Examination.
3. By obtaining a Master of Business Administration degree. Those who already hold an undergraduate accounting degree (or its equivalent) and who desire a graduate degree in business may establish their academic eligibility under the Board’s Accountancy Rules by completing as part of their M.B.A. requirements certain graduate accounting course work as determined by the Master of Accounting Program Director. Students interested in this option should first contact Christy Manning, the Program Coordinator in the Graduate School of Management, at [cmanning@uab.edu](mailto:cmanning@uab.edu).

## Other Professional Accounting Certifications

Other examinations leading to professional certification (CMA, CIA, CFE, CISA, etc.) generally do not require academic course work beyond the baccalaureate degree. Students interested in other accounting certifications should contact any member of the accounting faculty for further information.

## Additional Information

Deadline for Entry Term(s):	The program admits every semester
Deadline for All Application Materials to be in the Graduate School Office:	Two months before term begins Summer: April 1, Fall: July 1, Spring: November 1
Number of Evaluation Forms Required:	None, unless required by Program Committee
Entrance Tests:	GMAT score of 500 or higher. TOEFL (minimum composite score of 80 and a minimum score of 20 for each section) and TWE for international applicants whose native language is not English.
Comments:	An ECE "catalog match" is required of applicants whose degrees are from foreign institutions. Inquiries regarding financial assistance should be directed to the University’s Office of Financial Aid.

## Contact Information

For detailed information contact the Department of Accounting and Finance:

School of Business, BEC 305  
1150 Tenth Avenue South  
Birmingham, AL 35294-4460

Telephone 205-934-8817

FAX 205-934-9200

E-mail, M.Ac. [lcowart@uab.edu](mailto:lcowart@uab.edu)

E-mail, M.B.A. [cmanning@uab.edu](mailto:cmanning@uab.edu)

Web [www.uab.edu/business](http://www.uab.edu/business)

## Management, Information Systems, and Quantitative Methods

The department of Management, Information Systems & Quantitative Methods (MISQ) supports the School of Business’s mission through a diverse group of active researchers and teacher-scholars who are engaged with students in both undergraduate and MBA programs. We also work closely with the professional community to ensure student success through hands-on experiential learning with real-world projects and internships.

The department has two undergraduate programs (Management and Information Systems) (<http://www.uab.edu/business/degrees-certificates/undergraduate/management-information-systems-and-quantitative-methods>) along with the responsibility for teaching courses in Quantitative Methods. For the MBA program (<http://www.uab.edu/business/degrees-certificates/mba>), our faculty also teaches several courses in these three areas. The Management program covers a wide body of knowledge including leadership, strategy, organizational behavior, entrepreneurship, human resources management, operations management and supply chain management. Students have the opportunity to major in general management, business administration, and human resource management.

The Information Systems program focuses on how information systems are used to achieve business objectives and covers a broad body of knowledge including systems project management, systems analysis and design, data management, software application development and programming, information assurance and security, telecommunications and network security. Students have the opportunity to major in information systems with optional clusters for subtopics within IS such as application development, systems development, information security and forensics. The Quantitative Methods area covers the body of knowledge for decision sciences including probability and statistics, forecasting, optimization (using deterministic and stochastic models) and simulation.

## Business Administration

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/business\\_administration\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/business_administration_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.B.A.
Director:	Kenneth L. Miller, MBA, EdD
Phone:	(205) 934-8855
E-mail:	klmiller@uab.edu
Web site:	www.uab.edu/mba

## Program Objectives

The objectives of the UAB MBA program are to provide professional, graduate-level education and to maintain a continuing relationship with the business community through service activities. In order to deal effectively with increasingly complex and ambiguous problems of business and organizations, managers require training in sophisticated analytical techniques, appreciation for the behavioral facets of management, as well as an ability to anticipate and adapt to changes in an industrial environment. The UAB MBA program is designed to provide competency in management and to acquaint the student with all aspects of business activity. The program stresses critical thinking and is decision oriented, focusing on key aspects of business administration. It seeks to prepare graduates for leadership roles in business, industry, government, or social service.

## Admission Requirements

Applicants must be holders of baccalaureate degrees from regionally accredited institutions and must present evidence including, but not limited to, admission test scores (see below) and undergraduate records indicating high promise of success in business study at the graduate level. Preference is given to applicants with a minimum of two years of professional work experience after completion of the undergraduate degree.

Applicants must have completed satisfactorily an undergraduate calculus course within the previous five years of application. Students without calculus or students who took calculus more than 5 years prior to entry may prove proficiency by enrolling in a college level business calculus course or by passing 4 proficiency tests offered through the Graduate School of Management. The Graduate School of Management offers a calculus review course in both fall and spring for applicants who need assistance in preparing for the proficiency exams.

All applicants are required to complete a Business Boot Camp the semester before beginning the program. This course is designed to

acquaint students from non-business backgrounds with basic terminology and concepts in business, as well as baseline knowledge in accounting, finance and statistics. The course consists of modules covering specific areas of business. This review also allows applicants from business backgrounds to brush up on fundamentals. The course is self-paced and delivered online.

In addition, foreign applicants must have a minimum score of 550 on the TOEFL paper-based test or a minimum of 20 in each section and a minimum of 80 composite score on the internet-based test. IELTS scores of 6 may be accepted in lieu of TOEFL scores.

Waivers for the GMAT may be granted for applicants who meet specific criteria established by the UAB School of Business. This includes applicants with advanced degrees who also have an acceptable score on an equivalent graduate admissions test. Applicants meeting the criteria are not guaranteed a waiver, but rather qualify to be considered for a waiver.

Candidates interested in non-degree seeking admission must have an undergraduate cumulative GPA of 3.0 or higher. Non-degree seeking students are limited to earning 12 hours credit in this status. The option to enter as non-degree seeking will be offered to candidates who miss the application deadline for applying to the MBA program, but who submit all materials prior to the beginning of the term and meet admission requirements, provided that there are seats available. We will require a resume, copies of transcripts, and GMAT scores along with the application. Permission of the MBA Coordinator is needed in order to register for classes as a non-degree seeking student.

## Graduate Certificates

Students who meet the criteria for entering as a non-degree seeking student (see above) may pursue a certificate. Degree-seeking students may pursue a certificate in addition to their degree. Students wishing to pursue only the certificate may apply as a degree-seeking student and choose "certificate" as their program of choice. The application for graduate-level certificate should be used when the requirements for a graduate-level certificate have been completed. This form is different than the application for degree, used when completing an entire program. If completing a certificate and a graduate program, both are required.

The application for certificate must be received in the Graduate School by the deadline date listed on the Graduate School website.

## Graduate Certificate in Social Media

This certificate is designed to help students and working professionals advance in their careers by improving understanding of how to use the latest social media technologies to benefit organizational stakeholders, such as managers, organizations, employees, customers and partners. Emphasis is on application of new and emerging social media technologies, to serve those currently working in the IS and marketing related fields, and to prepare individuals from other fields by building the skills needed to succeed in social media careers.

Requirements	Hours
MBA 614 Social Media and Virtual Communities in Business	3
MBA 616 Web Analytics	3
MBA 617 Introduction to Business Intelligence	3
A social media course from any graduate program at UAB with approval of advisor	

## Certificate in Technology Commercialization and Entrepreneurship

The Graduate Certificate in Technology Commercialization and Entrepreneurship is designed to expose students (MBA and non-MBA) and scientists to the business foundations of entrepreneurship and technology commercialization. The program is designed to blend knowledge and experiential learning to help move scientific discovery and inventions out of the lab and into the marketplace.

Requirements	Hours
Required courses:	
Choose 4 courses from the following:	
A social media course from any graduate program at UAB with approval of advisor	3
MBA 681 From Idea to IPO (Fall)	3
MBA 673 Technology Venture Business Planning (Spring)	3
MBA 682 The Art of the Deal: Negotiating Technology Agreements	3
MBA 690 Special Topics (Managing Innovation - Summer)	3
MBA 691 MBA Internship (Any semester)	1-3
Total Hours	16-18

For additional information contact:

Doug Ayers, PhD  
Associate Professor  
(205) 934-8856  
Office: BEC 204-B  
dayers@uab.edu

## Program Information

The MBA program is suitable not only for students with baccalaureate degrees in business but also for those who have degrees in engineering, the sciences, or liberal arts.

The MBA program is taught in an evening format and is designed for students who work during the day. Most students can complete degree requirements within two years. Students may choose to follow either a one or two year plan of study to guarantee graduation with a specified timeframe or may pursue the degree at their own pace. Students have 5 years from term of entry to complete degree requirements. Concentrations are available in finance, information technology management, and health care management. Each concentration consists of nine semester hours. The MBA program is accredited by AACSB - The Association to Advance Collegiate Schools of Business.

After the student is admitted to the program, the MBA graduate advisor is available to meet with the students, if needed, to help outline a plan of study. Each candidate for the MBA must file a formal application for the degree in the Graduate School of Management Office one term prior to the expected term of graduation.

## Additional Information

Admission Terms Available	Fall, Spring, Summer
Deadline for All Application Materials to be in the Graduate School Office:	Fall admission - July 1st; Spring admission - Nov. 1st; Summer admission - April 1st
Number of Evaluation Forms Required:	Two letters of reference or *recommendation forms *(preferred)

### Entrance Tests

GMAT (TOEFL and TWE also required for international applicants whose native language is not English.) In certain cases the GRE can be accepted for those applying to dual degree programs.

## Contact Information

For detailed information contact Christy Manning, Coordinator of Graduate Programs in Business: School of Business, Room 210 1150 South 10th Avenue, Birmingham, Alabama 35294-4460.  
Telephone 205-934-8817 or 205-934-8815  
E-mail [cmanning@uab.edu](mailto:cmanning@uab.edu)  
Web [www.uab.edu/mba](http://www.uab.edu/mba)

## Management Information Systems

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/management\\_information\\_systems\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/management_information_systems_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.
Director:	Allen Johnston
Phone:	(205) 934-8870
Email:	<a href="mailto:ajohnston@uab.edu">ajohnston@uab.edu</a>
Web site:	<a href="http://www.uab.edu/business/departments-centers/academic-departments/management-informationsystems-quantitativemethods">http://www.uab.edu/business/departments-centers/academic-departments/management-informationsystems-quantitativemethods</a>

## Program Objectives

The University of Alabama at Birmingham's **School of Business, Department of Management, Information Systems and Quantitative Methods (MISQ)** Master of Science in Management Information Systems (MS MIS) program focuses on the business side of information systems and how to strategically position technology to maximize value for an organization. The mission of the MS in Management Information Systems degree program is to teach students the latest technical and managerial skills related to information systems in organizations, by tailoring the educational experience to meet the needs of working professionals. This program provides the broad perspective needed to advance in the information systems management field, and allow students to tailor their education based on specific career goals by focusing in one of three areas: **Web and Mobile Development, Information Security, or IT Management**. UAB's emphasis is on the managerial aspects of information systems, and although the program does provide opportunities for skill development in the latest technologies, the goal of the program is to help those currently working in information systems related fields move into managerial positions. We help students advance in their careers, by improving understanding of how to use the latest information technologies to benefit organizational stakeholders, such as managers, organizations, employees, customers and partners.

The Management of Information Systems field is growing at an exponential rate as organizations struggle to stay current with new and emerging technologies, such as mobile applications and social media. Professionals are needed that can help organizations understand the

business potential of these new technologies, how to develop new applications to meet changing market dynamics, and how to secure these systems from threats. Students graduating from this program are prepared to succeed in an exciting and dynamic career field combining a solid technical information system foundation with business skills so they can immediately contribute to solving business problems, and can drill down into specific fields, such as IT management, web and mobile development or information security.

## Admission Requirements

Applicants for the MS MIS program must have graduated with a baccalaureate degree in an information technology/systems related field from a regionally accredited college or university with a minimum overall grade point average (GPA) of 3.0 on a 4.0 scale. Those not meeting this requirement must have:

- Completed a baccalaureate degree in other areas of study from a regionally accredited college or university, or completed another graduate degree; AND
- Completed the UAB MS MIS Bridge Program; OR
- Submitted evidence to UAB as to significant work experience in IS/IT/ computer programming, enterprise systems, databases, and/or system design and analysis; OR
- Submitted evidence to UAB as to IS/IT/Computer industry certifications in computer programming, enterprise systems, databases, and/or system design and analysis.
- Applicants must provide evidence of relevant work experience (a minimum of 3 years of experience is preferred)
- Applicants must have a GMAT score of 500 or higher.

Those not meeting this requirement can:

- Submit a GRE combined verbal and quantitative score of 940 (score of 293 after August 1, 2011) or higher (GRE scores many not be more than 5 years old), OR
- Show 5 years of relevant work experience
- Show documentation of completing a graduate degree in any discipline with a minimum GPA of 3.0 on a 4.0 scale

## International Applicants

International applicants whose native language isn't English are required to show proof of English proficiency by submitting a TOEFL, IELTS, or PTE Academic test score. Official test scores are required and should be sent directly from the testing agency to UAB. Scores should not be more than 2 years old. The minimum score requirements are as follows:

- TOEFL (Test of English as a Foreign Language) score of 550 on the paper-based examination, 213 on the computer-based version, or 80 on the Internet-based version
- IELTS (International English Language Testing Service) score of 6.0 overall with at least a 5.0 on each section of the examination

Application Requirements

- Online application with a \$45 application fee or \$60 international application fee
- Current resume
- Personal Statement: statement must include the student's professional applications and how they faced and overcame challenges in their life

- References: 2 from supervisors, trainers, or instructors who can confirm requisite knowledge and skills as identified with the admission qualifications

## Program Requirements

Requirements	Hours	
Core Courses:		
IS 611	Info Tech and Bus Strategy	3
IS 612	IT Governance and Management	3
IS 613	Info Security Mgmt	3
IS 615	Soc Media/Virtual Communities	3
IS 617	Intro to Business Intelligence	3
IS 618	Tech Based Project MG	3
Concentration Courses:		
Information Security		
IS 620	Attack and Penetration	3
IS 621	Incident Resp./Bus. Continuity	3
IS 622	CISSP I	3
IS 623	CISSP II	3
Web and Mobile Development		
IS 630	Web Development	3
IS 631	Web Interface Design/Content	3
IS 616	Web Analytics	3
IS 633	Mobile Applications	3
IT Management		
IS 640	Tech Plans & Capital Budgeting	3
IS 641	Leadership in IT	3
Any IS or WDSM concentration course		3
Any IS or WDSM concentration course		3
Bridge Courses:		
IS 591	Intro Networking / Comp Prog	3
IS 592	Systems Analysis and Database	3

## Program Information

The MS MIS program is taught in an online format. Most students can complete degree requirements within 1.6 years. Concentrations are available in Web and Mobile Development, Information Security, and IT Management. Each concentration consists of twelve semester hours. The School of Business is accredited by AACSB—The Association to Advance Collegiate Schools of Business.

Admission Terms Available	Fall, Spring and Summer
Deadline for All Application Materials to be in the Graduate School Office:	Fall admission - July 15th / Spring admission - Nov. 15th / Summer admission - April 15th
Number of Evaluation Forms Required:	Two letters of reference or *recommendation forms *(preferred)
Entrance Tests	GMAT (TOEFL and TWE also required for international applicants whose native language is not English.)

## Contact Information

For detailed information contact **Allen Johnston, Associate Professor: School of Business, Room 317C 1150 South 10th Avenue, Birmingham, Alabama 35294-4460.**

Telephone 205-934-8870

E-mail [ajohnston@uab.edu](mailto:ajohnston@uab.edu)

Web <http://misdegree.businessdegrees.uab.edu>

# School of Dentistry

**Dean:** Dr. Michael S. Reddy

The School of Dentistry offers degree programs leading to a Master of Science in Dentistry and the DMD/PhD in Dentistry. Advanced clinical specialty training and research, leading to the degree of Master of Science in Dentistry, is offered to meet two areas of need: the preparation of qualified teachers and investigators in the various branches of academic dentistry and the preparation of fully trained dental specialists.

The UAB School of Dentistry DMD/PhD program prepares students for an exciting career in dental academics through an innovative integrated clinician scientist training program. Students in the program are allowed to apply credits earned in both dental and graduate school towards a specialized program earning both a DMD degree and a PhD degree in a biomedical science.

## Dentistry (M.S.)

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/dentistry\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/dentistry_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.
Director, Dentistry:	Dr. Amjad Javed
Phone:	(205) 996-5124
E-mail:	javeda@uab.edu
Web site:	www.dental.uab.edu

## Program Information

Advanced clinical specialty training and research, leading to the degree of Master of Science in Dentistry, is offered to meet two areas of need: the preparation of qualified teachers and investigators in the various branches of academic dentistry and the preparation of fully trained dental specialists. The program is a combination of the conventional work for the M.S. degree plus the achievement of proficiency in some phase of clinical dentistry. The course of study requires a minimum of two academic years; most students will require three years to complete the work. The applicant must be a graduate of an accredited school of dentistry, or an undergraduate school and must have achieved, in both pre-dental and dental requirements, a superior scholastic record.

At the time of enrollment in the Graduate School, the student is assigned an appropriate faculty advisor, who works with the student in outlining a course of study consistent with objectives. This curriculum must cover the three areas of a selected phase of clinical dentistry, a related basic health science, and research.

## Major and Minor

The major field of study must be selected from the following: dental biomaterials, endodontics, general dentistry, hospital dentistry, maxillofacial prosthetics, oral surgery, orthodontics, pediatric dentistry, periodontics, prosthodontics, public health dentistry, or oral biology. The program requires a minimum of 30 graduate credits. Not less than 18 semester hours of credit in the program must be in the major subject, with the minimum acceptable grade being B. A minor must involve at least six

semester hours of study in one or two basic health science departments related to the student's major and research interests.

By the time the student has been in residence one year and has finished some of both major and minor courses, the student and the advisor should recommend to the Graduate School dean at least two additional graduate faculty members, one from outside the student's specialty area, for appointment to the graduate study committee. The student should discuss with his/her committee plans for the remaining course of study, including a proposed thesis title and outline of experimental design. Depending upon the nature of the research plan, it may be desirable for a different advisor to be appointed, serving either as co-chair or as new chair of the graduate study committee. At this time, demonstration of a reading knowledge related to literature review, competence in research and experimental design, understanding of biostatistics, experience with computer and other techniques may be required, as appropriate to the student's investigation.

## Admission to Candidacy

When the graduate study committee is satisfied that the student is prepared to undertake the research, the student is admitted to candidacy for the master's degree. This step should be taken at least two semesters before the anticipated date of completion of the program.

## Research and Thesis

Sufficient research work to train the candidate in the principles and methods of scientific investigation is required. The research project should involve the student's own intensive work in some area of dentistry, preferably related to the basic health sciences. The thesis is based on the research study and must show the candidate's ability to delineate a problem, logically plan its solution, and present the results of the work in an orderly fashion. Familiarity with the literature of the field is expected.

## Final Examination

The final oral examination is administered by the student's graduate study committee before the deadline is set by the Graduate School. The examination begins with oral presentation and defense of the thesis and may include any work fundamental thereto. At the close of the examination, the committee votes on the candidate, taking into account all of the work undertaken. Majority approval is required.

## Additional Information

Deadline for Entry Term(s):	Consult Program Director for information
Deadline for All Application Materials to be in the Graduate School Office:	Variable
Number of Evaluation Forms Required:	Three
Entrance Tests	DDS (TOEFL and TWE also required for international applicants whose native language is not English.)

## Contact Information

For detailed information, contact the graduate program director, Dr. Amjad Javed, University of Alabama School of Dentistry, School of

Dentistry Building, SDB 714, 1919 Seventh Avenue South, Birmingham, AL 35294-0007.

Telephone 205-934-5407

Fax 205-934-0208

E-mail [javeda@uab.edu](mailto:javeda@uab.edu)

Web [www.dental.uab.edu](http://www.dental.uab.edu)

## Master of Science with Emphasis in Oral Biology

The School of Dentistry in collaboration with the joint basic science Departments at The University of Alabama offers graduate studies leading to a Master of Science degree with emphasis in Oral Biology. The objective of the program is to relate basic biological sciences to health and disease of the oral cavity. This program is designed for individuals holding a D.D.S., D.M.D., or B.S. in Science (e.g. biology, chemistry etc) with little or no experience in basic research. This program will provide insight into dental academics and teaching in basic or applied research.

Students are required to pursue studies in oral biology and in the basic biological sciences. These studies include course work, seminars, journal club, and a laboratory component. Course work includes formal lectures from within the School of Dentistry and courses offered by the basic sciences departments, School of Public Health and the School of Medicine. The seminars and journal club include the "Dean's Seminar Series" and the Oral and Skeletal Biology Journal Club and other Research seminars within UAB. The Seminars cover a wide array of topics relevant to various research areas as well as other disciplines of dentistry or dental education. A significant portion of the program is devoted to the design and completion of a thesis research project in the form of one publishable paper in a reputable scientific journal which is a requirement of the program. Thesis research will be carried out under the supervision of a faculty member. Faculty involved in the Master of Science program with emphasis in Oral Biology are actively engaged in research that represents a variety of oral and basic biomedical disciplines within the UAB. The diversity of the research interests offers opportunities for students to pursue studies in a stimulating research environment.

The program requires a **minimum of 30 graduate credits**. Of these, at least 24 credits must be selected from graduate-level courses approved for the program and a minimum of 6 credits at the master's research level. Each student must orally defend a master's thesis based on their research. If the applicant holds a D.D.S. or D.M.D. degree, the Master in Science may be combined with a clinical dental specialty training only after acceptance into the clinical program.

### Admission

Applicants must hold a B.S., D.D.S., or D.M.D., or an equivalent degree and should possess a cumulative grade-point average of at least 3.00 on a 4.00 scale. Standardized test such as GRE or DAT is required for all applicants. Students whose first language is not English must earn a score of 560 or better on the Test of English as a Foreign Language (TOEFL).

Applicants are asked to submit a statement describing past research experience and current research interests, and stating how completion of the Master in Science program fits into their career goals.

For International applicants; transcripts and all related material should be received no later than **February 28** to enroll in the fall semester of the same year.

For US applicants; transcripts and all related material should be received no later than **March 31** to enroll in the fall semester of the same year.

Financial assistance is not available. Students must show that they can support themselves.

### Contact

For further information and application materials, contact:

Jannet Katz, DDS, PhD

Professor

Department of Pediatric Dentistry

University of Alabama School of Dentistry

BBRB 713

1720 2nd Avenue South

Birmingham, AL 35294-2170

Telephone: (205) 934-2878

FAX: (205) 934-1426

e-mail: [meow@uab.edu](mailto:meow@uab.edu)

## DMD/PhD Program

Degree Offered:	DMD/PhD
Director:	Dr. Steve Filler
Phone:	(205) 934-3387
E-mail:	<a href="mailto:admissions@cs1.dental.uab.edu">admissions@cs1.dental.uab.edu</a>
Web site:	<a href="http://dental.uab.edu/students/prospective-students/dmd-phd-program.html">http://dental.uab.edu/students/prospective-students/dmd-phd-program.html</a>

### DMD/PhD Program

The UAB School of Dentistry DMD/PhD program prepares students for an exciting career in dental academics through an innovative integrated clinician scientist training program. Applicants interested in the DMD/PhD program must have completed an undergraduate degree program (BA or BS) that fulfills all requirements for both dental school and graduate school admissions.

Interested students need to contact Dr. Steve Filler, Director of Admissions, UAB-School of Dentistry at 205.934.3387 or by email at [admissions@cs1.dental.uab.edu](mailto:admissions@cs1.dental.uab.edu).

### Important Points:

1. DMD and PhD degrees will be awarded within the same year upon completion of all dental and graduate school requirements.
2. Duration of the program is 8 years; however students with strong prior research experience have completed the program in 7 years.
3. Students accepted into the DMD/PhD program that do not complete the PhD training program, are required to reapply to the School of Dentistry for admission as a traditional DMD candidate.

### To apply to the program, applicants must:

1. Contact Dr. Steve Filler at UAB School of Dentistry indicating intent to apply for the DMD/PhD program.
2. Submit a formal application to the UAB School of Dentistry through AADSAS as early as possible.

3. Submit an online application to the UAB Graduate School (<http://www.uab.edu/graduate/online-forms>) through one of the Biomedical Sciences Interdisciplinary Themes, Engineering (Biomedical or Materials), Public Health, or other graduate program.
4. Have successfully taken the Dental Aptitude Test (DAT).
5. Have completed all the recommended courses for both dental and graduate school admissions.
6. Have prior hands-on-research experience.

**Note:** Separate applications are required to the UAB School of Dentistry and the UAB Graduate School (<http://www.uab.edu/graduate>). UAB School of Dentistry participates in the American Association of Dental Schools Application Service (AADSAS). Students should initiate AADSAS applications as early as possible.

Applicants under consideration will be requested to file a supplemental DMD/PhD application. Applicants qualified for admission will be invited for a personal interview with the Admissions Committee.

Candidates will be evaluated based on their academic record, DAT scores, research accomplishments, publications, commitment to a research dental academic career, character, and personality traits indicating potential for success in a DMD/PhD program.

### **Sequence of the DMD/PhD Program:**

1. Students first enter the Graduate School and complete at least two years of coursework including graduate school qualification examinations and dissertation proposal defense maintaining at least a 3.0 GPA.
2. After research PhD candidacy with approval of the DMD/PhD Advisory Committee the student transitions into the DMD curriculum in lock step with a dental class from years 2-4.
3. DMD and PhD degrees are awarded within the same year upon completion of the degrees programs.

### **Financial Support Opportunities:**

Students enrolled in the DMD/PhD training program are eligible for funding through the School of Dentistry's NIDCR supported T-90 Dental Academic Research Training (DART) Program or an individual NIDCR supported F-30 Training Award. See details about these programs at the following links: DART Program (<http://dental.uab.edu/research/training-programs/dart/dental-academic-research-training-program.html>) and the NIDCR F-30 grant application (<http://grants.nih.gov/grants/guide/pa-files/PAR-08-119.html>.)

# School of Education

## General Information

UAB offers graduate programs that lead to certification in a variety of K-12 teaching disciplines (Biology, Language Arts, Early Childhood Education, English as a Second Language, etc.), School Counseling, and Instructional Leadership and non-certification programs such as Community Health Education, Clinical Mental Health Counseling, and Kinesiology with an Exercise Science concentration. A complete listing and description of all graduate programs are described in the Department of Curriculum and Instruction and Department of Human Studies sections of the catalog. Most certification programs have both master's (MAEd) and a post-master's Education Specialist (Ed.S.) degree. Additionally, the School of Education offers doctoral programs in Early Childhood Education (PhD), Educational Leadership (EdD), and Health Education/Health Promotion (PhD).

All certification programs in the School of Education are fully approved by the National Council for Accreditation of Teacher Education (NCATE). Teacher certification programs within the School of Education have been approved by the Alabama State Board of Education. The School Counseling program has also been accredited by the Council for Accreditation of Counseling & Related Educational Programs (CACREP).

## Degrees and Certificates

Degrees are awarded by UAB in recognition of scholastic achievement and may be pursued for their own sake. However, employment in the public schools is governed not by the degree but by the professional certificate issued by the Alabama State Department of Education (ALSDE). Since many students in these programs are preparing for work in the public schools, the pursuit of a degree is usually coupled with pursuit of SDE certification. There is a rough correspondence between degree level and certification class, as follows:

Degree Level	Certification Class
Bachelor's	B
Master's	A
Specialist (post-master's)	AA
Doctoral	No Equivalent

In spite of this correspondence, we emphasize that the admission and completion requirements for the degree and for the certificate are often significantly different. Furthermore, not all education students are pursuing SDE certification. Students seeking certification should verify requirements with an advisor or program director. State regulations governing certification change often; therefore, it is incumbent upon the student to seek advisement each term. Students should not register for any coursework without having first met with an advisor.

## Interdisciplinary Programs

The PhD in Health Education / Health Promotion is a University of Alabama System degree jointly administered by three units: UAB School of Education, UAB School of Public Health, and UA College of Human Environmental Sciences. Students draw upon the expertise and resources of a diverse and highly qualified faculty. Graduates in the PhD program develop advanced training to become leading researchers, clinicians and faculty in a variety of work settings such as universities,

businesses, government agencies, and foundations. We strive to create a rigorous scholarly and supportive atmosphere for students to develop intellectually to acquire the knowledge, skills, and dispositions necessary to be highly competent and ethical health education professionals.

This program is designed to provide students with the coursework and practical experience to become leading researchers and practitioners in Health Education and Health Promotion. Course work includes a core of courses in advanced research and statistical methods, social and behavioral sciences, and the completion of a research internship and dissertation.

## Curriculum and Instruction

Chair:	Dr. Lynn Kirkland
Phone:	(205) 934-8358
E-mail:	lkirk@uab.edu
Web site:	<a href="http://www.uab.edu/education/ci/">http://www.uab.edu/education/ci/</a>
Degree offered:	

Education, Early Childhood	Ph.D., Ed.S., M.A.Ed.
Education, Elementary	Ed.S., M.A.Ed.
Education, Secondary	Ed.S., M.A.Ed.
Art Education	M.A.Ed.
Music Education	M.A.Ed.
English as a Second Language	Ed.S., M.A.Ed.
Reading	M.A. Ed.
Special Education	Ed.S, M.A.Ed.
Teacher Leader	Ed.S.

## Program Contact Information

Program Coordinator Room Phone Number  
Secondary and Middle School Education (<http://www.uab.edu/education/ci/secondary-education>) Dr. Susan Spezzini 119 (205) 934-8357  
English as a Second Language (<http://www.uab.edu/education/esl>) Dr. Susan Spezzini 119 (205) 934-8357

Arts Education (<http://www.uab.edu/education/ci/arts-education-program-description>) Dr. Susan Spezzini 119 (205) 934-8357

Teacher Leader (<http://www.uab.edu/education/ci/teacher-leader>) Dr. Susan Spezzini 119 (205) 934-8357

Special Education (<http://www.uab.edu/education/ci>) Dr. Kay Emfinger 107 (205)934-7003

Early Childhood Education/Elementary Education (<http://www.uab.edu/education/ci/elementary-and-early-childhood-education-program>) Dr. Kay Emfinger 107 (205) 934-7003

Reading Education (<http://www.uab.edu/education/ci/reading-education-program-description>) Dr. Lynn Kirkland 100 (205) 934-8358

All Other Programs Dr. Lynn Kirkland 100 (205) 934-8358

## Graduate Programs

The M.A.Ed. and Ed.S. programs emphasize improving the teaching skills of the student and broadening the student's understanding of the field(s) of teaching specialization. Numerous teaching

fields are available. All prospective students must apply for admission through the Graduate School.

The M.A.Ed. program requires a minimum of 30-32 semester hours of study, and the Ed.S. program requires at least an additional 30 semester hours. All programs require a written final examination or comprehensive electronic portfolio and a minimum GPA of 3.00 for master's degree and 3.25 for the Ed.S. An outline of the specific course requirements can be obtained from the following link: <http://www.uab.edu/education/studentservices/general-information/checklists>. The M.A.Ed. programs satisfy the academic requirements for the Alabama State Department of Education Class A Professional Certificate and a M.A.Ed. degree. The Ed.S. programs satisfy academic requirements for the State Department of Education Class AA Professional Certificate and an Ed.S. degree. See also the section "Education (General Information)" earlier in this catalog.

The program leading to the Doctor of Philosophy (Ph.D.) degree in early childhood education is sufficiently flexible to accommodate the interests and previous preparation of the student, but it must include an internship and a substantial research component culminating in the completion of a dissertation. The minimum admission requirements are those of the UAB Graduate School. However, admission is highly selective, and most successful applicants have qualifications much higher than the minimum. Admission is open with ongoing application considerations. Application packets must be complete in the Graduate School office before the applicant can be considered for the program.

## Contact Information

For detailed information, contact Dr. Kay Emfinger (Early Childhood, Elementary, Special Education) or, Dr. Susan Spezzini (Secondary Education, Arts Education, Teacher Leader, and English as a Second Language), or Dr. Lynn Kirkland (Reading Education)

UAB Department of Curriculum and Instruction, EB 100, 1720 2nd Avenue South, Birmingham, Alabama 35294-1250.  
Telephone 205-934-5371  
Web [www.ed.uab.edu/education/ci](http://www.ed.uab.edu/education/ci)

## Art Education

UAB's Art Education program is housed within the Department of Curriculum and Instruction. This program consists of a Master's of Arts degree in Art Education and also an alternative master's degree in Art Education. The first purpose of this Art Education program is to train educators in meeting the evolving needs of learners in grades P-12 within today's rapidly changing society. Its second purpose is to deliver cutting-edge instruction through a standards-based, inquiry-focused approach that prepares educators to use state-of-the-art instructional strategies in their own classrooms. Its third purpose is to ensure that a quality program is available to pre-service and in-service teachers who may be unable to attend class during traditional class hours. UAB's teacher education

program is unique in how it combines online support from Blackboard with a variety of delivery formats:

- blended courses (online alternating with face-to-face evenings)
- flexible summer programming
- totally online platforms
- Saturday classes

Prospective students should contact the Program Director, Dr. Susan Spezzini, at [spezzini@uab.edu](mailto:spezzini@uab.edu) (205-934-8357).

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Early Childhood Education

UAB's Early Childhood Education program (M.A.Ed., Ed.S., Ph.D.) embodies a three-fold purpose. Its first purpose is to train educators in meeting the evolving needs of learners, primarily in grades P-6, within today's rapidly changing society. Its second purpose is to deliver cutting-edge instruction through a standards-based, inquiry-focused approach. Based on constructivism, this approach prepares prospective and experienced educators to use state-of-the-art instructional strategies in their own classrooms. Its third purpose is to ensure that a quality program is available to pre-service and in-service teachers who may be unable to attend class during traditional class hours. This program is unique in how it combines online support from the learning management system (i.e. Blackboard, Moodle, Edmodo) with a variety of delivery formats:

- blended courses (online alternating with face-to-face)
- professional learning communities
- flexible summer programming
- internships and practicums
- totally online platforms
- Saturday classes

These purposes are expanded through the Ed.S. program. This advanced degree program infuses an inquiry-focused approach that prepares teachers for assuming leadership roles in curriculum development and instructional delivery. It also provides experienced teachers with collaborative skills and mentoring techniques for serving as reflective practitioners to guide change and positively impact student achievement and school improvement. Teachers with Class A certification can pursue Ed.S.-level certification in elementary education or early childhood education. By then pursuing the Ph.D. program in early childhood education, they can then explore relevant issues, theories, and practice at an even higher level.

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Elementary Education

UAB's Elementary Education program (M.A.Ed., Ed.S.) embodies a three-fold purpose. Its first purpose is to train educators in meeting the evolving needs of learners, primarily in grades P-6, within today's

rapidly changing society. Its second purpose is to deliver cutting-edge instruction through a standards-based, inquiry-focused approach. Based on constructivism, this approach prepares prospective and experienced educators to use state-of-the-art instructional strategies in their own classrooms. Its third purpose is to ensure that a quality program is available to pre-service and in-service teachers who may be unable to attend class during traditional class hours. This program is unique in how it combines online support from the learning management system (i.e. Blackboard, Moodle, Edmodo) with a variety of delivery formats:

- blended courses (online alternating with face-to-face)
- professional learning communities
- flexible summer programming
- internships and practicums
- totally online platforms
- Saturday classes

These purposes are expanded through the Ed.S. program. This advanced degree program infuses an inquiry-focused approach that prepares teachers for assuming leadership roles in curriculum development and instructional delivery. It also provides experienced teachers with collaborative skills and mentoring techniques for serving as reflective practitioners to guide change and positively impact student achievement and school improvement. Teachers with Class A certification can pursue EdS-level certification in elementary education.

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## English as a Second Language

UAB's graduate degree program in ESL is comprised of a master of arts (M.A.Ed.) degree and an Educational Specialist (Ed.S.) degree. Both degrees prepare candidates to earn teacher certification in ESL from pre-school (P) through 12th grade.

UAB's MAEd/ESL embodies a three-fold purpose. Its first purpose is to train educators in meeting the needs of the growing population of English learners (ELs), both children and adults, in Alabama and abroad. Its second purpose is to deliver cutting-edge instruction through a standards-based, inquiry-focused approach. Its third purpose is to ensure that a quality MAEd/ESL program is available to teachers throughout the state. Accessible to educators all over Alabama, this MAEd/ESL program is unique in how it combines online support from Blackboard with a variety of delivery formats:

- blended courses (online alternating with face-to-face)
- professional learning communities
- one-week summer teacher institutes
- flexible summer programming
- internships and practicums
- totally online platforms
- Saturday classes

These purposes are expanded and enhanced by the EdS program. This advanced degree offers standards-based concentrations within discipline areas. It infuses an inquiry-focused teacher leader approach that prepares teachers for assuming leadership roles in curriculum

development and instructional delivery. It also provides experienced teachers with collaborative skills to serve as reflective practitioners in guiding school change as well as with mentoring techniques to positively impact student achievement and school improvement.

Prospective students should contact the Program Director, Dr. Susan Spezzini, at [spezzini@uab.edu](mailto:spezzini@uab.edu) (205-934-8357).

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Music Education

UAB's Music Education program consists of a Master of Arts degree in Music Education and also an Alternative Master's degree in Music Education. The Music Education is housed in the Department of Curriculum and Instruction. This program's first purpose is to train educators in meeting the evolving needs of learners in grades P-12 within today's rapidly changing society. Its second purpose is to deliver cutting-edge instruction through a standards-based, inquiry-focused approach that prepares educators to use state-of-the-art instructional strategies in their own classrooms. Its third purpose is to ensure that a quality program is available to pre-service and in-service teachers who may be unable to attend class during traditional class hours. UAB's teacher education program is unique in how it combines online support from Blackboard with a variety of delivery formats:

- blended courses (online alternating with face-to-face evenings)
- flexible summer programming
- totally online platforms
- Saturday classes

Prospective students should contact the Program Director, Dr. Susan Spezzini, at [spezzini@uab.edu](mailto:spezzini@uab.edu) (205-934-8357).

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Reading

The Reading Education master's program (M.A.Ed.) prepares teachers to serve as reading specialists and to improve their classroom skills in teaching reading. Reading candidates will receive in-depth knowledge of reading pedagogy and implementation during their program. The reading candidates participate in extensive work with children/students in diverse groupings and settings. A portfolio of professional development in reading is completed by the end of the program.

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Secondary Education

UAB's Secondary Education program prepares pre-service and in-service teachers for teaching in both Middle School and High School. This secondary education program offers the following graduate degrees: Master of Arts in Education (MAEd) and Educational Specialist (Ed.S.).

UAB's Secondary Education program embodies a three-fold purpose. Its first purpose is to train educators in meeting the evolving needs of learners, primarily in grades 6-12, within today's rapidly changing society. Based on constructivism, its second purpose is to deliver cutting-edge instruction through a standards-based, inquiry-focused approach that prepares educators to use state-of-the-art instructional strategies in their own classrooms. Its third purpose is to ensure that a quality program is available to pre-service and in-service teachers who may be unable to attend class during traditional class hours. This program is unique in how it combines online support from Blackboard with a variety of delivery formats:

- blended courses (online & face-to-face evenings)
- professional learning communities
- flexible summer programming
- totally online platforms
- Saturday classes

These purposes are expanded and enhanced by the Ed.S. program. This advanced degree offers standards-based concentrations within discipline areas. It infuses an inquiry-focused teacher leader approach that prepares teachers for assuming leadership roles in curriculum development and instructional delivery. It also provides experienced teachers with collaborative skills to serve as reflective practitioners in guiding school change as well as with mentoring techniques to positively impact student achievement and school improvement.

Prospective students should contact the Program Director, Dr. Susan Spezzini, at [spezzini@uab.edu](mailto:spezzini@uab.edu) (205-934-8357).

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Special Education

Welcome to UAB where students become skilled, reflective educators through Special Education graduate degree programs in Collaborative Teacher (CT) K-6, 6-12, Early Childhood Special Education (ECSE), and Visual Impairment (VI). These innovative program offer degrees and/or certification at three levels—alternative masters, traditional masters and specialist.

The alternative masters program (AMP) is for graduate students who do not already hold teacher certification in elementary or early childhood education. To be eligible for seeking initial teacher certification at a masters level, applicants must have an undergraduate degree with a 2.5+ GPA on their transcript from a regionally accredited college. They must have passed the Basic Skills test and the Praxis II exam in the targeted teaching field and also met other criteria stipulated by the ALSDE. Upon completing the AMP, candidates earn alternative Class A certification in this teaching field.

The traditional masters program (MAE) is for teachers who already hold Class B initial certification in any area of education. Upon completing the MAE, they earn Class A certification in the special education teaching field.

The Collaborative Teacher Autism Spectrum Disorders Educational Specialist (EdS) program is for teachers who already hold either an Alabama Class B or Class A certificate in any field of special education OR have at least 3 years of verified, full-time teaching experience with special populations and hold a valid Class A Professional Educator Certificate.

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Teacher Leader

The Ed.S. program in Teacher Leadership provides teachers with an avenue for career enhancement and advancement. This program prepares teachers for serving as professional development facilitators, instructional coaches, lead teachers, department chairs, curriculum coordinators, and program area specialists.

Through the standards-based approach of UAB's Ed.S. Teacher Leader program, teachers learn state-of-the-art instructional strategies for meeting the evolving needs of diverse learners within today's rapidly changing society. They acquire collaborative skills to serve as reflective practitioners and dynamic leaders in guiding school change and effectiveness. They also learn mentoring techniques for positively impacting student achievement and school improvement.

At UAB, the Teacher Leader program was designed with an executive delivery model. As such, it is accessible to teachers who live at a distance from UAB and also to those who prefer to take courses in non-traditional delivery formats. Courses are delivered through blended instruction (face-to-face alternating with online) and totally online platforms as well as through professional learning communities. This 30-hour program contains six 5-hour modules. Each of these modules consists of a 3-hour content course, a 1-hour research course (R), and a 1-hour field experience course (L). Teachers concentrate on one academic focus per term by taking one module at a time. Moreover, by enrolling in 5 graduate credit hours per term, they are eligible for financial aid during each of the program's 6 semesters. The EdS Teacher Leader program has a rolling admission, and students can start any semester.

For additional information about the Ed.S. Teacher Leader program, please contact Dr. Susan Spezzini, Program Director, at [spezzini@uab.edu](mailto:spezzini@uab.edu) (205-934-8357).

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

# Human Studies

## Program Contact Information

Program	Coordinator	Room	Phone Number
Counselor Education	Dr. Larry Tyson	152	(205) 975-2491
Educational Leadership	Dr. Loucrecia Collins	223	(205) 975-1984
Health Education - MAEd	Dr. Retta Evans	259	(205) 996-2701
Health Education - PhD	Dr. Cynthia Petri	206	(205) 934-8342
Kinesiology (formerly Physical Education) - Teacher Certification	Dr. Sandra Sims	207	(205) 996-2721
Kinesiology (formerly Physical Education) - Exercise Physiology	Dr. Jane Roy	205	(205) 934-1757
Research	Dr. Melanie Shores	246	(205) 975-8487
Foundations	Dr. Andrew McKnight	222	(205) 934-6232

## Educational Foundations

The Educational Foundations (EDF) Program examines how educational institutions shape and are shaped by the social and cultural structures within our society. Our mission is to offer a program that examines current teaching contexts and practice, research, and theory with the aim of increasing our professional candidates' knowledge and understanding of the socio-cultural, historical, political, and economic factors, as well as the philosophical underpinnings, that influence education and shape the societies and world in which we live. Within a diverse world, we also believe that professional educators should recognize a profound need to intentionally learn about and incorporate their students' personal experiences, cultures, and community resources into their instruction and programs. It is through our courses that students come to encounter, interrogate, better understand, and embrace the increasingly diverse landscape of our society and P-12 students.

## Educational Psychology and Research (EPR) is a service program within the UAB School of Education.

At the undergraduate level, we provide courses in Psychological Foundations and Measurement and Evaluation that are necessary for all prospective teachers to complete an undergraduate teaching degree. We also house the undergraduate Introduction to Statistics that serves both the Physical Education and Exercise Science programs.

At the graduate level, we provide Educational Psychology courses that meet the program requirements for graduate teacher certification programs as well as courses taken for recertification and electives for

other programs. We also house the research and statistics courses that are requirements for the three doctoral programs within the School of Education. These courses also attract graduate students from schools outside the School of Education such as Nursing, Public Health, and the School of Health Professions, to mention a few. Additionally, we serve numerous Masters and Educational Specialists degree programs with courses needed to complete these degrees as well.

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Overview

The program in Counselor Education at the University of Alabama at Birmingham prepares Clinical Mental Health and School counselors at the Master's level. At the master's level, students acquire core knowledge and clinical skills, which enable them to enter the profession of counseling.

All counseling concentrations (Clinical Mental Health and School) are designed to meet the course-work and field experiences requirements for professional licensure in the State of Alabama. The School Concentration is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The School Counseling Concentration meets the course work and field experiences required by the Alabama State Department of Education for certification.

The Counselor Education program at the University of Alabama at Birmingham is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The accreditation is through January 15, 2018. The Clinical Mental Health Counseling concentration, a 61 hour program, is currently accredited under the 2001 standards for Community Counseling programs as a Community Counseling program. The CACREP 2009 standards combine the Community Counseling and Mental Health Counseling standards into standards for Clinical Mental Health Counseling programs. The counseling program intends to seek accreditation for this program as a Clinical Mental Health Counseling program when it comes up for reaccreditation, per CACREP guidelines.

## Admission Process

Consideration for admission to graduate study in counseling will occur each term. The completed application packet must be received by the [Counselor Education Program](#) from the Graduate School by the dates shown:

Entry Term	Deadline
Fall	June 1
Spring	October 1
Summer	April 1

Admission to graduate study in counseling is initiated through the Graduate School and all required materials are to be submitted per specified instructions delineated by the Graduate School.

Each applicant seeking admission to a counseling program concentration must include with the other required materials, a typewritten statement of professional purpose that reflects the applicant's background, development, pertinent work-related experience, professional career

objectives and specified ways that completion of this program will contribute to his/her goal for becoming a professional counselor.

#### Standardized Test Scores and GPA Requirements

GPA 2.75 or better

GRE 850 (combined score of verbal and quantitative) or,

MAT 388

The application packet is reviewed by the Counselor Education faculty. Applicants deemed to have acceptable scores, strong references, appropriate statement of purposes, and grades will be invited for an interview that will include a group experience and a writing sample with the Counselor Education faculty. Applicants should not infer they have been admitted into the program if granted an admissions interview. Selection will be made by the Counselor Education faculty after reviewing the applicant's credentials in their entirety, and some candidates meeting minimum requirements may not be admitted. Candidates participating in the interview may be given one of two decisions: a) admit, b) denied. Students are notified of their admission status following the interview.

#### Non-Degree Seeking Students

Potential students may take classes prior to admission to the Counselor Education Program as "non-degree seeking" students. However, non-degree seeking students are limited to 12 hours of coursework that may be transferred into the Counselor Education Program. Non-degree seeking students may enroll in elective courses with the permission of the instructor. It would be important for non-degree seeking students to make an advising appointment with a Counselor Education faculty member prior to enrolling in Area II courses as choices made could impact on future clinical placements. Non-degree seeking students are not permitted to take Area I counseling courses without permission of the instructor. It is also important to note that students taking coursework as a non-degree seeking student do so at their own risk. Enrolling and passing non-degree seeking coursework does not guarantee admission into the program as admission criteria (e.g., test scores, undergraduate GPA, and interview) are the primary factors considered when reviewing student suitability for the program

## Program Outcomes

Students in the program are required to meet specific outcomes for the program. These outcomes involve knowledge, skills, and abilities. Outcomes are met when students pass critical "high stakes" assessments in the program. Failure to achieve the required outcomes will result in termination from the program.

## Evaluation of Candidates

There are 7 Checkpoints in the assessment system for counseling candidates: Admissions, Course-based Assessments, Comprehensive Exams, Practicum, Internship, and Eligibility for Graduation/Certification. Evaluation of the counselor-in-training is an on-going process. The faculty reserves the right to assess the candidate's appropriateness to be a professional counselor.

## Dispositions

Counselor Education faculty individually review the professional dispositions (behaviors and attitudes) of students within each course in accordance with the School of Education's policy and procedure. Additionally, faculty will collectively review student dispositions and overall progress in the program at the end of each semester.

Dispositional areas identified as deficient could result in termination from the program.

## Clinical Experience: Master's Level

**Upon admission, within the first semester of study, students in the school counseling concentration must submit to fingerprinting and a Background Review conducted by the Alabama State Department of Education at the student's cost. For information on the cost and how to complete this requirement, go to <http://background.alabama.gov/>. No school counseling student shall begin a clinical placement (Practicum or Internship in an education environment) in Alabama without a suitability letter from the Alabama State Department of Education demonstrating that the student's criminal background has been reviewed and cleared by the Department of Education. Clinical Mental Health counseling students are not required to submit to fingerprinting or a background review upon admission to the Counselor Education Program. However, Clinical Mental Health counseling students are required to complete clinical placements in order to obtain the master's degree in counseling and many of the outside agencies/entities require fingerprinting and background reviews prior to accepting a student for clinical placement. For all counseling students, the appearance of one or more felonies and/or several misdemeanors on a student's background review may negatively impact placement potential and/or credential obtainment.**

Prerequisites for the clinical experience include successful completion of required coursework, meeting the required outcomes and competencies in Areas I and II, and successful completion of comprehensive exams. The practicum experience requires a minimum of 100 hours (including **40 hours of direct client contact**) on-site at an appropriate setting to be determined by the Clinical Coordinator. The internship is 600 hours (including **240 hours of direct client contact**) on-site. Grading for the clinical experiences is on a Pass/Fail basis. To receive a Pass grade the counselor-in-training must be able to demonstrate basic counseling skills, behave in an appropriate professional manner consistent with the American Counseling Association's Code of Ethics, and satisfactorily complete the academic, dispositional and outcome requirements set forth in both the practicum and internship classes. If a student fails to pass any part of the clinical experience, he or she will not be allowed to continue in the program. Taking the clinical experience over will **not** be an option.

## Concentrations: Master's Level

### Clinical Mental Health Counseling

The Master of Arts in Counseling with a concentration in Clinical Mental Health counseling is designed to prepare students to demonstrate knowledge and skills with several counseling modalities appropriate for a broad range of clients in a multicultural society; interact effectively with other helping professionals and referral resources; make appropriate counselor-client related decisions in the context of professional, ethical, and legal guidelines; and fill effectively entry-level positions of professional responsibility within the specialization of agency counseling. The coursework is approved by the Alabama Board of Examiners in Counseling, which allows graduates of the program to pursue licensure as professional counselors in the state of Alabama. This program takes no less than 3 years to complete. For most students, it takes approximately 3.5 years or 10 terms (including summers) to complete the program.

## COURSE OF STUDY

(61 Semester Hours)

### Area I:

Requirements	Hours
EPR 590 Research & Prgm Eval in Coun	4
ECG 612 Professional Orientation	3
EPR 614 Lifespan Human Development	3
ECG 621 Theories of Individual Counseling	3
ECG 624 Assessment (Prerequisites: EPR 590)	3
ECG 626 Group Counseling: Process and Procedures (Prerequisites: ECG 624 & ECG 638)	3
ECG 628 Social and Cultural Diversity	3
ECG 630 Career Development: Vocational and Life Planning	3
ECG 638 Practicum I: Clinical Skills and Techniques (Prerequisite: ECG 621)	3
<b>Total Hours</b>	<b>28</b>

### Comprehensive Exam

The Counselor Preparation Comprehensive Exam will be given upon completion of Area I. This is a "high stakes" assessment. Students who do not successfully pass this examination will be given the opportunity to re-take the exam a maximum of two times. There are no exceptions. Students unsuccessful in passing the comprehensive exam will be dismissed from the program.

### AREA II:

Requirements	Hours
ECG 600 Intro to Community Counseling	3
ECG 650 Diagnosis and Treatment of Psychological Disorders	3
Elective (discontinued, fall, 2012)	
Elective (discontinued, fall, 2012)	
ECG 631 Suicide Prevention (Required, Fall, 2012)	3
ECG 651 Human Sexuality for Counselors (Required, Fall, 2012)	3
ECG 613 Foundations of Substance Abuse (required, Fall, 2012)	3
ECG 652 Advanced Counseling Techniques (Required, Fall, 2012)	3
ECG 653 Counseling Children and Adolescents (Required, Fall, 2012)	3
ECG 691 Seminar: Special Topics in the Helping Profession (Required, Fall, 2012)	3
<b>Total Hours</b>	<b>24</b>

### AREA III: Clinical Requirements

Requirements	Hours
ECG 695 Practicum II: Supervised Field Experience (prerequisites: Areas I & II, Comprehensive Exams, and recommendation of the faculty)	3
<b>Practicum is 100 hours minimum with 40 hours of direct client contact</b>	
ECG 697 Counseling Internship (6 hours-2 semesters) (Prerequisite: ECG 695)	6
<b>Internship is 600 hours with 240 hours of direct client contact</b>	
<b>Total Hours</b>	<b>9</b>

## School Counseling

According to the American School Counseling Association, "the purpose of a counseling program in a school setting is to promote and enhance the learning process." The goal is to enable all students to achieve success in school and to develop into contributing member of our society.

The concentration in School counseling is designed to prepare individuals as counselors in grades K-12. The program leading to the Master of Arts in Counseling degree requires a minimum of 49 semester hours of prescribed coursework to meet the academic and field experience requirements for the SDE Class A Professional Certificate in school counseling.

**Admissions:** In addition to the admission requirements for the Counselor Education Program, candidates seeking admission to the school counseling concentration must possess a minimum of a 2.75 undergraduate grade point average. Before the school counseling student can receive certification, the school counseling student must satisfactorily obtain a passing score on the following assessments: Alabama Educator Certificate Test, the Praxis II Test in School Counseling, the National Counselor Exam.

The school counseling concentration meets the course work and field experiences required by the Alabama State Department of Education for certification. The concentrations meet the academic and field experience requirements for licensure as professional counselors in Alabama.

## COURSE OF STUDY

(49 Semester hours)

### Area I

Requirements	Hours
EPR 590 Research & Prgm Eval in Coun	4
ECG 612 Professional Orientation	3
ECG 621 Theories of Individual Counseling	3
EPR 614 Lifespan Human Development	3
ECG 624 Assessment	3
ECG 626 Group Counseling: Process and Procedures	3
ECG 628 Social and Cultural Diversity	3
ECG 630 Career Development: Vocational and Life Planning	3
ECG 638 Practicum I: Clinical Skills and Techniques	3
<b>Total Hours</b>	<b>28</b>

### Comprehensive Exam

A National Comprehensive Examination will be given upon completion of Area I. This is a "high stakes" assessment. Students who do not successfully pass this examination will be given the opportunity to re-take the exam a maximum of two times. There are no exceptions. Students unsuccessful in passing the comprehensive exam will be dismissed from the program.

### AREA II

Requirements	Hours
ECG 620 Foundations of School Counseling	3
ECG 623 Comprehensive Counseling and Guidance: M/H School	3
ECG 627 Comprehensive Counseling and Guidance: M/H School	3
Elective (discontinued, fall, 2012)	

ECG 619	Special Issues for School Counselors	3
Total Hours		12

## AREA III: Clinical Requirements

Requirements	Hours	
ECG 695	Practicum II: Supervised Field Experience	3
(Prerequisites: Areas I & II, Comprehensive Exams, and recommendation of faculty)		
<b>Practicum 100 hours; 40 direct hours.</b>		
ECG 697	Counseling Internship	6
(Prerequisite: ECG 695)		
Internship 600 hours; 240 direct hours		
Total Hours		9

Because admission to these programs is selective, prospective students should contact a departmental advisor to determine specific admission requirements for the degree or certificate in which they are interested. For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/student-services/admission-requirements>.

The following degrees are offered: MAE in Instructional Leadership (leading to Alabama Class A Certification in Instructional Leadership); the Educational Specialist Degree (leading to Alabama Class AA Certification in Instructional Leadership – must have Class A in Instructional Leadership first); the Doctorate of Education degree (Ed.D.) in Educational Leadership (must have Ed.S. in Educational or Instructional Leadership to apply).

The programs leading to the Doctorate of Education (Ed.D.) degree in educational leadership are offered at UAB by the joint faculties of UAB and the University of Alabama (Tuscaloosa). Admission is highly selective and is open only once annually. In addition to the Graduate School requirements, an interview, portfolio, and on-site writing sample is required by the program.

## Additional Information

For detailed information, contact Dr. Loucrecia Collins, Program Director, Educational Leadership, Department of Human Studies, UAB School of Education, 1530 3rd Avenue South, EB 223, Birmingham, AL 35294-1250.

Telephone: 205-975-1984

E-mail: [lcollins@uab.edu](mailto:lcollins@uab.edu)

Web: <http://www.uab.edu/education/humanstudies/educational-leadership/program-admission>

## Dispositions

Educational Leadership faculty individually review the professional dispositions (behaviors and attitudes) of students within each course in accordance with the School of Education's policy and procedure. Additionally, faculty will collectively review student dispositions and overall progress in the program at the end of each semester. Dispositional areas identified as deficient could result in termination from the program.

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/student-services/admission-requirements>.

## Overview of Our Programs

The Health Education program at the University of Alabama at Birmingham prepares professionals for a variety of careers in health education. At the *master's level*, students acquire advanced knowledge and skills which enable them to enter professions in community, clinical, worksite and agency settings (M.A.Ed., Community Health). Students may complete requirements to earn a certificate in Clinical Research Management AND the M.A.Ed. in Community Health. The certificate program is a collaboration between the Department of Human Studies and the School of Nursing (M.A.Ed., Community Health with CRM certificate). The department also offers a Graduate Traineeship in Pediatric Pulmonary Care (with School of Health Professions), designed specifically for professionals desiring a graduate degree in Health Education (master's or doctorate), who are interested in pediatric pulmonary care, and aspiring to positions of leadership. PhD graduates become leading researchers, clinicians and faculty in higher education, government agencies and foundations.

## M.A.Ed. – Community Health

The Health Education program at the University of Alabama at Birmingham prepares professionals for a variety of careers in health education. Students acquire advanced knowledge and skills which enable them to enter professions in community, clinical, worksite and agency settings.

## M.A.Ed. Admission Process

Consideration for admission to the master's degree program will occur each Fall and Spring term. The completed application packet must be received by the Health Education Program from the Graduate School by the dates shown:

Entry Term	Deadline
Fall	April 30
Spring	October 30

Admission to graduate study in health education is initiated through the Graduate School and all required materials are to be submitted per specified instructions delineated by the Graduate School. M.A.Ed. applicants should have a cumulative GPA of 2.50/4.00 or greater for prior college coursework and preferred MAT score of 40 or greater, or preferred GRE scores of 150 or greater for Verbal Reasoning and 149 or greater for Quantitative Reasoning. In rare cases, applicants who do not meet these standards may be considered for admission if the faculty determines the candidate brings something unique to the learning community.

In addition, applicants must include a typewritten statement of professional purpose that reflects the applicant's background, development, pertinent work-related experience, professional career objectives and specified ways that completion of this program will contribute to his/her goal for becoming a health education professional.

All applications for graduate admission are reviewed by the health education faculty. Applicants deemed to meet requirements will be contacted for an interview with the Admissions Committee. Applicants should not infer they have been admitted into the program if granted

an admissions interview. Selection will be made by the faculty after reviewing the applicant’s credentials in their entirety, and some candidates meeting minimum requirements may not be admitted. Candidates participating in the interview may be given one of two decisions: a) admit, or b) not admit. Students are notified of their admission status following the interview.

## Programs of Study for Master’s Degrees

(Program Coordinator, Dr. Retta Evans, rrevans@uab.edu)

The M.A.Ed. in Community Health is designed to prepare individuals for advanced health education careers in agency, schools, worksites, and allied health care settings. This program is aligned with the National Commission for Health Education Credentialing and prepares students to sit for the CHES/MCHES certification. CHES/MCHES provides evidence of competency of the knowledge, skills and application of the Areas of Responsibilities defining the role of an entry or masters-level health educator. Program options allow students to select thesis, or non-thesis as options. In addition, a Graduate Traineeship in Pediatric Pulmonary Care (PPC) is offered to one student and is designed specifically for professionals desiring a graduate degree in Health Education, who are interested in pediatric pulmonary care, and aspiring to positions of leadership. IF interested in the PPC program, contact Dr Wajih Ahmad, wahmad@uab.edu.

## M.A.Ed. – Community Health, Thesis Option

Thesis required (33 hours course work required)

NOTE: No individual course grade below “C” will be accepted. Each course with a grade below “C” must be repeated.

Requirements	Hours
<b>Major Courses</b>	
HE 610 Foundations of Health Education (pre or co requisites HE 223, HE 343 or equivalent coursework)	3
HE 606 Issues in Disease Control (pre or co requisites HE 223, HE 343 or equivalent coursework)	3
HE 631 Planning and Implementing Health Education (Prerequisite: HE 610)	3
HE 632 Admin Health/Fit Programs (Prerequisite: HE 610)	3
HE 642 Health Behavior and Health Education (Prerequisite: HE 610)	3
HE 689 Methods and Materials for Planning Health Ed Prog (Prerequisite: HE 610)	3
HE 697 Evaluation of Health Education Programs (Prerequisite: HE 610)	3
<b>Additional Requirements</b>	
Students must have these courses or equivalents, or take them with HE 610:	
HE 223 Introduction to Epidemiology and Disease Impact	
HE 343 Theory and Determ of Health Behavior	
<b>Research Courses</b>	
EPR 609 Statistical Methods and Research in Ed: Intermed (Prerequisite EPR 608)	3
EPR 692 Introduction to Educational Research Design	3
<b>Graduate Elective (MUST be approved by a health education advisor).</b>	
HE 693 Advanced Field Experience in Health Education	3
<b>Total Hours</b>	<b>33</b>

## M.A.Ed. – Community Health, Non-Thesis Option

(33 hours course work required.)

NOTE: No individual course grade below “C” will be accepted. Each course with a grade below “C” must be repeated.

Requirements	Hours
<b>Major Courses</b>	
HE 610 Foundations of Health Education ((pre or co requisites HE 223, HE 343 or equivalent courses)	3
HE 606 Issues in Disease Control (Prerequisite: EPR 607/608 or equivalent course)	3
HE 631 Planning and Implementing Health Education (Prerequisite: HE 610)	3
HE 632 Admin Health/Fit Programs (Prerequisite: HE 610)	3
HE 642 Health Behavior and Health Education (Prerequisite: HE 610)	3
HE 689 Methods and Materials for Planning Health Ed Prog (Prerequisite: HE 610)	3
HE 697 Evaluation of Health Education Programs (Prerequisite: HE 610)	3
<b>Additional Requirements</b>	
Students must have these courses or their equivalents, or take them with HE 610:	
HE 223 Introduction to Epidemiology and Disease Impact	
HE 343 Theory and Determ of Health Behavior	
<b>Research Courses</b>	
EPR 609 Statistical Methods and Research in Ed: Intermed (Prerequisite EPR 608)	3
EPR 692 Introduction to Educational Research Design	3
<b>Graduate Elective (Must be approved by a health education advisor).</b>	
HE 693 Advanced Field Experience in Health Education	3
<b>Total Hours</b>	<b>33</b>

## Comprehensive Examination Non-Thesis Option Only

Students in the Non-Thesis M.A.Ed. program must complete a supervised internship including comprehensive exams during their last semester of course work. The examination process is intended to allow students to demonstrate the appropriate aptitude for advanced level health education. The process encompasses the content knowledge and critical thinking skills that Health Education faculty believes every student graduating from this program should possess. A student cannot attempt the internship and comprehensive exam more than twice. Those who cannot complete the internship and exam with a passing score during the second attempt will be dismissed from the program and not allowed readmission. Contact your health education academic advisor for further information.

## Graduate Traineeship in Pediatric Pulmonary Care (with School of Health Professions)

The traineeship features a combination of planned coursework, hospital rounds, pulmonary clinics, patient and family education and research experience and is designed specifically for professionals desiring a graduate degree in Health Education (master’s or doctorate), who are interested in pediatric pulmonary care, and aspiring to positions of

leadership. This 12-month interdisciplinary training program is offered to graduate students in Respiratory Therapy - Health Education, nursing, nutrition, social work and medicine. Training is provided in each of the Maternal and Child Health Leadership Competencies. The Traineeship includes a monthly stipend (for up to 12 months) and tuition assistance (limited to U.S. citizens or to individuals with a permanent visa). For further information, contact Heather Hathorne, Pediatric Pulmonary Center Faculty Respiratory Therapist, 205-638-9568.

## Student Professional Dispositions

Health Education faculty individually review the professional dispositions (behaviors and attitudes) of students within each course in accordance with the School of Education's policy and procedure. Additionally, faculty will collectively review student dispositions and overall progress in the program at the end of each semester. Dispositional areas identified as deficient could result in termination from the program.

## Graduate Program Policies

No individual course grade below "C" will be accepted. Each course with an earned grade below "C" must be repeated. Repeating a required health education course more than twice is not permitted. If a student receives a grade lower than a "C" after their second attempt, they will be dismissed from the Health Education program and not allowed readmission.

## Non-Degree Seeking Graduate Students

Following admission to the UAB Graduate School, students may enroll in elective Health Education courses as "non-degree seeking" students with the permission of the instructor. Non-degree seeking students are limited to 12 hours of coursework. It is essential for non-degree seeking students to make an advising appointment with a faculty member prior to enrolling in elective courses as some elective courses have pre-/co-requisites. Non-degree seeking students are not permitted to take "core" health education courses prior to admission. Enrolling and passing non-degree seeking coursework does not guarantee admission into a masters or doctoral degree program. Admission criteria (e.g., test scores, cumulative GPA, recommendations, and interview) are the primary factors considered when reviewing student suitability for admission to a program.

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/student-services/admission-requirements>.

## Health Education/Health Promotion (PhD)

Graduate Program Director (Education): Dr. Cynthia J. Petri, [cpetri@uab.edu](mailto:cpetri@uab.edu)

## Ph.D. Health Education/Health Promotion

The PhD in Health Education/Health Promotion is a UA System degree jointly administered by three units: UAB School of Education and College of Arts & Sciences, UAB School of Public Health, and UA College of Human Environmental Sciences. Students draw upon the expertise and resources of a diverse and highly qualified faculty. Faculty members strive to create a rigorous scholarly and supportive atmosphere for students to develop intellectually with the knowledge, skills and attitudes necessary to be ethical and responsible health education professionals.

## Ph.D. Admission Process

Consideration for admission to graduate study in health education will occur each Fall and Spring term. The completed application packet must be received by the [Health Education Program](#) from the Graduate School by the dates shown:

Entry Term	Deadline
Fall	April 30
Spring	October 30

Candidates for admission must have completed a bachelor's or master's degree from an accredited institution in health education or a health-related field. Admission to doctoral study is initiated through the Graduate School. Applicants will: (a) request official transcripts of all college coursework to send to UAB Graduate School; (b) submit (3) letters of recommendation from professors or others who are qualified to judge your ability to complete doctoral coursework; (c) complete the GRE indicating UAB as the recipient of your scores; and (d) submit writing sample(s), such as an essay describing your academic training, professional experiences and career goals, or scholarly papers presented during professional meetings. Admission to the program is competitive.

Ph.D. applicants should have a cumulative GPA of 3.00/4.00 or greater for prior college coursework and preferred GRE scores of 156 or greater for Verbal Reasoning and 156 or greater for Quantitative Reasoning.

Faculty consider GRE scores as one indicator of an applicant's potential success in the doctoral program.

## Ph.D. Health Education/Health Promotion Program of Study

Students may enter the program with either a bachelor's or master's degree in health education, or a master's degree in a closely related health field. Prerequisite coursework includes Foundations of Health Education, Administration of Health Education, Health Education Planning and Evaluation, Health Education Methods, Materials and Delivery, and Research Design and Statistics. These requirements may be corequisite components in the program.

Students entering the program with a master's degree may transfer appropriate coursework to this program; however, this will not reduce the number of courses required. Students will not be required to retake coursework already completed but may be required to complete prerequisites as part of their planned course of study.

A required review of student credentials prior to admission will identify strengths and needs. This review will provide students with a blueprint for their course of study and will be conducted by the program director and faculty advisor.

The PhD degree program will require students to complete a minimum of 72 credit hours: 36 hours of coursework, 12 hours of research internship, and 24 hours of dissertation research. Students will meet regularly with a faculty advisor to plan course enrollment.

The specific components of the PhD program in health Education and Health Promotion are outlined below.

## Ph.D. through the School of Education

(UA = HHE, UAB-Public Health = HB, UAB-Education = HE)

Requirements	Hours
<b>I. Health Education and Promotion Courses</b>	
A. Advanced Theoretical and Scientific Bases of Health Education and Health Promotion (HHE 605, HB 750, HE 705)	3
B. Health Communications Research (HHE 607, HB 730, HE 701)	3
C. Planning and Administration of Health and Health Promotion (HHE 606, HB 760, HE 710)	3
D. Doctoral Studies Seminars (HHE 604, HB 770, HE 700) taught during 3 consecutive terms, 1.0 hr each Seminar	3
<b>II. Advanced Research and Statistical Methods</b>	
A. Multivariate/Multiple Regression Analysis	3
B. Advanced Epidemiological Research Methods	3
C. Data Management/Computer Technology	3
D. Evaluation/Research Methods	3
<b>III. Coursework in the Social and Behavioral Sciences Minor</b>	
Selection of courses pre-approved by doctoral program advisor to build knowledge and skills in a cognate area, e.g. Health Disparities Research, Global Health, Public Health Policy, Aging and Health, Disabilities and Health	12
<b>IV. Research Internship</b>	12
<b>V. Dissertation</b>	24
<b>Total Hours</b>	<b>72</b>

## Comprehensive Examination

A written comprehensive examination is required of all candidates for the Ph.D. degree. Your preparation will include studying course content, core competencies for the profession, and related literature of the discipline. Prior to taking the exam, students must have completed their core course requirements, and at least 75% of their other course work. Students must register for a minimum of 3.0 hours of graduate work during the semester(s) in which the comprehensive exam is taken.

The Comprehensive exam will be offered twice each year and is written and graded by the graduate faculty in the joint doctoral program. The examination will be a synthesis of the core coursework as well as core competencies in the field of Health Education and Health promotion. Grading of the comprehensive exam is done blinded, and by consensus. Students who fail to achieve passing scores will have one attempt to remediate within a calendar year. If a student fails a section for the second time, they will be dismissed from the program.

For detailed information regarding admission requirements for the School of Education graduate programs, please visit the Admissions Requirements website at <https://www.uab.edu/education/studentservices/admission-requirements>.

## Kinesiology

Degrees offered include the Master of Arts in Education and the Educational Specialist. At the master's degree level, students may specialize in Exercise Physiology (see listing below for more information about this program) or complete a teacher certification program. (traditional master's program for those holding a valid B level certificate in physical education or the alternative master's program for those NOT completing an undergraduate physical education teacher education program). The teacher certification program links teacher certification with the graduate program in physical education. For example, the M.A. Ed. awards the level A certificate and the Ed.S. is linked to the AA certificate. Each program requires a teaching certificate in physical education at the previous level (e.g., B certificate for admission to the A level, except

the Alternative A program, and the A certificate for admission to the AA certificate).

## Dispositions

Physical Education faculty individually review the professional dispositions (behaviors and attitudes) of students within each course in accordance with the School of Education's policy and procedure. Additionally, faculty will collectively review student dispositions and overall progress in the program at the end of each semester. Dispositional areas identified as deficient could result in termination from the program.

## Master of Arts in Education and "A" level teaching certificate; Non-Thesis

(31- 37 hours)

Teaching Field: At least 1/3 of the program shall be teaching field courses. (18 hours)

Requirements	Hours
PE 645 Advanced Motor Development	3
PE 647 Teaching Strategies and Issues in K-12 PE	3
PE 643 Curriculum Development in Physical Education	3
PE 649 Adapted Physical Education	3
600 Level Electives as approved by advisor	6
<b>Total Hours</b>	<b>18</b>

Additional Courses: (13-16 hours)

Requirements	Hours
Survey of Special Education Coursework: Required if not previously completed (0-3 hours)	
ECY 600 Introduction to Exceptional Learner	3
EPR 608 Statistical Methods and Action Research	3
EPR 607 Microcomputer Applications to Statistical Analysis	1
Foundations and Professional Studies (see approved list)	3
Required if not previously completed (0-3 hours)	
EDT 610 Computer-Based Instructional Technologies	3
or EDT 620 Current and Emerging Instructional Technologies	
or EDT 630 Curriculum Integration of Technology	
Elective (as approved by advisor)	6
<b>Total Hours</b>	<b>19</b>

## Master of Arts in Education and "A" level teaching certificate; Thesis

(31-34 hours)

Teaching Field: At least 1/3 of the program shall be teaching field courses. (18 hours)

Requirements	Hours
PE 645 Advanced Motor Development	3
PE 647 Teaching Strategies and Issues in K-12 PE	3
PE 643 Curriculum Development in Physical Education	3
PE 649 Adapted Physical Education	3
PE 699 Thesis Research	6
Survey of Special Education Coursework: Required if not previously completed (0-3 hours)	

ECY 600	Introduction to Exceptional Learner	3
Total Hours		21

**Additional Courses: (13 hours)**

<b>Requirements</b>		<b>Hours</b>
EPR 608	Statistical Methods and Action Research	3
or EPR 609	Statistical Methods and Research in Ed: Intermed	
EPR 607	Microcomputer Applications to Statistical Analysis	1
Foundations and Professional Studies (see approved list)		3
EDT 610	Computer-Based Instructional Technologies	3
or EDT 620	Current and Emerging Instructional Technologies	
or EDT 630	Curriculum Integration of Technology	
EPR 692	Introduction to Educational Research Design	3
Elective (as approved by advisor)		3
Total Hours		16

**Alternative A (Non-Traditional 5th-Year Physical Education program) Non-Thesis****(37-40 hours)**

Additional requirements are 28 hours of prescribed coursework. Contact Student Services in Suite 100 Education Building, UAB for specific courses required.

<b>Requirements</b>		<b>Hours</b>
Survey of Special Education Coursework: Required if not previously completed (0-3 hours)		
Curriculum and Teaching:		
PE 643	Curriculum Development in Physical Education	3
Professional Studies:		
EDF or EPR 500 - 600 level course (Advisor Approval Required)		3
ECY 600	Introduction to Exceptional Learner	3
Technology:		
EDT 610	Computer-Based Instructional Technologies	3
or EDT 620	Current and Emerging Instructional Technologies	
or EDT 630	Curriculum Integration of Technology	
Evaluation of Teaching and Learning:		
EPR 608	Statistical Methods and Action Research	3
EPR 607	Microcomputer Applications to Statistical Analysis	1
Reading:		
EDR 551	Reading in Content Areas	3
Internship:		
PE 696	Elementary/Secondary Physical Education Internship	9
Teaching Field:		
At least 1/3 of the program shall be teaching field courses (12)		
PE 645	Advanced Motor Development	3
PE 647	Teaching Strategies and Issues in K-12 PE	3
PE 649	Adapted Physical Education	3
PE 607	Principles of Coaching	3
PE 509	Assessment in Physical Education	3
PE 589	Physical Education Instructional Strategies	3
Total Hours		46

**Ed.S. Degree****(31-37 hours)**

<b>Requirements</b>		<b>Hours</b>
Teaching Field:		
At least 1/3 of the program shall be teaching field courses (12)		
600 & 700 Level Electives as approved by advisor		12-15
PE 726	Supervised Research in Physical Education	3
(PE 643, 645, 647 and 649 must be taken if comparable courses were not part of the master's program)		
Survey of Special Education Coursework: Required if not previously completed. (0-3 hours)		0-3
PE 729	Physical Education Seminar	3
ECY 600	Introduction to Exceptional Learner	3
Additional Courses:		
EPR 692	Introduction to Educational Research Design	3
EPR 609	Statistical Methods and Research in Ed: Intermed	3
Electives with 600- or 700-level Professional Studies or Teaching Field Permission of Advisor		3
Total Hours		30-36

**Exercise Physiology**

The Exercise Physiology specialization offers a master's degree option for students interested in either clinical exercise physiology or physiology research. The curriculum is multidisciplinary and comprises courses in the Schools of Education, Medicine, Health Related Professions, and Public Health. Two program plans are offered (detailed below). Plan I culminates with a thesis research project, and Plan II culminates with a written comprehensive exam. Resources for student participation in research include a Muscle Research Laboratory, a Strength Performance Laboratory, and a Body Composition/Energy Metabolism Laboratory. Wide arrays of field experiences are also available in local agencies and clinics. In addition to Graduate School admission requirements, prospective students must have completed undergraduate coursework in physiology, anatomy, and chemistry. First-year students begin in the fall term. Listed below are the courses required in the program and a sample of elective courses.

**M.A.Ed. Program****Admission Requirement and Prerequisites**

In addition to the general admission requirements of the Graduate School, the following prerequisites apply to these programs. The prerequisites are not part of the graduate program. Applicants without the prerequisites may be admitted conditionally and take up to 12 semester hours of graduate work while completing the prerequisites. Specific course prerequisites are determined on an individual program basis by the student's advisors.

**Plan I - 27 hours and Thesis****Required Courses (12-15)**

<b>Requirements</b>		<b>Hours</b>
PE 637	Physiology of Exercise I	3
PE 638	Physiology of Exercise II	3
EPR 692	Introduction to Educational Research Design	3
PE 642	Practicum in Physiology	3
EPR 609	Statistical Methods and Research in Ed: Intermed	3
Thesis		6
Related Field		6-9
Total Hours		27-30

**Plan II****(36 hours of coursework)****Major Courses (12-15 hours)**

<b>Requirements</b>	<b>Hours</b>
PE 637 Physiology of Exercise I	3
PE 638 Physiology of Exercise II	3
EPR 692 Introduction to Educational Research Design	3
EPR 609 Statistical Methods and Research in Ed: Intermed	3
Elective in Major	3
Thesis Substitution	12
Related Field	6-9
<b>Total Hours</b>	<b>33-36</b>

**Sample Major Electives for Plan I and II**

<b>Requirements</b>	<b>Hours</b>
PE 656 Advanced Sport Psychology	3
PE 640 Advanced Techniques in Conditioning the Athlete	3
PE 639 Exercise Prescription for High Risk Populations	3
PE 672 Advanced Treatment of Athletic Training	3
PE 674 Sport Performance and Nutrition	3
PE 645 Advanced Motor Development	3
PE 695 Problems in Physical Education	3-6
PE 630 Mechanical Analysis of Motor Skills	3
PE 585 Principles of Exercise Leadership	3

**Sample Courses for Related Fields, Plan I and II**

<b>Requirements</b>	<b>Hours</b>
NTR 601 Advanced Medical Nutrition	3
NTR 618 Nutritional Biochemistry	6
NTR 650 Body Composition and Energy Metabolism	3
EPI 602 Epidemiology Chronic Diseases	3
GER 540 Biology of Aging	3
HE 502 Mental Health and Stress Management	3
HE 532 Administration of Health and Fitness Programs	3

# School of Engineering

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**Dean:** Dr. J. Iwan Alexander

The School of Engineering is comprised of five departments: Biomedical Engineering; Civil, Construction, and Environmental Engineering; Electrical and Computer Engineering; Materials Science and Engineering; and Mechanical Engineering. The School offers 6 programs leading to a master's degree and 4 programs leading to a doctoral degree.

Engineering at UAB is about the brightest, most talented researchers in their fields bringing new basic science discoveries and new applied technologies to fruition. Engineering at UAB is about smart, driven students from across the city, state, and world learning together and taking advantage of a multitude of opportunities for real-world educational experiences. Engineering at UAB is about collaboration: projects that are bringing engineers together with medical professionals, business leaders, and fellow scientists from other disciplines, in order to push the envelope and discover new, innovative solutions for the challenges our world faces. The School of Engineering seeks to provide students with the opportunities you need to meet your goals.

## Interdisciplinary Programs

The School of Engineering offers an Interdisciplinary Engineering PhD program with concentrations in Computational Engineering and Environmental Health & Safety Engineering. Additionally, the Departments of Mechanical Engineering and Art & Art History bring their collective expertise and experience together to offer a new interdisciplinary Category A certificate program involving an integrated art and engineering curriculum. The Leonardo Art & Engineering Graduate Certificate program provides cross-disciplinary training in simulation, art, visualization, and virtual reality (VR) to students with a BS/BA degree in Arts and Sciences, Engineering, Business, or Healthcare-related disciplines for addressing marketing, education/training, entertainment, product development, and design application demand of the 21st century growth area in 3D and VR technologies.

## Interdisciplinary Engineering (Ph.D)

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/interdisciplinary\\_engineering\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/interdisciplinary_engineering_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

**Concentrations offered: Computational Engineering, Environmental Health & Safety Engineering**

**Faculty - Because of the interdisciplinary nature of this program, participating faculty come from various areas of engineering and science. A complete listing of all participating faculty can be found at <http://www.uab.edu/engineering/home/degrees-cert/197-degree-certificates/765-graduate-faculty>.**

## Program Objectives

For more than a decade, research-focused centers at UAB and elsewhere have brought together expertise from many disciplines to solve problems. This same problem-solving approach is now finding its way

into academic programs through the implementation of interdisciplinary graduate education. It is the premise of these interdisciplinary programs that students must be educated in more than one area to remain competitive and have successful careers whether they choose to stay in academia or work in industry. Industries are particularly interested in graduate education that emphasizes breadth of knowledge as well as depth in a particular field. Today's professional must be able to change, focus, and move between disciplines in order to keep up with rapid market shifts and technological advances.

The Ph.D. program in Interdisciplinary Engineering takes advantage of unique resources and strengths at UAB. This program fosters interdisciplinary interactions between the School of Engineering and medical and biomedical units and the Schools of Business and Public Health and the College of Arts and Sciences. Students in Interdisciplinary Engineering will have the opportunity to develop a plan of study and research topic which incorporates course work and faculty expertise from two or more of these disciplines.

The students enrolled in the Interdisciplinary Engineering Ph.D. program will gain the skills needed to succeed as independent and productive investigators in multidisciplinary analysis and design, with applications over a wide spectrum of science, engineering, health, and medical fields. The interdisciplinary program will:

- Provide a rigorous academic curriculum including course work in two or more disciplines,
- Provide collaborative interactions with students and faculty from a variety of disciplines,
- Provide unique opportunities for interdisciplinary research, and
- Facilitate continued development of high quality research programs supported by external funding. Two tracks are available in the Interdisciplinary Engineering Ph.D. program – Computational Engineering (<http://www.uab.edu/engineering/home/degrees-cert/197-degree-certificates/33-cme>) and Environmental Health & Safety Engineering (<http://www.uab.edu/engineering/home/degrees-cert/197-degree-certificates/601-ehse>).

## Admission Requirements

Students applying to the Interdisciplinary Engineering Ph.D. program have completed an undergraduate degree in a supporting field and must submit official transcripts and Graduate Record Exam (GRE) scores with their application. In general, GRE quantitative and verbal scores of at least 50th percentile and a minimum undergraduate or master's degree grade point average of 3 on a 4 point scale are required for admission. Students for whom English is a second language should have a score no less than 100 on the Internet Based TOEFL (Test of English as a Foreign Language). In the essay submitted by the student as part of the application package, the applicant is encouraged to identify his/her research interest. This information will help the admission committee in decision making. The Interdisciplinary Engineering Admissions Committee reviews all applications completed and submitted and will make all admission decisions.

## Degree Requirements

The Ph.D. in Interdisciplinary Engineering promotes a research-based curriculum. A minimum number of core courses will be required of all students in the program, with additional course work directed by the student's graduate research committee based on the student's area of interest. Committee members must be selected from at least two different

disciplines, and the planned curriculum must result in cross training in two or more disciplines.

Students entering the Ph.D. program with a baccalaureate degree must, in keeping with UAB Graduate School Policies, complete at least 48 hours of course work prior to admission to candidacy. Up to 16 credits of the 48 can be as non-dissertation research credits, and up to 10 credits can be as lab rotations, seminars or directed study credits. Students entering the Ph.D. program with a Master's degree in a related field, M.D., DMD, etc., must complete at least 27 credit hours of course work prior to candidacy. Up to 6 credits of the 27 can be non-dissertation research credits, and up to 6 credits can be as lab rotations, seminars, or directed study credits.

The UAB Graduate School also requires that students complete at least two semesters as a full time student in candidacy or accumulate at least 24 credits in research hours or course work in candidacy prior to granting of degree. At least 24 hours of dissertation research will be required for Ph.D. program graduates in Interdisciplinary Engineering.

All students in the IE program must complete the following core courses:

Requirements	Hours
EGR 710 Intro to Interdisciplinary EGR	3
EGR 711 Methodology for IEGR Research	3
EGR 796 Journal Club in Interdisciplinary Engineering	1

A Comprehensive Exam is required of all doctoral candidates. The exam may include both written and oral components and will include presentation of the student's dissertation proposal. The exam will be administered by the student's graduate research committee. Upon successful completion of the Qualifying Exam and completion of at least 48 hours of course work (in keeping with Graduate School requirements), a student is admitted into doctoral candidacy.

A dissertation showing the ability to conduct independent research and organizational and presentation skills must be prepared on a topic in the research field of interest. Dissertation results are expected to be submitted for refereed scholarly publication. The dissertation must comply with UAB dissertation preparation guidelines. When the dissertation has been completed, doctoral candidates will present and defend their work before their graduate research committee and the public. This defense will constitute the candidate's final exam. The results of the examination must be reported to the Graduate School at least six weeks before the commencement at which the degree is to be conferred.

## Program Resources

High Performance Computing (HPC), High Fidelity Simulations (HFS), Tera/Penta-scale data mining/management/analysis, image processing, feature extraction, pattern recognition, and geometry reconstruction are the key enabling technologies in addressing 21st century science and engineering problems. These technologies are necessary for the development of cross-cutting tool kits to enhance research and development in interacting biological, chemical, medical, physical, business and finance, and engineering phenomena associated with interdisciplinary engineering research.

In response to this need, UAB has made a strategic investment in establishing an Enabling Technology Laboratory (ETLab). The ETLab provides software and hardware infrastructure and support for high performance parallel and distributed computing, numerical tools, information technology-based computing environments, and computational simulation to UAB and Southern Research Institute (SRI)

researchers. In collaboration with UAB interdisciplinary investigators, the ETLab has established 6.0+ Teraflops high performance computing clusters, including an IBM Blue gene with 2048 processors and a visualization infrastructure with stereoscopic and high resolution large displays. Both hardware and software essential for interdisciplinary engineering research can be fully supported by this equipment.

A 3D laser scanner necessary for full three-dimensional modeling and reconstruction was acquired by a collaborative team including faculty from the Schools of Engineering and Medicine. Access to this and other equipment, as well as clinical data available in the Radiology, Orthopedic, and Surgery departments and the School of Dentistry will be available to the students and interdisciplinary teams of faculty members participating in the interdisciplinary engineering program. These teams have already been collaborating on several sponsored and un-sponsored research programs in both computational engineering and environmental health and safety engineering tracks.

Additional equipment to facilitate engineering research is available to Interdisciplinary Engineering students through the laboratories of the Departments of Materials Science & Engineering, Mechanical Engineering, Electrical & Computer Engineering, Biomedical Engineering, and Civil, Construction, & Environmental Engineering. Additional equipment is available to students through participating faculty from other Schools across campus.

## Program Curriculum

The Ph.D. in Interdisciplinary Engineering program encompasses a broad spectrum of possible fields of expertise in engineering and science, and as such, curriculums vary depending on the specific fields of research and background of the student.

### Computational Engineering (CME) Track

The CME track of the Interdisciplinary Engineering program takes advantage of UAB's diversified Schools of Engineering, Public Health, Dentistry and Medicine and College of Arts and Sciences to produce Ph.D. candidates cross-trained in computational engineering from a variety of disciplines. The program provides students an in-depth foundation and innovation opportunities in interdisciplinary aspects of enabling technologies - geometry generation and computer-aided geometry design, mesh generation and adaptation, visualization, augmented reality and virtual reality, image processing and pattern recognition, design optimization, computational fluid dynamics, computational structural mechanics, high performance and parallel computing, and molecular dynamics applicable to disparate time and length-scale problems encountered in biomedical, biology, medicine and surgery, physics and biophysics, manufacturing, combustion, aeronautics and astronautics, and energy, environment and power.

### Environmental Health and Safety Engineering (EHSE) Track

The EHSE track of the Interdisciplinary Engineering program takes advantage of UAB's diversified Schools of Engineering and Public Health, and College of Arts and Sciences as well as the nationally renowned health sciences center, to produce Ph.D. candidates cross-trained in public health, environmental, and safety engineering from a variety of disciplines. The program provides students with an understanding of basic mechanisms through which agents alter environmental, human, and ecosystem health, and the skills needed to evaluate and implement

remediation for environmental problems, in the context of engineering and public health.

## Coursework

In addition to EGR 710 EGR 711, and EGR 796, course selection is based on the research and career goals of the student, and curricula will vary between students. Students are guided by their faculty mentor (committee chair) and a graduate study committee composed of faculty representing an interdisciplinary team in the student's area of research interest. The coursework must include courses from at least two disciplines.

This work will be completed under the guidance of the student's faculty mentor (graduate study committee chair). An approved 6 hour internship may be substituted for 6 of the required dissertation research hours. Non-dissertation Research and Dissertation Research hours will be taken through the department of the student's faculty mentor.

## Additional Information

Deadline for Entry Term(s):	Fall: July 1· Spring: November 1, Summer: April 1
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE General Test (TOEFL is also required for international applicants whose native language is not English.)

## Contacts:

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Graduate Program Director  
Professor of Mechanical Engineering  
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Mrs. Kim Hazelwood  
Program Manager II  
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# Leonardo Art & Engineering Graduate Certificate

## Contacts

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Kim Hazelwood

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(205) 934-8460

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/leonardo\\_art\\_engineering\\_certificate\\_admissions\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/leonardo_art_engineering_certificate_admissions_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## Program Description

Leonardo da Vinci is recognized as embodying the concept of the Renaissance Man as he was a painter, sculptor, architect, musician, scientist, mathematician, engineer, and inventor - an accomplished artist of the 16th century and a perfect example of interdisciplinary endeavors.

In this spirit of the Renaissance Person, the Departments of Mechanical Engineering and Art & Art History bring their collective expertise and experience together to offer a new interdisciplinary Category A certificate program involving an integrated art and engineering curriculum.

The Leonardo Art & Engineering program crosses traditional boundaries between academic disciplines and forges new collaborations to create a scholar/scientist/artist ready to meet the demands of the 21st century.

The objectives for the program are to:

- Provide cross-disciplinary training in simulation, art, visualization, and virtual reality to students with a BS/BA degree in Arts and Sciences, Engineering, Business, or Healthcare-related disciplines for addressing marketing, education/training, entertainment, product development, and design application demands of the 21st century growth area in 3D and VR technologies.
- Offer a mechanism for the large number of practicing artists, engineers, healthcare professionals, business managers, and game developers in Alabama and Birmingham to acquire additional training and education in simulation, 3D visualization, and VR.
- Provide a specialized education suitable to the needs of in-state, out-of-state, and international students interested in the application of 3D visualization, VR, and simulation to the industry or business segment of their preference. The program will provide the students with highly specialized and marketable skills.

## Program Requirements

- Students must be admitted to either Department in either the undergraduate or graduate program or to the UAB Graduate School as a non-degree seeking student. (Undergraduates may begin work on the certificate in their senior year provided they have satisfied prerequisite requirements and obtained approval from the Graduate School to take graduate level courses. A certificate can only be awarded after completion of the BA or BS degree requirements.)
- Students must be admitted to the Leonardo Art & Engineering Certificate program using the degree-seeking application found on the UAB Graduate School Apply Yourself ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=uab-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=uab-grad)) website.
- Certificate requires a minimum of 18 semester hours.

- Relevant courses taken towards the certificate may be applied to the MS degree offered by the Department of Mechanical Engineering or MA degree offered by the Department of Art & Art History.
  - One course, up to three semester hours, may be transferred from another institution. This may be the required course or one of the graduate level courses.
- Courses taken from UA and UAH by IITS may be applied to certificates

## Course Requirements

Total of 18 credit hours, as follows:

Requirements	Hours
ME 521 Introduction to Computational Fluid Dynamics Basics or ME 564 Introduction to the Finite-Element Method	3
ARS 520 Sculpture	3-6
ARS 561 3D Modeling	3
ME 698 Non-Thesis Research	1-12
ARS 588 Seminar in Time Based Media	3
<b>Total Hours</b>	<b>13-27</b>

## Professional Degree Programs

In an effort to meet increasing industry demands for highly skilled workers, the School of Engineering offers a variety of professional programs. These programs are designed to benefit working professionals who seek to increase their qualifications through specialized degree and certificate programs. The following three tracks are available in the Master of Engineering (MEng): Construction Engineering Management; Advanced Safety Engineering and Management; and Information Engineering and Management.

## Advanced Safety Engineering and Management

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/advanced\\_safety\\_engineering\\_and\\_management\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/advanced_safety_engineering_and_management_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

**Note that this program is totally online.**

Web site:	<a href="http://www.uab.edu/asem">http://www.uab.edu/asem</a>
E-mail:	<a href="mailto:mbidez@uab.edu">mbidez@uab.edu</a>
Phone:	(205) 934-6528
Director:	Martha W. Bidez
Degree Offered:	MEng

## Instructors

The MEng-ASEM graduate program is taught by a team of practicing safety and health professionals with Dr. Martha Bidez serving as overall Course Master. Practitioner-Scholars facilitate online discussions on key topics of interest in their industry sector and provide industry-specific case studies. Students participate in peer to peer learning activities

discussing current topics of interest and real world experiences using on line discussion boards.

## ASEM Admission Requirements

Admission to the UAB MEng-ASEM program requires the following:

- An undergraduate degree with a minimum 3.0 GPA from a regionally accredited school and a minimum of five years of professional work experience as evidenced by resume and recommendations.
  - Undergraduate degree does not have to be in engineering.
- One of the recommendations must be a self-recommendation and one must be from a current, direct supervisor
- Applicants not satisfying the grade point average requirement and/or holding a degree from a nationally accredited school may receive admission on a provisional basis, subject to assessment and recommendation of the program director.

To apply, go to Apply Yourself ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=uab-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=uab-grad)) and complete and submit your online application.

## Additional Information

Comments:	The ASEM program is totally online. There are no campus classes, meetings, or activities. Course delivery includes asynchronous and synchronous learning modes.
Entrance Tests:	None
Number of Recommendations Required:	Three (including self-recommendation and recommendation from your current, direct supervisor)
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins (see UAB academic calendar - <a href="https://www.uab.edu/students/academics/academic-calendar">https://www.uab.edu/students/academics/academic-calendar</a> )
Application Submission Deadline for Entry Term(s):	Fall: July 1; Spring: November 1; Summer: April 1

For detailed program information, contact:

Martha Warren Bidez, PhD, Professor and Graduate Program Director  
MEng in Advanced Safety Engineering and Management  
UAB School of Engineering, HOEN 101  
1720 2nd Avenue South, Birmingham, AL 35294-4440  
Telephone: 205-934-6528  
E-mail: [asem@uab.edu](mailto:asem@uab.edu)  
Web: <http://www.uab.edu/asem>

## Construction Engineering Management

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/construction\\_engineering\\_management\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/construction_engineering_management_checklist)) to obtain specific admissions requirements on how to apply to Graduate School

Degree Offered:	M.Eng.
Director:	Wilbur Hitchcock
Phone:	(205) 504-1386
E-mail:	wah@uab.edu
Web site:	<a href="http://www.uab.edu/engineering/cem/">http://www.uab.edu/engineering/cem/</a>

## CEM Admission Requirements

Admission to the UAB CEM requires

1. Bachelors degree from an accredited U.S. College or University
2. Personal interview with program manager
3. Two letters of recommendation
4. NO GRE REQUIRED

To apply:

Go to Apply Yourself ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=uab-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=uab-grad)) for the UAB Graduate School and fill out application.

- Should apply as Graduate Application.
- Please make sure you use an email and phone number where you can be contacted for an interview.
- Use the area on the left and choose "Application for Admission as a Degree-Seeking Student".
- Under the link Application Information and the option Program Applying to: choose Information Engineering and Management. Under Additional Information you will be asked to upload a resume.

Once your application is complete, a member of the committee will contact you for an interview.

## Additional Information

Deadline for Entry Term(s):	Spring: November 1, Fall: July 1
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Two
Entrance Tests:	N/A

For detailed information, contact:

Dianne Gilmer, IEM  
 Hoehn 130B, 1720 2nd Avenue South, Birmingham, Alabama  
 35294-4440  
 Telephone: 205-975-5848  
 E-mail: [digilmer@uab.edu](mailto:digilmer@uab.edu)  
 Web: <http://www.uab.edu/engineering/cem>

## Information Engineering and Management

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/information\\_engineering\\_and\\_mangement\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/information_engineering_and_mangement_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.Eng.
Director:	Dr. Dale W. Callahan, PE
Phone:	(205) 934-8480
E-mail:	<a href="mailto:iem@uab.edu">iem@uab.edu</a>
Web site:	<a href="http://www.uab.edu/iem">http://www.uab.edu/iem</a>

## IEM Admission Requirements

Admission to UAB Information Engineering and Management requires

1. An undergraduate degree from a regionally accredited university.
2. Preference is given to engineering, math, science or technical-related undergraduate degrees.
3. Original transcripts from every institution attended should be requested by the applicant and sent directly to the UAB Graduate School.
4. Relevant industry work experience as evidenced by your resume and three recommendations.
5. An essay containing a short paragraph addressing each of the following questions:
  1. Why do you want to be a part of IEM and what do you expect to gain?
  2. Describe your area(s) of technical expertise.
  3. Tell us about one major accomplishment and one major setback you have faced in your career and how that impacted you.
  4. Why will your classmates be glad you are on their team?
6. A video introducing yourself to IEM. The video should be less than 5 minutes in length. Please tell us a little about yourself, what you've done and why you want to be admitted to IEM. The video should be posted to YouTube, marked private with a limited access URL and the link emailed to [iem@uab.edu](mailto:iem@uab.edu).
7. An interview with the IEM admissions committee may also be required.
8. No GMAT/GRE required for admission to IEM.

### To Apply:

**Whether you are on campus or online, or some of both, here is what all entering clients need to do:**

Go to Apply Yourself ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=uab-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=uab-grad)) for the UAB Graduate School and fill out application.

- Use the area on the left and choose "**Application for Admission as a Degree-Seeking Student**".
- Under the link **Application Information** and the option **Program Applying to:** choose Information Engineering and Management.
- Under **Additional Information** you will be asked to upload a resume.
- Applications will be processed in rounds. We encourage applicants to complete their application early to make sure they are considered for admission as soon as possible. A complete application means that all materials (transcripts, essay, resume, etc.) have been received by the Graduate School and the video should be uploaded to YouTube. Applications must be complete by the following deadlines or the application will be delayed to the next evaluation round:

Entry Term	Deadline
Round 1	January 1

Round 2	March 1
Round 3	May 1
Round 4	July 1

- Due to limited openings, applications completed after July 1 may not be accepted for the current year. If space is unavailable, the application may be deferred to the next Fall Semester.
- Acceptance is determined by the IEM Admissions Committee.
- Scholarships may be available to those that complete their paperwork before May 1 – see the IEM website (<http://www.uab.edu/iem/admissions-a-tuition/scholarship-information>) at for more information.

## Applications Submitted after July 1

If you are applying after the graduate school deadline (July 1 for Fall), the system will only allow you to apply for the following year. Go ahead and apply, then email IEM.

Late applicants may apply as “non-degree seeking” and pay an additional application fee. If approved by the Graduate School deadline, they may start classes in the Fall semester. Applicants are still required to submit the paperwork shown above. The non-degree seeking deadline is typically two weeks before classes begin.

## Additional Information

Deadline for Entry Term(s):	Fall: July 1
Deadline for All Application Materials to be in the Graduate School Office:	Approximately 3 weeks after deadline for entry
Number of Evaluation Forms Required:	Three
Entrance Tests:	N/A

For more information, contact IEM Director-Dr. Dale Callahan, PE or IEM Program Manager-Maria Whitmire, CAP-OM; IEM, Hoehn 370, 1530 3rd Avenue South, Birmingham, Alabama 35294-4440.

Telephone: 205-934-8480

E-mail: [iem@uab.edu](mailto:iem@uab.edu) or [mwhitmire@uab.edu](mailto:mwhitmire@uab.edu)

Web: [www.uab.edu/iem](http://www.uab.edu/iem)

## Information Engineering and Management – IEM (EGR)

### FALL 1

First Year	
First Term	Hours
EGR 640	2
EGR 641	3
EGR 642	3
	<b>8</b>

Total credit hours: 8

### Spring 1

Second Year	
Second Term	Hours
EGR 643	3

EGR 644	3
	<b>6</b>

Total credit hours: 6

## Summer

First Year	
Summer Term	Hours
EGR 645	3
EGR 646	3
	<b>6</b>

Total credit hours: 6

## Fall 2

Second Year	
First Term	Hours
EGR 650	1
EGR 651	3
EGR 652	3
	<b>7</b>

Total credit hours: 7

## Spring 2

Second Year	
Second Term	Hours
EGR 653	3
EGR 655	3
	<b>6</b>

Total credit hours: 6

## Biomedical Engineering

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/biomedical\\_engineering\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/biomedical_engineering_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

### Biomedical Engineering (Ph.D., M.S.B.M.E., M.S.B.M.E. with Certificate in Technology Commercialization and Entrepreneurship)

Degrees Offered:	Ph.D., M.S.B.M.E., M.S.B.M.E. with Certificate in Life Sciences Entrepreneurship
Phone:	(205) 975-2119
E-mail:	<a href="mailto:uabmegrad@uab.edu">uabmegrad@uab.edu</a>
Web Site:	<a href="http://www.uab.edu/bme">www.uab.edu/bme</a>

## Program Information

### M.S.B.M.E. Program

The Master of Science in Biomedical Engineering prepares students for entry into the doctoral program, biomedical industry, or professional school. Primary research areas are biomedical imaging, biomedical implants and devices, cardiac electrophysiology, multiscale computational modeling, tissue engineering and regenerative medicine. Other research opportunities are available through our on-going collaborations with the UAB Medical and Dental Schools. With the terminal degree, employment is usually found in health-care delivery, medical devices,

pharmaceuticals, biomedical imaging, instrumentation, medical sales and marketing, regulatory agencies, or computer application groups. For admission to the program, a student should have earned a bachelor's degree in biomedical engineering, engineering or a closely-related field.

Students with undergraduate degrees in the physical sciences, life sciences, or mathematics will also be considered for admission; however, such students may be required to demonstrate competence in engineering areas usually found in an undergraduate engineering curriculum. In some cases, preparatory courses in mathematics, engineering or life sciences may be required, with specific recommendations made by the Biomedical Engineering (BME) Graduate Program Committee. Admission to the BME Master's program is competitive, and successful applicants will usually present scores of at least 156 on the verbal and at least 159 on the quantitative sections of the GRE General Test (equivalent to 550 and 750 under the previous scoring system). Typical students have an undergraduate GPA of 3.5 or greater and have participated in at least one research project while an undergraduate (e.g., honors research, summer research experience, laboratory research, senior design, internship).

The student's research advisor and the Graduate Program Committee work to devise an individualized curriculum developed to ensure each student obtains the coursework to provide an in-depth knowledge of both quantitative methods and human physiology necessary to succeed in completion of the thesis research. The master's degree requires a minimum of 30 semester hours of graduate coursework beyond the bachelor's including 24 semester hours of course work and 6 hours of thesis research (BME 699). All students are required to take BME 517 Engineering Analysis, BME 670 Quantitative Physiology, three one-hour departmental seminar courses (BME 601), at least one three-hour Biostatistics course. Additional course work is a combination of graduate-level life sciences and bioengineering courses selected in consultation with your thesis advisor and approved by the BME Graduate Program Committee.

The majority of students carry out research leading to a thesis (plan I option). To receive a master's degree in BME, the student must publish their research in a peer-review journal article; typically a first-author publication. The student is expected to present their research at a scientific or technical conference; preferably at a relevant national or international scientific meeting. Publication of at least one peer-reviewed manuscript is a requirement for graduation from the BME M.S. Program. Plan I students must register for at least six semester hours of BME 699 (thesis research) and successfully write, present and defend a thesis based on their research.

Additionally, BME now offers a Master's in Biomedical Engineering with a Certificate in Technology Commercialization and Entrepreneurship. This represents a unique graduate training program featuring collaboration between BME and the UAB School of Business. Biomedical engineering principles are blended with business-model planning in an effort to equip students to not only become scientists and researchers, but also capable business professionals. BME students partner with Business students pursuing an M.B.A. to turn biomedical devices into commercial successes that are marketed worldwide. They will participate in the Invention to Innovation (i2i) activities, in which they will pitch their start-up companies and enter business plan competition with the Alabama Launchpad (<http://www.alabamalaunchpad.com/>). In addition to the BME course and thesis requirements, students in the M.S.B.M.E. with a Certificate in Life Sciences Entrepreneurship will take 12 credit hours of M.B.A. coursework, including MBA 681: Idea to IPO; MBA 673: Technology-

based Venture Planning; MBA 690: Managing Innovation; and MBA 691: The i2i Entrepreneur Accelerator Directed Independent Study.

## Ph.D. Program

The Ph.D. degree prepares students for careers in industry and academics. Students entering the doctoral program will possess a B.S. or M.S. or be currently enrolled in the D.M.D/Ph.D. or M.D./Ph.D. program at UAB.

Admission to the Ph.D. program is competitive, and successful applicants will usually present scores of at least 156 on the verbal and at least 159 on the quantitative sections of the GRE General Test (equivalent to 550 and 750 under the previous scoring system). Typical students have a graduate GPA of 3.5 or greater and have a significant research experience. Students admitted to the doctoral program typically receive a competitive stipend that usually includes payment of tuition.

Students can be admitted to the Ph.D. Program with a B.S. degree in a field of biomedical engineering or closely-related discipline. Students with undergraduate degrees in the physical sciences, life sciences, or mathematics can also be considered to admission. Students entering the Ph.D. program with a B.S. are required to complete at least 72 semester hours of graduate work, including 48 semester hours of graduate course work, and a minimum of 24 hours of dissertation research (BME 799) earned over at least two semesters in candidacy. All students are required to take BME 517 Engineering Analysis, BME 770 Quantitative Physiology, and at least one 3-hour Biostatistics course (BST 621) and 6 semesters of BME seminars (BME 701). The remaining course work should be a combination of life sciences, biomedical engineering, or mathematics elective courses that provide sufficient breadth and depth to gain the necessary graduate level, interdisciplinary knowledge to complete thesis research. Up to three credit hours of bioengineering elective course work can be taken as directed independent study. If approved by the Graduate Program Committee. At least three peer-reviewed first-author publications are required for completion of the Ph.D. in the Department of Biomedical Engineering.

Students can be admitted to the Ph.D. Program following completion of a Master's Degree in BME or closely-related discipline. If the Master's Degree in BME was obtained at UAB (Plan I option), the admission requires an endorsement from their Master's Thesis Committee. As a student completes a master's thesis and prepares for a defense, he/she should indicate the desire to go on for the Ph.D. to the Research Advisor and the BME Graduate Program Director. All students in the M.S. program who wish to pursue the Ph.D. degree need only write a letter to the Chair to be considered by the Admissions Committee. A student is not required to re-apply to the Graduate School. The BME Graduate Program Committee evaluates all BME students who are required to complete the M.S. degree before entering the Ph.D. program before they proceed into the Ph.D. program. Admission into the Ph.D. Program with a M.S. requires publication of at least one peer-reviewed journal article (typically a first author publication). Students entering the Ph.D. program with a M.S. are required to complete at least 48 semester hours of graduate work beyond the Master's degree including 24 semester hours of course work and 24 hours of dissertation research (BME 799). earned over at least two semesters in candidacy. All students are required to take BME 517 Engineering Analysis, BME 770 Quantitative Physiology, and BST 621 Statistical Methods, if not taken as part of their master's program, and 3 semesters of BME seminars (BME 701). The remaining course work should be a combination of life sciences, biomedical engineering, or mathematics elective courses that provide sufficient breadth and depth to gain the necessary graduate level, interdisciplinary

knowledge to complete thesis research. At least two peer-reviewed first-author publications beyond the M.S.B.M.E. degree are required for completion of the Ph.D. in the Department of Biomedical Engineering.

## Additional Information

Deadline for Entry Term(s):	Fall
Deadline for All Application Materials to be in the Graduate School Office:	February 1
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE (TOEFL is also required for international applicants whose native language is not English)
Comments	Students are rarely admitted for the Spring term

For detailed information, contact Dr. Vladimir Fast, Associate Professor, BME Graduate Program Director, UAB Department of Biomedical Engineering, 1670 University Blvd., Volker Hall B126, Birmingham, AL 35294-0019.

Telephone (205) 975-2119  
E-mail [uabmegrad@uab.edu](mailto:uabmegrad@uab.edu)  
Web [www.uab.edu/bme](http://www.uab.edu/bme)

## Civil, Construction and Environmental

The Civil, Construction, and Environmental Engineering (CCEE) department offers master's and doctoral level programs, and cutting-edge research covering various facets of Civil Engineering theory and practice. A knowledgeable and experienced group of faculty members work closely with students to provide them with the tools required to succeed professionally in globally-competitive work environments.

The UAB Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

## Civil Engineering

Degree Offered:	M.S.C.E., Ph.D.
Director:	Dr. Robert W. Peters
Phone:	(205) 934-8430
Fax:	(205) 934-9855
E-mail:	<a href="mailto:rwpeters@uab.edu">rwpeters@uab.edu</a>
Web site:	<a href="http://www.uab.edu/engineering/">http://www.uab.edu/engineering/</a>

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/civil\\_engineering\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/civil_engineering_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## Admission Requirements

In addition to the UAB Graduate School admission requirements, requirements for admission to the program leading to the Master of Science in Civil Engineering degree include the following five criteria:

1. An undergraduate engineering degree from an accredited program by the ABET. Applicants who do not meet this criterion but who have an outstanding academic record in an engineering degree program not accredited by ABET, or in a baccalaureate degree program in a related field, may be admitted on probation. Students admitted in this category will be required to complete a sequence of undergraduate courses in addition to the normal requirements of the M.S.C.E. degree. This set of extra requirements will be specified in writing at the time of admission to the program.
2. GPA of 3.0 or better (A = 4.0) in all undergraduate degree major courses attempted;
3. Three letters of evaluation concerning the applicant's previous academic and professional work; and
4. Submission of scores achieved on the GRE General Test. Admission to the program is competitive and is based on all available evidence; for admission in good academic standing, scores above 160 on each component of GRE General Test are preferred. Minimum scores of 550 on the Test of English as a Foreign Language (TOEFL) and a 3.5 on the Test of Written English (TWE) are also required for those applicants whose native language is not English. These test scores will be used primarily if an applicant fails to meet minimum standards for admission in good standing and is being considered for admission on probation.
5. Verification of registration by examination as a Professional Engineer (P.E.) will satisfy criteria 4 above.

## M.S.C.E. Program Requirements

The following minimum requirements apply to the plan of study for a student who has earned a baccalaureate degree in civil engineering. A student with an undergraduate degree in another field may also be accepted into the civil engineering program but will normally have to take additional preparatory coursework as part of an expanded plan of study. Continuous enrollment for at least 3 credit hours per term is required. Students receiving a research or teaching assistantship are required to be enrolled as full-time students every semester. A full-time student is one who is enrolled in at least 9 credit hours per term. ***Enrollment in the Civil Engineering Graduate Seminar (CE 641) is required at least once prior to graduation.***

### Plan I (Thesis Option)

1. In addition to the general Graduate School requirements, the student must successfully complete at least 33 semester hours of graduate credit, including:
  - a) A minimum of 18 semester hours in civil engineering;
  - b) Up to 6 semester hours in disciplines outside civil engineering, such as other engineering disciplines, mathematics, biology, earth science, physics, urban affairs, or public health.
  - c) A minimum of 9 hours of - Masters Thesis Research.
2. The student must pass a comprehensive examination on the content of the program. This examination may be written, oral, or both and shall include an oral defense of a thesis.

### Plan II (Nonthesis Option): Research/Design Emphasis

1. The student must successfully complete at least 33 semester hours of graduate credit including:
  - a) A minimum of 24 semester hours in civil engineering;

b) Up to 6 semester hours in disciplines outside civil engineering, such as; other engineering disciplines, mathematics, biology, earth sciences, physics, chemistry, or public health; and

c) A minimum of 3 hours of CE 698 – Nonthesis Research under the direction of the graduate study committee chair, resulting in a committee approved written report.

- The student must pass a comprehensive examination on the content of the program. This examination may be written, oral, or both and shall include an oral defense of the nonthesis research project.

## Areas of Specialization

Specialization programs are available in the fields of environmental engineering, structural engineering/structural mechanics, construction engineering management; and transportation engineering. Supporting courses are offered in geotechnical engineering, optimization, engineering law and other areas. **Enrollment in the Civil Engineering Graduate Seminar series (CE 641/ CE 741) is required of all graduate students at least once prior to graduation.**

### Required Courses for Specialization in Environmental Engineering

In addition to the M.S.C.E. program requirements, the following undergraduate classes (plus all associated prerequisites) are generally required of all M.S.C.E. students specializing in environmental engineering:

Requirements	Hours
CE 236 Environmental Engineering	3
CE 337 Hydraulics	3
CE 344 Civil Engineering Analysis I	3
CE 430 Water Supply/Drainage Design	3
or CE 480 Introduction to Water and Wastewater Treatment	

### Required Courses for Specialization in Structural Engineering/Structural Mechanics

In addition to the M.S.C.E. program requirements, the following undergraduate classes (plus all associated prerequisites) are generally required of all M.S.C.E. students specializing in structural engineering/structural mechanics:

Requirements	Hours
CE 332 Soil Engineering	4
CE 344 Civil Engineering Analysis I	3
CE 360 Structural Analysis	3
CE 450 Structural Steel Design	3
CE 455 Reinforced Concrete Design	3

### Required Courses for Specialization in Construction Engineering Management

In addition to the M.S.C.E. program requirements, the following undergraduate classes (plus all associated prerequisites) are generally required of all M.S.C.E. students specializing in construction management.

Requirements	Hours
CE 395 Engineering Economics	3
CE 497 Construction Engineering Management	3

## Required Courses for Specialization in Transportation Engineering

In addition to the M.S.C.E. program requirements, the following undergraduate classes (plus all associated prerequisites) are generally required of all M.S.C.E. students specializing in transportation engineering.

Requirements	Hours
CE 344 Civil Engineering Analysis I	3
CE 345 Transportation Engineering	3

## Ph.D. Program

This is a joint program with the University of Alabama in Huntsville (UAH). A typical student entering the program would already have an undergraduate degree in Civil Engineering from an ABET accredited program. Students with outstanding records in related fields or from a non-accredited engineering program will be considered for admission on conditional standing, and must remedy deficiencies in their preparation after the start of their academic program. They may then be granted unconditional standing in the doctoral program.

The program requires 48 credit hours of coursework beyond the baccalaureate level or 24 credit hours of coursework beyond the master's degree, plus a minimum of 24 credit hours of dissertation research. **Enrollment in the Civil Engineering Graduate Seminar (CE 741) at least once prior to graduation is required.** A minimum of 6 credit hours must be taken from the UAH campus, and may be taken through the Intercampus Interactive Telecommunications (IITS) System here at UAB, Distance Learning courses from UAH (DL) or Web-based Instruction from UAH.

A comprehensive examination is required of all doctoral candidates. This examination is given after (a) all coursework is completed, and (b) the student's Graduate Committee, which consists of faculty representatives from both campuses, deems the student to have adequate preparation in the major and minor fields of study. The examination is conducted by the student's Graduate Committee and administered on the resident campus. The examination consists of a written part and an oral part. During the oral portion of the examination, the student also presents his/her dissertation proposal. The Comprehensive Examination may only be taken twice.

For additional details, please refer to the CCEE website: <http://www.uab.edu/engineering/>

## Additional Information

For detailed information, contact Jennifer A. Vinson, Administrative Associate (jav@uab.edu), UAB Department of Civil, Construction, and Environmental Engineering, HOEN 140, 1720 2nd Ave., S., Birmingham, AL 35294-4440. Physical location: 140 Hoehn Building, 1075 13th Street South, Birmingham, AL, Telephone # (205) 934-8430.

## CE Specialty Certificate Programs

Category A certificates are offered by the Civil, Construction, and Environmental Engineering Department. Any undergraduate or graduate student in good standing who is pursuing a Civil Engineering degree (B.S.C.E., M.S.C.E., Ph.D.) may elect to simultaneously complete the requirements of his or her degree program and the Certificate Program. These certificates are listed on student transcripts and in the university graduation bulletin. Certificates can be earned in:

- Construction Engineering Management
- Sustainable Engineering Management

3. Structural Engineering
4. Environmental Engineering
5. Transportation Engineering
6. Geotechnical Engineering

Civil Engineering (B.S.C.E.) graduates who complete the Certificate Program will have greater depth in specific technical area. The certificates also allow a means for practicing engineers to acquire expertise beyond a Bachelor degree, and have it formally recognized, without completing a program leading to a master's degree. This technical expertise will enhance their proficiency and marketability. Up to 12 graduate level credit hours taken for a certificate may be applied toward the M.S.C.E. degree.

Students who wish to pursue a CE Certificate must be admitted to the Department as either undergraduate or graduate students (B.S.C.E. or M.S.C.E. program). Students who are not currently enrolled in the civil engineering program may be admitted as a non-degree seeking student to earn a Certificate.

Certificates require a minimum of 15 semester hours. They consist of one required course (which may also count toward the B.S.C.E. degree at UAB) and four graduate level elective courses in the area of specialization. Courses that can be applied towards the Certificate can be found at <http://www.uab.edu/engineering/home/departments-research/civil>

For more information, please contact Jennifer A. Vinson, Administrative Associate, 140 Hoehn Engineering Building, 1075 13th Street South, telephone (205) 934-8430, e-mail [jav@uab.edu](mailto:jav@uab.edu)

## Master in Engineering – Construction Management Program Requirements

The Department of Civil, Construction, and Environmental Engineering is pleased to announce its newest program, a Masters in Engineering – Construction Management. This program is designed to enhance the engineering and business qualifications of working professionals interested in project and company management.

In addition to the Graduate School admission requirements, requirements for admission to the program leading to the Master in Engineering – Construction Management degree include the following:

1. Must have a Bachelors degree from an accredited U.S. College or University;
2. Must have an Undergraduate GPA of 3.0 or higher (individuals not meeting this requirement may start on a probationary status with strong interview and recommendations);
3. No GRE required for U.S. Citizens;
4. Must submit at least two letters of recommendation
5. Must schedule an interview with the Program director or coordinator.
6. Student must successfully complete at least 33 semester hours of graduate credit

## Electrical and Computer Engineering

Degree offered:	M.S.E.E.
Director:	Mohammad Haider

Phone:	(205) 934-8440
E-mail:	<a href="mailto:mrhaider@uab.edu">mrhaider@uab.edu</a>
Web site:	<a href="http://www.uab.edu/engineering/home/index.php">http://www.uab.edu/engineering/home/index.php</a>

## Program Information

The Master of Science in Electrical Engineering (M.S.E.E.) prepares students for a professional career in industry or entry into a doctoral program or professional school. The M.S.E.E. program builds upon the broad foundation provided by a Bachelor of Science in Electrical Engineering by supplying depth in specific areas of electrical and computer engineering through advanced coursework and a thesis or project experience.

## Admission Requirements

Requirements for admission to the electrical engineering master's degree program include the following:

1. A bachelor's degree in electrical or computer engineering.
2. A 3.0 (A = 4.0) or better GPA in all junior and senior electrical and computer engineering and mathematics courses attempted;
3. Three letters of evaluation concerning the applicant's previous academic and professional work; and
4. An acceptable score on the GRE General Test and the TOEFL, if applicable.

## Financial Support

Limited financial assistance may be available for well-qualified students admitted into the M.S.E.E. program. In order to be considered for financial aid for the coming academic year, the completed application materials must usually be received at UAB by April 1.

There are a number of minority fellowships available through the Graduate School. Contact the UAB Graduate School directly for further information.

## Program Requirements

Assuming that a student possesses appropriate academic preparation for this degree, 33 semester hours of course work will be required beyond the bachelor's degree. This work must be distributed as follows:

### Plan I (Thesis Option)

1. Twelve semester hours of graduate-level courses appropriate to the student's area of technical specialization;
2. Six semester hours of graduate-level courses in an area related to the student's area of technical specialization; and
3. Six semester hours of courses having a mathematical emphasis; and
4. Successful completion and oral defense of a thesis developed through registration for at least nine semester hours of EE 699.

### Plan II (Nonthesis Option)

1. Twelve semester hours of graduate-level courses appropriate to the student's area of technical specialization;

2. Twelve semester hours of graduate-level courses in an area related to the student's area of professional emphasis (these courses may address technical subjects or subject matter appropriate to an emphasis in engineering management or entrepreneurship);
3. Six semester hours of courses having a mathematical emphasis; and
4. Successful completion of a project developed through registration for at least 3 semester hours of EE 697.

### Additional Information

Deadline for Entry Term(s):	Fall, Spring, Summer
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments	GRE and evaluation forms requirements waived for persons holding registration as professional engineers

For detailed information, contact  
 Dr. Mohammad Haider, Graduate Program Director  
 UAB Department of Electrical and Computer Engineering, BEC 255E  
 1720 Second Avenue South, Birmingham, Alabama 35294-1170.

Telephone 205-934-8440

E-mail [mrhaider@uab.edu](mailto:mrhaider@uab.edu)

Web <http://www.uab.edu/engineering/home/index.php>

## Electrical Engineering

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/electrical\\_engineering\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/electrical_engineering_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.E.E.
Director:	Mohammad Haider
Phone:	(205) 934-8440
E-mail:	<a href="mailto:mrhaider@uab.edu">mrhaider@uab.edu</a>
Web site:	<a href="http://www.uab.edu/engineering/home/departments-research/ece">http://www.uab.edu/engineering/home/departments-research/ece</a>

### Program Information

The Ph.D. degree prepares students for professional and research careers in industry and academia. The Ph.D. in Computer Engineering is awarded by UAB and is offered through a program shared with the University of Alabama in Huntsville (UAH), allowing both UAB and UAH to contribute to the program.

## Admission Requirements

Requirements for admission to the electrical engineering master's degree program include the following:

1. A bachelor's degree in electrical or computer engineering.
2. A 3.0 (A = 4.0) or better GPA in all junior and senior electrical and computer engineering and mathematics courses attempted;
3. Three letters of evaluation concerning the applicant's previous academic and professional work; and
4. An acceptable score on the GRE General Test and the TOEFL, if applicable.

### Financial Support

Limited financial assistance may be available for well-qualified students admitted into the M.S.E.E. program. In order to be considered for financial aid for the coming academic year, the completed application materials must usually be received at UAB by April 1.

There are a number of minority fellowships available through the Graduate School. Contact the UAB Graduate School directly for further information.

### Program Requirements

Assuming that a student possesses appropriate academic preparation for this degree, 33 semester hours of course work will be required beyond the bachelor's degree. This work must be distributed as follows:

#### Plan I (Thesis Option)

1. Twelve semester hours of graduate-level courses appropriate to the student's area of technical specialization
2. Six semester hours of graduate-level courses in an area related to the student's area of technical specialization; and
3. Six semester hours of courses having a mathematical emphasis; and
4. Successful completion and oral defense of a thesis developed through registration for at least nine semester hours of EE 699.

#### Plan II (Nonthesis Option)

1. Twelve semester hours of graduate-level courses appropriate to the student's area of technical specialization;
2. Twelve semester hours of graduate-level courses in an area related to the student's area of professional emphasis (these courses may address technical subjects or subject matter appropriate to an emphasis in engineering management or entrepreneurship);
3. Six semester hours of courses having a mathematical emphasis;
4. Successful completion of a project developed through registration for at least 3 semester hours of EE 697.

### Additional Information

Deadline for Entry Term(s):	Deadline for Entry Term(s):
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three

Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments	GRE and evaluation forms requirements waived for persons holding registration as professional engineers

For detailed information, contact

Dr. Mohammad Haider Graduate Program Director  
UAB Department of Electrical and Computer Engineering, BEC 255E  
1720 Second Avenue South, Birmingham, Alabama 35294-1170.

Telephone 205-934-8440

E-mail [mrhaider@uab.edu](mailto:mrhaider@uab.edu)

Web <http://www.uab.edu/engineering/home/departments-research/ece>

## Computer Engineering

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/computer\\_engineering\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/computer_engineering_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D.
Director:	Dr. Mohammad Haider
Phone:	(205) 934-8440
E-mail:	<a href="mailto:mrhaider@uab.edu">mrhaider@uab.edu</a>
Web site:	<a href="http://www.uab.edu/engineering/home/about-ece">http://www.uab.edu/engineering/home/about-ece</a>

## Program Information

The Ph.D. degree prepares students for professional and research careers in industry and academia. The Ph.D. in Computer Engineering is awarded by UAB and is offered through a program shared with the University of Alabama in Huntsville (UAH), allowing both UAB and UAH to contribute to the program.

## Admission Requirements

Requirements for admission to the Ph.D. program include the following:

1. A bachelor's degree in an accredited electrical or computer engineering program or a bachelor's degree in a related program acceptable to the graduate faculty in Electrical and Computer Engineering;
2. A score of at least 550 on the verbal and quantitative sections of the Graduate Record Examination (GRE);
3. An acceptable score on the TOEFL examination for international students whose native language is not English;
4. An overall GPA of at least 3.0 on a 4.0 point scale, or at least 3.0 for the last 60 semester hours completed; and
5. Three letters of evaluation concerning the applicant's previous academic and professional work.

Students not having a bachelor's degree in electrical or computer engineering may be required to complete prerequisite courses.

## Financial Support

Fellowships and/or assistantships may be available for well-qualified students admitted into the PhD program. In order to be considered for financial aid for the coming academic year, the completed application materials must usually be received at UAB by April 1.

There are a number of minority fellowships available through the Graduate School. Contact the UAB Graduate School directly for further information.

## Program Requirements

The course of study leading to the Ph.D. includes a minimum of 48 semester hours of course work beyond the bachelor's degree (excluding dissertation research). A student's advisory committee may allow appropriate course work pursued in completing a master's degree to be counted towards the 48 hour course work requirement, but a maximum of nine semester hours credit in thesis/research work from the master's degree may be allowed to count toward the 48 hour course work requirement for the Ph.D. Requirements include the following:

1. A major consisting of a minimum of 18 semester hours of approved coursework in computer engineering;
2. A minor consisting of a minimum of 12 semester hours of approved coursework in mathematics, theoretical or formal methods as related to computer engineering;
3. A minor consisting of a minimum of 12 semester hours of approved coursework in electrical or computer engineering;
4. Additional coursework consisting of a minimum of 6 semester hours of approved coursework in supportive fields;
5. Successful completion of a preliminary examination;
6. Successful completion of a qualifying examination that includes a presentation of the dissertation research proposal. Successful completion of the qualifying examination leads to admission to candidacy;
7. Successful completion of a minimum of 18 semester hours in EE 799 Dissertation Research; and
8. Successful completion of a final examination on the dissertation.

## Additional Information

Deadline for Entry Term(s):	Each semester
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

For detailed information, contact

Dr. Mohammad Haider Graduate Program Director  
UAB Department of Electrical and Computer Engineering, BEC 255E  
1720 Second Avenue South, Birmingham, Alabama 35294-1170.

Telephone 205-934-8440

E-mail [ElecCompEng@uab.edu](mailto:ElecCompEng@uab.edu)

Web <http://www.uab.edu/engineering/home/about-ece>

## Course Descriptions

See the graduate catalog of the University of Alabama at Huntsville (UAH) for doctoral courses at that university.

See the listing for the master's degree in electrical engineering (M.S.E.E.) for courses at the 500 level.

Unless otherwise noted, all courses are for 3 semester hours of credit. Course numbers preceded with an asterisk indicate courses that can be repeated for credit, with stated stipulations.

## Materials Science and Engineering

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/materials\\_engineering\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/materials_engineering_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D., M.S.Mt.E.
Director:	Dr. Uday Vaidya
Phone:	(205) 934-9199
E-mail:	uvaidya@uab.edu
Web site:	www.eng.uab.edu

## Admission Requirements

In addition to the general Graduate School admission requirements, requirements for admission to the M.S.Mt.E. and Ph.D. graduate programs include the following criteria:

1. A 3.0 (A = 4.0) or better GPA on all undergraduate degree major courses attempted
2. MSE evaluates the three scores reported on the GRE revised General Test (as of August 2012):
  - a Verbal Reasoning score reported on a 130-170 score scale, in 1-point increments
  - a Quantitative Reasoning score reported on a 130-170 score scale, in 1-point increments
  - an Analytical Writing score reported on a 0-6 score scale, in half-point increments.

MSE recommends that a student receive a minimum quantitative score of 148/170 (600/800 on the old scale); a verbal score of 153/180 (500/800 on the old scale) and a score of 3/6 on the analytical writing

3. TOEFL is an additional requirement for international students. The revised TOEFL scoring scale for an internet based TOEFL test (iBT) is 0-120 which includes:
  - Reading Section (Score of 0-30)
  - Listening Section (Score of 0-30)
  - Speaking Section (Score of 0-30)
  - Writing Section (Score of 0-30)

MSE requires a minimum TOEFL score of 80-120 (20 in each section) to be considered for admission and financial support. For applicants

who report TOEFL scores based on a paper test or a computer test, the scores will be compared to the iBT scale.

## Preparatory Courses

A student seeking a graduate degree in Materials Engineering without a Baccalaureate degree in Materials Engineering or similarly named program accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>, must demonstrate competence at the undergraduate level in the areas of physical behavior of materials, thermodynamics, mechanical behavior of materials, instrumentation, and characterization. He/she may do this by passing all or some of the following courses depending on the student's academic background. Students may be exempted from individual courses if they demonstrate that they possess the knowledge from that course. However, the burden of proof is on the student. The decisions are based on a balance between assuring a sufficient background and imposing more extensive course demands. The preparatory courses must be taken on a pass/fail basis, with a "pass" being equivalent to a grade of B or better in the course. The courses that fulfill the preparatory requirements are:

Requirements	Hours
MSE 280 Engineering Materials	3
MSE 281 Physical Materials I	4
MSE 380 Thermodynamics of Materials (Not required if graduate students take MSE 603/703)	3
MSE 381 Physical Materials II	3
MSE 382 Mechanical Behavior of Materials	3
MSE 565 Characterization of Materials	4

## M.S.Mt.E. Program

The following minimum requirements for a Master of Science in Materials Engineering apply to a student who has earned a baccalaureate degree from a program accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>, in materials or metallurgical engineering or in a similarly named engineering program. A student with an undergraduate degree in another field of engineering or in the physical sciences may also be accepted into the Materials Engineering program. However, such a student will be required to demonstrate competence in fields of study that emphasize the interrelationship among structure, processing, performance, and properties of materials. This can be accomplished by one of the methods described under "Preparatory Courses." All full-time master's students must take MSE 601 Materials Science and Engineering Seminar every term.

## Plan I (Thesis Option)

The student must successfully complete at least 24 semester hours of (primarily) materials engineering graduate course work.

- Of these 24 hours, 3 to 6 semester hours will be approved courses in mathematics, physical sciences, another engineering discipline or management (a maximum of 3 hours are allowed in management).
- Up to 9 of the 24 hours may be at the 500 level.
- The student must successfully complete and defend a thesis.
- The student must register for and successfully complete at least 9 semester hours of in addition to the 24 semester hours of course work.

## Plan II (Non-thesis Option): Research/Design Emphasis

The student must successfully complete at least 30 semester hours of (primarily) materials engineering graduate course work.

- Of these 30 hours, 3 to 6 semester hours will be approved courses in mathematics, physical sciences, another engineering discipline or management (a maximum of 3 hours are allowed in management).
- Up to 9 of the 30 hours may be at the 500 level.
- The student must complete 3 semester hours of MSE 699 Thesis Research, involving an on-site research project (usually taken after completion of all coursework).
- Successfully complete a written comprehensive examination on all course work taken in the program or a comprehensive examination on the on-site research project topic. The latter option requires a publication-quality manuscript and oral presentation (with questions) deemed acceptable by the graduate committee.

## Plan II (Non-thesis Option): Technology/Engineering Management Emphasis

The student must successfully complete at least 30 semester hours of graduate credits.

- 12 semester hours of course work in a specific area of materials science and engineering (at least 6 of these 12 hours must be at the 600 level).
- 6 semester hours of approved management course work.
- 9 semester hours of engineering-oriented management coursework.
- 3 hours of MBA 631-Administrative Theory and Practice.
- The student must also complete 3 semester hours of involving an on-site design or research project (usually undertaken after completion of all course work).
- Successfully complete a written comprehensive examination on all course work taken in the program or a comprehensive examination on the on-site research project topic. The latter option requires a publication-quality manuscript and oral presentation (with questions) deemed acceptable by the graduate committee.

## Ph.D. Program

The Ph.D. program in Materials Engineering is offered jointly with the Department of Metallurgical and Materials Engineering at the University of Alabama (Tuscaloosa). All full-time doctoral students must take MSE 701-Materials Science and Engineering Seminar every term.

## PhD Track (For students entering with a BS):

The following minimum requirements for a PhD in materials engineering apply to a student who has earned a baccalaureate degree from a program accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>, in materials or metallurgical engineering or in a similarly named engineering program. A student with an undergraduate degree in another field of engineering or in the physical sciences may also be accepted into the Materials Engineering program. However, such a student will be required to demonstrate competence in fields of study that emphasize the interrelationship among structure, processing, performance, and properties of materials. This can be accomplished by one of the methods described under "Preparatory Courses."

The requirements for a Ph.D. student entering with a BS degree are:

- A minimum of 48 hours of approved graduate course work in metallurgical engineering, materials engineering, or fields supportive of these (15 hours may be at the 500 level and at least 6 semester hours but no more than 12 must be in supportive fields (a maximum of 6 hours can be in management). Additional course work may be required at the discretion of the mentor and program director.
- Successful completion of a written qualifying examination covering the preparatory course sequence. (Students will receive a Plan II Master's upon successful completion of the Qualifying Exam and 30 hours of coursework).
- Successful completion of a Dissertation Research Proposal and examination on topics related to the student's research. (Completion of this step is required for Admission to Candidacy).
- A minimum of 24 semester hours in MSE 799 Dissertation Research.
- Successful defense of a research dissertation in metallurgical/materials engineering.

## PhD Track (For students entering with a MS):

This track is for students entering the program with a master's degree in Materials Engineering or a closely related field.

The requirements for a Ph.D. student entering with a MS degree are:

- A minimum of 24 hours of approved graduate course work in metallurgical engineering, materials engineering, or fields supportive of these (6 hours may be at the 500 level and at least 3 semester hours but no more than 6 must be in supportive fields (a maximum of 3 hours can be in management). Additional course work may be required at the discretion of the mentor and program director.
- Successful completion of a written qualifying examination covering the preparatory course sequence.
- Successful completion of a Dissertation Research Proposal and examination on topics related to the student's research. (Completion of this step is required for Admission to Candidacy).
- A minimum of 24 semester hours in MSE 799 Dissertation Research.
- Successful defense of a research dissertation in metallurgical/materials engineering.

## Additional Information

Deadline for Entry Term(s):	Each semester and summer
Deadline for All Application Materials to be in the Graduate School Office - Fall Semester:	March 1st
Deadline for All Application Materials to be in the Graduate School Office - Spring Semester:	August 31st
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments:	*To be considered for funding

For detailed information, contact Dr. Uday Vaidya, Graduate Program Director, The University of Alabama at Birmingham, Department of Materials Science and Engineering, BEC 254, 1150 10th Avenue South, Birmingham, AL 35294-4461.

Telephone 205-934-9199  
 Web [www.eng.uab.edu](http://www.eng.uab.edu)

## Graduate Automotive Technology Education (GATE)

The Graduate Automotive Technology Education (GATE) program is a Department of Energy funded initiative at UAB for advancing the state of the art in lightweight materials and manufacturing technologies for automotive, mass transit and truck. There is increasing emphasis on reducing weight in vehicles as a means to meet stringent Corporate Average Fuel Economy (CAFÉ) standards. The GATE program recruits graduate students from materials, mechanical, biomedical, civil and interdisciplinary engineering with a GPA of 3.5 or above. The GATE scholars work towards their research on GATE topics and enroll in GATE courses. A GATE certificate of completion is issued by the MSE department upon successful completion of GATE courses. Please visit [www.uab.edu/engineering/composites](http://www.uab.edu/engineering/composites) for additional information and the application process for the GATE program.

## Mechanical Engineering

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/mechanical\\_engineering\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/mechanical_engineering_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.M.E.
Director:	David Littlefield
Phone:	(205) 934-8460
E-mail:	<a href="mailto:littlefield@uab.edu">littlefield@uab.edu</a>
Web site:	<a href="http://www.uab.edu/engineering/home/departments-research/me/graduate">http://www.uab.edu/engineering/home/departments-research/me/graduate</a>

## M.S.M.E. Program Requirements

A bachelor's degree from an accredited (or equivalent) program in engineering or the physical sciences is required for admission to graduate study in mechanical engineering. The usual criteria for admission in good standing follows:

- Not less than B-level scholarship overall or over the last 60 semester hours of earned credit; and a minimum of 50th percentile on both quantitative and verbal portions of the GRE General Test. In addition, for foreign nationals, a minimum score of 80 (IBT) on the TOEFL is required. Other standardized examination scores will also be considered. A student not meeting these requirements may also be admitted, perhaps on probationary status, provided other information indicating likely success in the program is provided.

A student with an undergraduate degree in a field of engineering other than mechanical or in the physical sciences may also be accepted into the mechanical engineering program. However, such a student will normally have to take additional, preparatory coursework as part of an expanded plan of study (see "Preparatory Courses" later in this section).

## PLAN I (Thesis Option)

1. The student must successfully complete at least 24 semester hours of coursework, including (in addition to the general Graduate School requirements)

- Six semester hours in committee-approved\* mathematics courses
- Eighteen semester hours in committee-approved\* mechanical engineering courses or approved related courses, including at least two semester hours of ME 694 Seminars in Mechanical Engineering and three semester hours in a course outside the student's research or specialization area.

2. The student must register for at least 6 hours of ME 699 Thesis Research in addition to the 24 semester hours of course work.
3. The student must successfully complete and defend a thesis.

\* Before the first graduate semester at UAB, the Graduate Coordinator will advise new students regarding courses for the first semester. Before the end of the first semester, students will be assigned a Thesis Director based on research interest, and students will assemble their graduate committees. The committee will consist of the Thesis Director and two graduate faculty members with experience or expertise related to the student's thesis topic. The Thesis Director in coordination with the graduate committee will set the curriculum for the student.

## PLAN II (Non-thesis Option): Research/ Design Emphasis

Generally, Plan II will be approved for students working full-time and attending UAB on a part-time basis or when the student demonstrates that Plan II offers superior educational benefits. After 15 credit hours of course work are completed, the student should select a project director and begin work on the final project. The election of Plan II must be approved by the student's graduate advisor.

1. The student must successfully complete at least 33 semester hours of coursework, including
  - Six semester hours in approved mathematics courses
  - A minimum of 27 semester hours in approved mechanical engineering courses or approved related courses. Out of these 27 semester hours, students must enroll in:
    - at least three (3) semester hours in a course outside the student's research or specialization area
    - at least two (2) semester hours of ME 694 Seminars in Mechanical Engineering
    - at least three (3) hours of ME 698 Non-Thesis Research involving design or research
2. The student must make a presentation on the research project and submit a final report which must be approved by the project director.

## PLAN II (Non-thesis Option): Technology/ Engineering Management Emphasis

1. The student must successfully complete at least 33 semester hours of coursework, including
  - At least three semester hours in approved mathematics courses
  - At least six semester hours in approved mechanical engineering courses
  - At least two semester hours of ME 694 Seminars in Mechanical Engineering
  - At least six semester hours in one of the following two management applications areas: MBA 660 Business Statistics and either EC 520 Applied Forecasting or another approved advanced management course

- Three semester hours in MBA 632 Managerial Processes and Behavior
- At least three semester hours in ME 698 Non-Thesis Research, involving design or research
- At least nine semester hours of engineering-oriented management coursework. Approved courses include:

Requirements		Hours
CE 658	Engineering Management	3
EE 585	Engineering Operations	3
EE 686	Technical Entrepreneurship I	3
EE 687	Technical Entrepreneurship II	3

2. The student must make a presentation on the research project and submit a final report which must be approved by the project director.

## Preparatory Courses

Students admitted to the graduate program in mechanical engineering without an undergraduate degree in mechanical engineering or who have not had the courses listed below must take the following courses or present equivalent prior coursework. Additional coursework may be required depending on the courses the student has taken during his/her undergraduate degree and the area of specialization for Masters.

Requirements		Hours
ME 241	Thermodynamics I	3
ME 321	Introduction to Fluid Mechanics	3
ME 322	Introduction to Heat Transfer	3
ME 360	System Modeling and Controls	3
ME 370	Kinematics and Dynamics of Machinery	3
ME 371	Machine Design	4
CE 220	Mechanics of Solids	3

## Additional Information

Deadline for Entry Term(s):	Fall: July 1, Spring: November 1, Summer: April 1
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE General Test (TOEFL is also required for international applicants whose native language is not English.)

For detailed information, contact Dr. David Littlefield, Department of Mechanical Engineering, BEC 257, 1720 2nd Avenue South, Birmingham, Alabama 35294-4461.  
 Telephone: 205-934-8460  
 E-mail: [littlefield@uab.edu](mailto:littlefield@uab.edu)  
 Web: <http://www.uab.edu/engineering/home/departments-research/me/graduate>

# School of Health Professions

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**Dean: Dr. Harold P. Jones**

The School of Health Professions delivers educational programs to prepare health personnel who will improve the services in health care and the systems through which these services are provided. In keeping with the mission of the University of Alabama at Birmingham, the resources and programs of the school are dedicated to excellence in teaching, research, and scholarly activity and to service to the institution, the community, and the professions represented by programs of the school.

Degree options in the School of Health Professions include bachelor's, master's, and doctoral programs sponsored by five academic departments – Clinical and Diagnostic Sciences, Health Services Administration, Nutrition, Occupational Therapy, and Physical Therapy. In addition, certificate options are available in some specialized areas.

The School of Health Professions provides the professional phase (upper division coursework) for the following programs leading to a Bachelor of Science degree: biomedical sciences, health information management, health care management, medical technology, nuclear medicine technology, and respiratory therapy. The pre-professional phase of these programs may be completed by taking the prescribed coursework at UAB or any other accredited university or college. All eligible undergraduate programs have been continuously accredited since their inception by the appropriate professional accrediting bodies.

At the graduate level, the School of Health Professions offers Doctor of Philosophy degree programs in administration/health services (offered jointly with the UAB School of Business), nutrition sciences, and rehabilitation sciences; Doctor of Science in administration/health services; Doctor of Physical Therapy; and Master of Science degree programs in biotechnology, clinical laboratory sciences, nutrition sciences, genetic counseling, health administration, health informatics, occupational therapy, and physician assistant studies. Post-baccalaureate certificates are also offered in dietetics (internship), health-focused patient/client management for physical and occupational therapists, health care quality and safety, and low vision rehabilitation.

The School of Health Professions is committed to the practice of ethical standards of conduct. School policies, procedures, and regulations reflect this commitment and are in compliance with those of the University of Alabama at Birmingham. To ensure continued practice of ethical standards, the administration and the standing committees of the school (Faculty Affairs, Academic Affairs) regularly review school policies and procedures. All research endeavors are in compliance with policies of the UAB Institutional Review Board.

## SHP Admissions

Entrance requirements for the individual educational programs of SHP vary greatly. Persons desiring admission to a particular program should consult the appropriate section of the School of Health Professions Catalog for specific entrance requirements, application process, and program information. Students who attend an institution other than UAB are encouraged to seek academic advisement from the SHP Office of Student Success as early as possible to plan for completion of program prerequisites.

The School of Health Professions welcomes applications from all individuals who are prepared for the programs offered. All applicants must offer acceptable evidence of ability and intent to meet the academic standards specified by the particular program into which admission is desired. In addition, certain immunizations are required prior to enrollment. For specific requirements, see the UAB Student Health and Insurance Programs and UAB Immunization Policy. If accepted into a SHP program, students must complete a background check and drug screen upon admission and again prior to clinical placement. Applicants are considered regardless of race, color, religion, sex, sexual orientation, national origin, disability unrelated to program performance, disabled veteran status, or Vietnam era veteran status (see UAB Equal Opportunity Policy). Persons who have not yet decided upon a specific health career may obtain information from the:

SHP Office of Student Success  
School of Health Professions Building  
Room 230  
1705 University Boulevard  
telephone: (205) 934-4194

## Interdisciplinary Programs

The School of Health Professions offers two graduate level interdisciplinary programs. The Graduate Certificate in Health-Focused Patient/Client Management for Physical and Occupational Therapists is designed to prepare PTs and OTs for expanding roles in the areas of prevention, health promotion, and wellness. Health Focused Patient/Client Management is the integration of health promotion and education methods in OT and PT practice to create a holistic approach to enhance patient/client wellness and quality of life.

The Ph.D. in Rehabilitation Sciences is an interdisciplinary program sponsored by the Department of Occupational Therapy and the Department of Physical Therapy within the School of Health Professions. This program is designed to prepare graduates to become academicians, scholars, scientists and researchers in education, health care, industry, and government institutions as well as consultants to individuals, communities, and governments. The aim of this program is to prepare candidates to become leaders in teaching and research within the field of Rehabilitation Science. However, this is not a clinical training program. Applicants planning to become occupational therapists or physical therapists should look at the graduate catalog entries for these two professions.

## Health Focused Patient/Client Management for Physical and Occupational Therapists

### Contact Information

Program Coordinator:	Cecilia Graham, PT, PhD
E-mail:	cgraham@uab.edu
Phone:	205 - 934 - 5949
Fax:	205 - 975 - 7787
Web site:	www.uab.edu/ptotcert

Mailing address:

The University of Alabama at Birmingham  
 Department of Physical Therapy  
 1720 2nd Avenue South  
 SHPB 337  
 Birmingham, AL 35294-1212

## Program Information

The UAB Graduate Certificate in Health Focused Patient/Client Management for Physical and Occupational Therapists is designed to prepare PTs and OTs for expanding roles in the areas of prevention, health promotion, and wellness. Health Focused Patient/Client Management is the integration of health promotion and education methods in OT and PT practice to create a holistic approach to enhance patient/client wellness and quality of life. The ultimate goal of the certificate is to enable graduates to develop and implement clinical and community programs to address lifestyle and behavior factors that underlie many chronic diseases. Emphasis will be placed on program development for persons with disabilities. The concepts addressed in the certificate program are applicable across the patient/client lifespan and in a variety of practice settings.

## Credentials Conferred

The Graduate Certificate in Health Focused Patient/Client Management for Physical and Occupational Therapists is awarded by the University of Alabama at Birmingham.

## Length of Study

The certificate requires 5 semesters to complete; students take 1 course per semester.

## Program Entrance Date

A new cohort of students is admitted in January of each year.

## Admission Requirements

Admissions requirements include completion of a degree in physical or occupational therapy and current licensure as a physical or occupational therapist in the United States or foreign equivalent. Students from countries where English is not the official and primary language must also take and receive an acceptable score on the TOEFL or IELTS.

## Degree Requirements

15 credit hours (5 required courses)

## Rehabilitation Sciences

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/rehabilitation\\_sciences\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/rehabilitation_sciences_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D.
Director:	Dr. David Brown
Phone:	(205) 934-3566
E-mail:	dbrownpt@uab.edu
Web site:	<a href="http://www.uab.edu/rsphd">http://www.uab.edu/rsphd</a>

## Program Information

### Ph.D. in Rehabilitation Science

The Ph.D. in Rehabilitation Science program is an interdisciplinary program offered by The Department of Occupational Therapy (<http://www.uab.edu/ot>) and The Department of Physical Therapy (<http://www.uab.edu/pt>) at the School of Health Professions. This exciting program is designed to prepare graduates to become\*:

- Academicians, scholars, scientists and researchers in education, health care, industry, and government institutions.
- Consultants to individuals, communities, and governments.

The goal of the Program is to prepare graduates to have the following skills:

- Design and implement research studies that will contribute to the knowledge base of rehabilitation science.
- Design and deliver educational courses related to rehabilitation.
- Translate innovative rehabilitation research findings into practice so as to advance the field of rehabilitation science.

\* The aim of this program is to prepare candidates to become leaders in teaching and research within the field of Rehabilitation Science. However, this is not a clinical training program. Applicants planning to become occupational therapists or physical therapists should visit the following websites to pursue training in these two professions: [www.uab.edu/ot](http://www.uab.edu/ot) or [www.uab.edu/pt](http://www.uab.edu/pt).

## Application Procedure

### Received by UAB Graduate School

LHL G03  
 1720 2nd Avenue South  
 Birmingham, Alabama 35294-0013

- Complete and submit online Graduate School application
- Submit application fee payment - Domestic: \$45.00
- Request one (1) official transcript to be mailed by the issuing institution to the UAB Graduate School
- Three (3) letters of recommendation are required. Please ask the individuals from whom you request references to submit them online via the Apply Yourself system. Electronic submission is the preferred method. However, if your referees prefer to mail a recommendation letter, it should be mailed to the address of the department or program to which you are applying.

## Minimum Requirements for Admission

- Note that each application will be reviewed by the Admission Committee to identify individuals with strong commitment and aptitude to perform research related to Rehabilitation Science, along with strong academic preparation and professional-leadership potential.
- Undergraduate or graduate degree in occupational or physical therapy, engineering, exercise science, neuroscience, medicine, nursing, or other health related professions.
- Recommended minimum combined Graduate Record Exam (GRE) score of 1100
- Recommended minimum GPA 3.0/4.0 in all previous coursework
- Three strong evaluation references, with at least one from a research lab mentor, and one from an academic source.

- With the written essay, provide evidence of appropriate goals of study, professional growth and commitment to research, with special emphasis on interest in research that is being conducted at UAB.
- Interview with faculty that shows passion and commitment to research and professional growth in Rehabilitation Science.

### For further information contact:

David Brown, PT, Ph.D.  
 Department of Physical Therapy  
 205-934-3566  
 dbrownpt@uab.edu This e-mail address is being protected from spambots. You need JavaScript enabled to view it.

## Clinical and Diagnostic Sciences

The Department of Clinical and Diagnostic Sciences is comprised of academic programs essential to today's healthcare system. Our programs provide training for future health care professionals in a variety of disciplines ranging from the diagnosis of illness and disease, the administration of advanced treatment therapies, to the performance of vital roles in surgical suites and in outpatient and inpatient healthcare settings. Graduates of our programs are well poised for a wide variety of job opportunities due to the outstanding education received at UAB. Current graduate program offerings include:

### Biotechnology, M.S.

### Clinical Laboratory Science, M.S.

### Genetic Counseling, M.S.

### Physician Assistant Studies, M.S.P.A.S.

## Biotechnology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/biotechnology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/biotechnology_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.
Program Director:	Dr. Kathy Nugent, PhD
Phone:	(205) 934-7384
E-mail:	knugent@uab.edu
Web site:	<a href="http://www.uab.edu/shp/cds/academic/graduate/biotech">http://www.uab.edu/shp/cds/academic/graduate/biotech</a>

## Program Information

### Program Mission

The faculty members of the Biotechnology Program are devoted to providing an excellent service to the community and its graduates. The faculty, in its concern for the health and safety of the general public, is committed to ensuring that each student develops knowledge, skills, and values essential to the appropriate role providing the basis for continuing intellectual and professional growth.

Out of a great concern for applied technology and the role that it plays in the diagnosis, management and treatment of human disease, and in developing products to solve problems for present and future generations, the Program is designed to provide instruction through

didactic and practical training in order to ensure that its graduates possess the critical knowledge and skill sets that are required for intellectual and professional growth in the future.

## Biotechnology

The Master of Science degree in Biotechnology is designed to prepare a diverse student body for careers in various fields involving biotechnology and its related sciences. This program is designed to provide students with broad training and education in scientific principles and knowledge underlying biotechnology, scientific principles and knowledge underlying emerging diagnostic technologies associated with biotechnology, basic laboratory techniques in biotechnology, instrumentation and automation principles used in the biotechnology industry, and legal, regulatory and marketing issues in biotechnology.

The Biotechnology Program is a Master of Science degree that requires 3 semesters for completion as full-time students. The Master of Science requires 36 credit hours and is designed for individuals who hold a Bachelor of Science degree in a related discipline including biology, chemistry, biochemistry, physics, engineering, mathematics, psychology and sociology.

### M.S. Admission Requirements

In addition to the general Graduate School admission requirements, applicants to the M.S. program must:

- Have a biology, chemistry, or a related major from an accredited college or university,
- Have a minimum undergraduate GPA of 3.0 (A = 4.0), computed from all undergraduate credits or from the last 60 semester hours of undergraduate course credit,
- Have scores of at least 500 in each of the verbal and quantitative sections of the GRE General Test, if taken prior to August, 2011, or equivalent scores on the Revised GRE,
- Provide a written statement of career goals,
- Complete an interview with the program admissions committee, and
- If foreign-educated, have a score of at least 550 for paper version (or 80 for Internet version; or 213 for computer version) on the TOEFL, submit a transcript evaluation from World Education Services (WES) at [www.wes.org](http://www.wes.org) (<http://www.wes.org>)

If accepted, students must complete the UAB medical history questionnaire and physical, provide proof of required immunizations, and receive satisfactory screening by the UAB Medical Center Student Health Service before enrollment. Accepted students must complete a background check and drug screen at admission and prior to placement in clinical internships by school policy.

Persons with a Bachelor of Science degree may be eligible to register for courses as non-degree seeking graduate students before acceptance into the M.S. program. If a non-degree seeking graduate student meets the M.S. program admission requirements, up to 12 semester hours of approved non-degree graduate coursework may be accepted for the M.S. degree. Admission of a student to any course as a non-degree student does not constitute admission to the M.S. degree program.

## Essential Requirements

Fundamental tasks, behaviors, and abilities necessary to successfully complete the requirements of the Program are available upon request from the Biotechnology program office. If you have a disability, but have

not contacted Disability Support Services (DSS), please call 934-4205 or visit <https://www.uab.edu/students/services/disability-support-services>.

## Additional Information

Entry Term	Fall semester
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	None
Entrance Tests:	GRE and for international applicants from non- English speaking countries, scores for the Test of English as a Foreign Language (TOEFL) and the Test of Written English(TWE)
Comments:	Financial aid (fellowship, stipend or assistantship) is not available from the program; scholarship availability is limited; transcript evaluation by WES is required for applicants with foreign university degrees

## Contact Information

For detailed information, contact the Department of Clinical and Diagnostic Sciences, Biotechnology Program, UAB School of Health Professions, SHPB 430, 1705 University Blvd., Birmingham, Alabama 35294-1212.  
Telephone 205-934-3209.  
E-mail [AskCDS@uab.edu](mailto:AskCDS@uab.edu)

## Clinical Laboratory Sciences

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/clinical\\_laboratory\\_science\\_or\\_cytology\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/clinical_laboratory_science_or_cytology_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degrees Offered:	M.S.
Director:	Dr. Janelle M. Chiasera
Phone:	(205) 975-3111
E-mail:	<a href="mailto:chiasera@uab.edu">chiasera@uab.edu</a>
Web sites:	<a href="http://www.uab.edu/shp/cds/academic/graduate/cls">http://www.uab.edu/shp/cds/academic/graduate/cls</a>

## Program Information

### Program Mission

The Faculty of the Clinical Laboratory Sciences program is committed to service to the community and to providing high quality education to prepare students with a solid educational background and a set of skills translatable to a variety of laboratory settings including hospital laboratories, industry, research laboratories, and many more. The Faculty, in its concern for the health and safety of the general public, is committed to ensuring that each student develops knowledge, skills and values essential to the appropriate role providing the basis for continuing intellectual and professional growth.

## M.S. Admission Requirements

In addition to the general Graduate School admission requirements, applicants to the M.S. program must:

- Have a biology, chemistry, or a related major from an accredited college or university if applying for the Professional Entry Program,
- Have a minimum undergraduate GPA of 3.0 (A = 4.0), computed from all undergraduate credits or from the last 60 semester hours of undergraduate course credit,
- Have taken the GRE General Test,
- Provide a written statement of career goals,
- If foreign-educated, have a score of at least 550 for paper version (or 80 for Internet version; or 213 for computer version) on the TOEFL, submit a transcript evaluation from World Education Services (WES) at [www.wes.org](http://www.wes.org) (<http://www.wes.org>)

If accepted, students must complete the UAB medical history questionnaire and physical, provide proof of required immunizations, and receive satisfactory screening by the UAB Medical Center Student Health Service before enrollment. A background check and drug screen will be required at program admission and prior to clinical placement.

Persons with a Bachelor of Science degree may be eligible to register for courses as non-degree seeking graduate students before acceptance into the M.S. program. If a non-degree seeking graduate student meets the M.S. program admission requirements, up to 12 semester hours of approved non-degree graduate coursework may be accepted for the M.S. degree. Admission of a student to any course as a non-degree student does not constitute admission to the M.S. degree program.

## Essential Functions

Essential functions are fundamental tasks, behaviors, and abilities necessary to successfully complete the requirements of the Program. A full list of the essential functions of the program are available from the CLS website under the link *Admission Requirements* (<http://www.uab.edu/shp/cds/academic/graduate/cls>). Essential functions are physical abilities, mental abilities, skills, attitudes, and behaviors the students must evidence or perform at each stage of their education. The absence of an essential function would fundamentally alter a student's ability to meet the program goals. The essential requirements include categories of observation, movement, communication, intellect, and behavior.

If you have a disability, but have not contacted Disability Support Services (DSS), please call 934-4205 or visit the DSS offices at 1701 9th Avenue South. Additional information is available at <http://students.uab.edu/dss>.

## Accreditation and Certification

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Program graduates are eligible to apply for the certification examination offered by the American Society of Clinical Pathology Board of Certification (ASCP-BOC).

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## NAACLS

5600 N River Road, Suite 720

Rosemont, IL 60018-5119  
 Phone: 847.939.3597  
 Fax: 773.714.8886  
 URL: <http://www.naacs.org/>

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## ASCP Board of Certification

33 West Monroe Street, Suite 1600  
 Chicago, IL 60603  
 Phone: 312.541.4999  
 Fax: 312.541.4998  
 Email: [info@ascp.org](mailto:info@ascp.org)  
 URL: <http://www.ascp.org/>

## Additional Information:

Entry Term:	Fall semester
Deadline for All Application Materials to be in the Graduate School Office:	Early Admission: February 1; Regular Admission: May 1
Entrance Tests:	GRE and for international applicants from non- English speaking countries, scores for the Test of English as a Foreign Language (TOEFL) and the Test of Written English(TWE)
Comments:	Scholarship money is available, but is limited; transcript evaluation by WES is required for applicants with foreign university degrees

## Contact Information

For detailed information, contact the Department of Clinical and Diagnostic Sciences, Clinical Laboratory Sciences Program, UAB School of Health Professions, SHPB 430, 1705 University Blvd., Birmingham, Alabama 35294-1212.  
 Telephone 205-934-3209.  
 E-mail [AskCDS@uab.edu](mailto:AskCDS@uab.edu)

## Genetic Counseling

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/genetic\\_counseling\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/genetic_counseling_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.
Interim Program Director:	Christina Hurst
Phone:	(205) 934-7299
E-mail:	<a href="mailto:cbhurst@uab.edu">cbhurst@uab.edu</a>
Web site:	<a href="http://www.uab.edu/msgc">www.uab.edu/msgc</a>

## M.S. Program in Genetic Counseling

### Accreditation:

The Genetic Counseling Program is fully accredited by the Accreditation Council for Genetic Counseling (ACGC). The program received full accreditation in 2013 and will apply for re-accreditation in 2019. Fully accredited programs must complete a rigorous process to demonstrate that the program is capable of meeting the criteria for a genetic counseling training program as established by ACGC. Programs that successfully complete this process are awarded full accreditation. All students that graduate from an accredited program may apply for board certification and licensure as a genetic counselor.

### Admission Requirements

- Baccalaureate degree from a regionally-accredited college/university
- Graduate Record Examination (GRE) General Test scores from the Verbal, Quantitative and Analytic sections. Applicants with advanced degrees whose GRE scores are older than 5 years (the time limit that ETS will send scores) can send reports from previously attended graduate programs.
- A minimum cumulative undergraduate grade point average of at least 3.0 (A = 4.0)
- A minimum GPA of 3.0 in natural science courses
- A minimum cumulative grade point average of 3.0 in the program prerequisite courses, with a minimum grade of C in each (prerequisite courses are listed below)
- Resume or CV: This should include academic qualifications, a description and timeline of any paid or volunteer work experience in crisis counseling or peer counseling setting, working with individuals with genetic conditions or disabilities, technical work in laboratories, or teaching experience and any other relevant information.
- A personal statement (no more than 500 words) highlighting your motivation to become a genetic counselor, and emphasizing your prior and current experiences and how they will benefit you in the profession.
- Paid or volunteer experience in a crisis counseling setting, peer counseling setting, working with individuals with genetic conditions or disabilities, technical work in genetics laboratories, or teaching experience in biology or genetics are recommended and encouraged in preparation for entering the genetic counseling field.
- Interview with faculty
- Three letters of recommendation
- Satisfactory screening on health data questionnaire by the UAB Medical Center Student Health Service.
- Complete a criminal background check and drug screen at program admission and again prior to clinical placement as required by school policy.
- The following course prerequisites:
  - o 4 semester hours of biology I (with lab)
  - o 4 semester hours of biology II (with lab)
  - o 3-4 semester hours of biochemistry
  - o 3-4 semester hours of genetics
  - o 3 semester hours of statistics (upper level, population, and/or health-related)
  - o 3-4 semester hours of psychology (general, developmental, or abnormal)

## Degree Requirements

The graduate program in genetic counseling will follow the Plan II (non-thesis) option.

### Program Curriculum

#### First Year

First Term	Hours
GC 501	3
GC 510	3
GC 560	1
GC 725	3
CDS 610	3
ECG 621	3
	<b>16</b>

Total credit hours: 16

#### First Year

Second Term	Hours
GC 504	3
GC 505	3
GC 506	3
GC 560	1
CDS 625	3
ECG 628	3
	<b>16</b>

Total credit hours: 16

#### First Year

Summer Term	Hours
GC 650	2
GC 651	5
	<b>7</b>

Total credit hours: 7

#### Second Year

First Term	Hours
GC 560	1
GC 600	2
GC 652	2
GC 653	2
GC 698	2
CDS 500	1
	<b>10</b>

Total credit hours: 10

#### Second Year

Second Term	Hours
GC 560	1
GC 602	2
GC 654	2
GC 655	2
GC 698	2
CDS 605	1
	<b>10</b>

Total credit hours: 10

## Additional Information

Deadline for Entry Term(s):	January 15
Deadline for All Application Materials to be in the Graduate School Office:	January 15
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

For detailed information, contact Program Director, Graduate Program in Genetic Counseling, UAB School of Health Professions, 1705 University Boulevard, SHPB 441, Birmingham, AL 35294-1212.

Telephone 205-975-4CDS (205-975-4237)

E-mail <mailto:AskCDS@uab.edu>

Website [www.uab.edu/msgc](http://www.uab.edu/msgc)

## Physician Assistant Studies

Students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/surgical\\_physician\\_assistant\\_studies\\_\\_caspa\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/surgical_physician_assistant_studies__caspa_checklist)) to complete the CASPA application. The Physician Assistant program will notify students when it is time to complete the Graduate School application online.

Students should complete this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/surgical\\_physician\\_assistant\\_studies\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/surgical_physician_assistant_studies_checklist)) after the CASPA application has been approved and the Physician Assistant program has notified them of admission to the program.

Degree Offered:	M.S.P.A.S.
Program Director:	James R. Kilgore, MS, PA-C
Phone:	(205) 934-9124
E-mail:	<a href="mailto:AskCDS@uab.edu">AskCDS@uab.edu</a>
Web site:	<a href="http://www.uab.edu/surgicalpa">www.uab.edu/surgicalpa</a>

## General Information

Physician Assistants (PAs) are valuable members of a multidisciplinary healthcare team. The profession was established in 1965 to help physicians provide healthcare services to under-served and rural populations. While the profession remains committed to its historical mission, PAs are now employed in almost all medical and surgical specialties.

PAs are healthcare professionals licensed to practice medicine under the supervision of a physician. Individual state practice laws and hospital bylaws define the scope of practice and prescribing authority of physician assistants. In general, most states authorize PAs to prescribe non-controlled substances and perform any task delegated by a supervising physician.

To be eligible for licensure, PAs must graduate from an accredited physician assistant program and pass the Physician Assistant National Certification Examination (PANCE). To maintain licensure, PAs must complete 100 hours of continuing medical education credits every two years and pass the Physician Assistant National Recertification Examination (PANRE) every six years. PAs may obtain additional training

through postgraduate residency programs in subspecialty areas, but these programs are not required for licensure or practice in subspecialty areas.

The mission of the UAB Physician Assistant Program is to provide qualified individuals with the knowledge, skills, and judgment needed to assist physicians in the care of patients in surgical, acute-care, and medical settings. While physician assistants function under the direction of the physicians, they are capable of performing selected tasks autonomously.

**Accreditation:**

The Physician Assistant Program is accredited by the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA).

**Credentials Conferred:**

Diploma–The Master of Science in Physician Assistant Studies (MSPAS) degree is awarded by the University of Alabama at Birmingham.

**Professional Certification:**

Graduates of the UAB PA program are eligible to take the Physician Assistant National Certifying Examination (PANCE) sponsored by the National Commission on Certification of Physician Assistants to become a certified PA.

**Essential Requirements**

Fundamental tasks, behaviors, and abilities necessary to successfully complete the academic and clinical requirements of the program and to satisfy licensure/certification requirements have been outlined and are available upon request from the academic program office. Students requesting disability accommodations should contact UAB Disability Support Services (DSS) at 205-934-4205.

**Program Curriculum:**

Course requirements are listed below with semester credit hours shown.

**Didactic Curriculum**

First Year	
First Term	Hours
PA 601	4
PA 602	4
PA 605	3
PA 610	3
PA 615	1
	<b>15</b>

Total credit hours: 15

First Year	
Second Term	Hours
PA 603	3
PA 606	4
PA 608	3
PA 611	2-3
PA 613	3

PA 616	1
	<b>16-17</b>

Total credit hours: 16-17

First Year	
Summer Term	Hours
PA 604	3
PA 614	2
PA 619	3
AHS 530	3
	<b>11</b>

Total credit hours: 11

Second Year	
First Term	Hours
PA 607	6
PA 609	3
PA 612	3
PA 617	2
PA 618	1
PA 620	2
PA 634	1
	<b>18</b>

Total credit hours: 18

**Clinical Curriculum**

The clinical component of the curriculum consists of 12 clinical rotations PA 621 – PA 632 (4 credits each) plus Senior Seminar I, II & III, and a Master’s Research Project Presentation. Of the 12 clinical rotations, 10 are required and 2 are electives. (One required clinical rotation in either CVS, Orthopedics, or General Surgery will be an 8 week rotation.)

Second Year	
Second Term	Hours
PA 621	4
PA 622	4
PA 623	4
PA 624	4
PA 638	3
	<b>19</b>

Total credit hours: 19

Second Year	
Summer Term	Hours
PA 625	4
PA 626	4
PA 627	4
PA 628	4
PA 639	3
	<b>19</b>

Total credit hours: 19

Third Year	
First Term	Hours
PA 629	4
PA 630	4
PA 631	4

PA 632	4
PA 640	2
PA 698	1
	<b>19</b>

Total credit hours: 19

## Clinical Rotations (PA 621- PA 632)

### 10 Required Clinical Rotations

Requirements	Hours
PA 621 Clinical Services I	4
PA 622 Clinical Services II	4
PA 623 Clinical Service III	4
PA 624 Clinical Services IV	4
PA 625 Clinical Services V	4
PA 626 Clinical Service VI	4
PA 627 Clinical Service VII	4
PA 628 Clinical Service VIII	4
PA 629 Clinical Service IX	4
PA 630 Clinical Service X	4
PA 631 Clinical Service XI	4
PA 632 Clinical Service XII	4

### 2 Elective Clinical Rotations:

Neurosurgery  
 Outpatient Surgery  
 Plastic Surgery  
 Renal Transplantation  
 Surgical Oncology  
 Thoracic Surgery  
 Trauma Surgery

## Admission Requirements:

- Baccalaureate degree from a regionally-accredited college/university.
- Graduate Record Examination (GRE) General Test scores from the Verbal, Quantitative and Analytic sections. Applicants with advanced degrees whose GRE scores are older than 5 years (the time limit that ETS will send scores) can send reports from previously attended graduate programs.
- A minimum cumulative undergraduate grade point average of at least 3.0 (A = 4.0).
- A minimum GPA of 3.0 in natural science courses.
- A minimum cumulative grade point average of 3.0 in the program prerequisite courses, with a minimum grade of C in each.
- Technical ability to complete the program (see Essential Requirements and Technical Standards).
- Interview with program faculty.
- Satisfactory screening on health data questionnaire by the UAB Medical Center Student Health Service.
- If accepted, a background check and drug screen are required at program admission and again prior to clinical rotation by school policy.
- The following prerequisites:

Requirements	Hours
BY 115 Human Anatomy	4
BY 116 Introductory Human Physiology or BY 409 Principles of Human Physiology	4
BY 123 Introductory Biology I	4

BY 124	Introductory Biology II	4
BY 261	Introduction to Microbiology	4
or BY 271	Biology of Microorganisms	
CH 115	General Chemistry I	8
& CH 116	and General Chemistry I Laboratory	
& CH 117	and General Chemistry II	
& CH 118	and General Chemistry II Laboratory (CH 105, CH 106, CH 107, CH 108 accepted)	
PY 214	Elementary Statistical Methods and Design	10
& PY 217	and Laboratory for Elem Stats Methods and Design	
& AHS 360	and Statistics for Healthcare Managers	
& MA 180	and Introduction to Statistics (PY 217, AHS 360 preferred, MA 180 accepted)	
PY 101	Introduction to Psychology	3
or PY 201	Honors Introduction to Psychology	
PY 212	Developmental Psychology	3
PY 218	Abnormal Psychology	3

## Applicants are evaluated on the following criteria:

**Academics** - Overall GPA, Science GPA, Prerequisite Grades and GRE Scores.

**Clinical Experience**- Although not required for admission into the program, experience in health care settings, (providing direct patient care and/or surgical experience) is considered in the application score.

**Personal statement**- Applicants are evaluated on the quality of their personal statement.

**Letters of support**- Three (3) letters of support are reviewed and considered.

The PA Program is committed to recruiting and matriculating minority and disadvantaged students for careers as physician assistants.

Listed below are the mid-range scores of students admitted into the program. These scores are provided so that applicants can assess their competitiveness.

Class Cohort	Verbal GRE	Quant. GRE	Analyt. GRE	Science GPA	Overall GPA
2012-2014	495	650	3.9	3.54	3.61
2011-2013	473	619	4.0	3.61	3.62
2010-2012	495	633	4.1	3.52	3.55
2009-2011	499	638	n/a	3.55	3.58
2008-2010	484	619	n/a	3.53	3.56
2007-2009	497	631	4.0	3.51	3.46
2006-2008	482	603	n/a	3.53	3.45
Averages	489	628	4.0	3.54	3.55

## Application Procedures:

This program participates in the Central Application Service for Physician Assistants (CASPA). Please consult [www.caspaonline.org](http://www.caspaonline.org) (<http://www.caspaonline.org>) for more information regarding specific CASPA application requirements, procedures and fees. The CASPA application needs to be completed by September 1 of the year prior to admission. Applicants should send all CASPA application materials (except official GRE scores) directly to CASPA. CASPA will verify the application information and send completed applications to the program. Applicants should make arrangements to send official GRE scores directly to the UAB Graduate School. The GRE code is 1856.

After completing the CASPA application the applicant should complete the UAB PA Supplemental Application. Following the program's receipt of the CASPA application, official GRE scores, and UAB PA Supplemental Application, the UAB PA Program will review the packet. Completed applications are reviewed by members of the admissions committee. Approximately 100 of the best applicants are selected to interview. Interviews are held in December and in January. Admissions decisions are finalized in February. Students who are accepted to the Physician Assistant program will need to complete the UAB Graduate School application.

## Admissions Timeline

- August 31: Last day to take the GRE
- May – September 1: Complete the CASPA application at [www.caspaonline.org](http://www.caspaonline.org) (<http://www.caspaonline.org>)
- September 7: Postmark deadline for mailing the UAB Supplemental Application ([http://www.uab.edu/shp/cds/images/SupplementalApplication\\_04052013.pdf](http://www.uab.edu/shp/cds/images/SupplementalApplication_04052013.pdf))
- September – December: Application review
- November, December, and January: Interviews
- February: Admissions decisions finalized
- February – March: Complete the UAB Graduate School Application (admitted and waitlisted students only)
- August: Program starts

## Additional Information

Deadline for All Application Materials to be received by the CASPA:	Completed applications must be received by the Central Application Service for Physician Assistants (CASPA) no later than September 1 the year prior to the expected term of enrollment
Number of Evaluations/ Letter of Recommendations Required:	Three
Entrance Tests:	GRE (TOEFL is required for international applicants whose native language is not English.)

## Financial Support

Scholarships available to students enrolled in the Physician Assistant Program are:

**Albert E. Purser Scholarship:** A grant for first or second year students with financial need who are permanent residents of Alabama. Contact the program director for an application.

**Scholarship for Disadvantaged Students (SDS):** One one-year scholarship is awarded each year to a second year student in the Physician Assistant Program. The scholarship is based on academic merit and financial need, and is disbursed over a three-semester period.

**Henry L. Laws Scholarship Loan:** A loan for a first or second-year student in good academic standing and a demonstrated financial need. The amount of the loan varies, and it is only awarded once to a student. The loan is established and supported by alumni. Contact the program director for an application.

**Earl W. Hall Loan:** Seniors with an emergency financial need may apply for this low-interest loan. Contact the program director for further details.

## Contact Information

For detailed information, contact:

CDS Admissions Physician Assistant Program  
University of Alabama at Birmingham, SHPB 430  
Birmingham, Alabama 35294-1212

Telephone: (205) 934-3209

E-mail: [AskCDS@uab.edu](mailto:AskCDS@uab.edu)

Web address: <http://www.uab.edu/shp/cds/academic/graduate/spa>

## Health Services Administration

The Department of Health Services Administration includes programs at baccalaureate, masters, and doctoral levels, as well as a variety of professional education opportunities for health services executives and clinicians. Some programs in the department are the only one of their kind in the state, or first of their kind in the nation. The MSHA Program is ranked #5 in the nation.

## Administration Health Services

Prospective students should use this checklist (Ph.D.) ([http://catalog.uab.edu/graduate/admissionchecklists/administration\\_health\\_services\\_\\_phd](http://catalog.uab.edu/graduate/admissionchecklists/administration_health_services__phd)) to obtain specific admissions requirements on how to apply to the Graduate School.

Prospective students should use this checklist (D.Sc.) ([http://catalog.uab.edu/graduate/admissionchecklists/administration\\_health\\_services\\_\\_dsc](http://catalog.uab.edu/graduate/admissionchecklists/administration_health_services__dsc)) to obtain specific admissions requirements on how to apply to the Graduate School.

Degrees Offered:	D.Sc., Ph.D.
Co-Director:	Dr. Robert Hernandez (School of Health Professions)
Co-Director:	Dr. Susan K. Key (School of Business)
Phone:	(205) 934-3113
E-mail:	<a href="mailto:phdha@uab.edu">phdha@uab.edu</a>
Web site:	<a href="http://www.uab.edu/shp/home/about-shp">http://www.uab.edu/shp/home/about-shp</a> (School of Health Professions)
Web site:	<a href="http://www.uab.edu/business/">http://www.uab.edu/business/</a> (School of Business)

## Program Information

The Ph.D. program in Administration–Health Services is a degree program offered jointly and cooperatively by the Department of Health Services Administration in the School of Health Professions and the Graduate School of Management in the School of Business. Faculty associated with the School of Public Health, School of Medicine, Lister Hill Center for Health Policy, Center for Outcomes and Effectiveness Research and Education, and Center on Aging also contribute to student learning.

The Ph.D. program is for those who wish to pursue the conceptual, philosophical, and applied aspects of administrative processes in

health services, health policy, and outcomes research in health care. It provides doctoral-level study and research in administration with specific application to health services. The pedagogical focus is on developing a strong research orientation through course work, research seminars, and mentoring relationships with faculty. Students may choose a specialization in either strategic management or health services research. Students who are interested in pursuing academic careers are also afforded the opportunity to develop their teaching skills through course work and teaching opportunities. Job placement occurs in regional, national, and international markets. To date, over 80 graduates have taken positions in academic institutions as well as health service delivery, governmental, and consulting organizations.

## Admission Requirements

An applicant should already possess a master's degree in a relevant discipline or have completed an undergraduate program with an outstanding record. Completed applications of well-qualified candidates received by January 15 may be considered for early admission. The application deadline is March 1st. Although applications may be considered after March 1st, admission and financial aid priority is given to those applicants whose materials are complete by March 1st. Applications submitted after March 1st would be considered on a space-available basis only.

Admission recommendations are made by the Admissions and Policy Committee after examination of the candidate's qualifications, which should include a minimum GRE General Test score of 1,000 (verbal plus quantitative), if tested prior to August 2011; equivalent combined scores for the revised GRE; or a GMAT test score of 550. All applicants whose first language is not English are also required to submit a score for the Test of English as a Foreign Language (TOEFL). A TOEFL score of 80 is required if the TOEFL taken is based on the Internet version; if computer-based, the minimum score required is 213; and if the paper-based test version is taken, the minimum acceptable score is 550 or above. Consideration will also be given to the quality of the applicant's academic record, previous research experience and productivity, and estimated research potential as indicated by references.

Various forms of financial aid are available to students. Departmental research assistantships are awarded on a competitive basis and carry an obligation of 20 hours of work per week. Assistantships are awarded to incoming students for a period of one year, and may be renewable for a second year based on satisfactory work and academic progress, depending on the availability of funds. Some students are able to secure funding for additional years in the program through research assistant positions or other part-time jobs funded by faculty members' grants and contract activities. Other forms of financial assistance include minority fellowships offered through the UAB Graduate School, paid teaching opportunities in selected undergraduate programs, and federal student loans.

## Prerequisites

Prerequisite requirements include one graduate-level statistics course with computer usage, one graduate-level course on the U.S. health care system, and an introductory healthcare finance course. Incoming students who have not met these prerequisites during a master's program may take courses prior to entering the program or during their first year of study in the program.

## Program of Study

The program of study consists of five components

1. Courses in administration and health systems,
2. Courses in research methodology and statistics,
3. Specialization courses,
4. Comprehensive examinations,
5. The doctoral dissertation.

Specializations are currently available in strategic management and health services research. Students must complete all coursework in the first three areas and pass a comprehensive examination in each before work can officially begin on the dissertation. The investigation and other special work leading to the dissertation must be performed directly under the guidance and supervision of a five-person committee of the UAB graduate faculty. The normal minimum period in which the doctoral degree can be earned is three to four years of full-time study.

## Degree Completion

The granting of the Ph.D. degree is based on completion of all required coursework, residency requirements, comprehensive examinations, dissertation requirements, and the recommendation of the Administration–Health Services graduate program director and the dissertation committee.

## Mission, Vision, and Values Statements

Because outstanding teaching and research are essential to the future of health care delivery in our nation and abroad, the Ph.D. program in Administration–Health Services provides doctoral-level training to individuals who will be our future health care leaders in academic and nonacademic research organizations.

We seek to recruit a diverse and talented group of national and international students who are attracted to careers in research and teaching. The educational experience in the Ph.D. program is characterized by exposure to the various disciplines relevant to health administration and policy from across the university, as well as one-on-one mentorship relationships with faculty. These experiences are expected to serve as a foundation for future research throughout the graduate careers.

## Additional Information

Deadline for Entry Term(s):	January 15th
Deadline for All Application Materials to be in the Graduate School Office:	March 15th
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE or GMAT (TOEFL also required for international applicants whose native language is not English.)
Comments:	Stipend support available

For detailed information, contact the Program Office of the Doctoral Programs in Administration–Health Services, UAB School of Health Professions Building, 1705 University Boulevard, Birmingham, AL 35294-1212.

Telephone 205-934-3113  
 Fax 205-975-6608  
 E-mail [phdha@uab.edu](mailto:phdha@uab.edu)  
 Web [www.hsa.uab.edu](http://www.hsa.uab.edu)

## Health Administration

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/health\\_administration\\_\\_msha](http://catalog.uab.edu/graduate/admissionchecklists/health_administration__msha)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.H.A.
Residential and Executive M.S.H.A. Director:	Mrs. Randa Hall (Residential & Executive)
Phone:	(205) 934-3332
E-mail:	<a href="mailto:randahall@uab.edu">randahall@uab.edu</a>
Web site:	<a href="http://www.uab.edu/msha">www.uab.edu/msha</a>

## Program Information

The Master of Science in Health Administration (MSHA) Program, accredited by the Commission on Accreditation of Healthcare Management Education, trains executives for health services organizations. The program has graduated more than 1,300 persons since 1965.

Students must complete 23 graduate courses and a 12-month administrative residency in a health care organization. A capstone core course is completed during the last on-campus semester. Twenty-one core courses and two elective courses are required as well as a summer internship or international experience for single-degree MSHA students. All students begin in the fall term and complete coursework in 21 months followed by the administrative residency.

Complete applications for fall entry are due no later than the preceding March 1. Since admission to the MSHA program is very competitive, early application is encouraged.

## MSHA-MBA, MSHA-MSHI Coordinated Degrees

Students wishing to pursue simultaneously the Master of Science in Health Administration (MSHA) and the Master of Business Administration (MBA) degrees must complete 29 graduate courses, including 3 electives. Students seeking to complete the Master of Science in Health Administration (MSHA) and the Master of Science in Health Informatics (MSHI) must complete 27 graduate courses and a summer internship. A 12-month administrative residency in a health services organization is required for completion of the MSHA program. A student who enters a coordinated program, but subsequently decides to pursue only one of the degrees, must satisfy all the requirements for the degree sought.

## Application Information

Applicants to the MSHA, MSHA-MBA, or MSHA-MSHI programs must have completed or anticipate completion of at least a baccalaureate degree from a regionally accredited college or university or from a recognized university abroad before entry into the program. Prior to matriculation, MSHA-MBA students must have completed an online MBA boot camp course with a passing grade. In addition, MSHA-MBA students must have successfully completed three semester credit hours in calculus.

Application for the MSHA program should be made using the UAB Graduate School Apply Yourself Application Network Service available at ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=uab-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=uab-grad)) ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=uab-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=uab-grad))).  
 Telephone 205-934-1583  
 E-mail [parmstrong@uab.edu](mailto:parmstrong@uab.edu)  
 Web [www.uab.edu/msha](http://www.uab.edu/msha)

## Additional Information

Deadline for Entry Term(s):	Fall
Deadline for All Application Materials to be in the Graduate School Office:	March 1 for first priority and June 1 if space is still available
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE (minimum composite score of 300) or GMAT (minimum score of 480) is required for Residential applicants only. TOEFL and TWE are also required for all international applicants whose native language is not English.
Comments:	Additional application for admission is required by program

For detailed information, contact Admissions Coordinator, Department of Health Services Administration, UAB School of Health Professions, SHPB 567, 1720 3rd Avenue South, Birmingham, AL 35294-3361.  
 Telephone 205-934-1583  
 E-mail [parmstrong@uab.edu](mailto:parmstrong@uab.edu)  
 Web [www.uab.edu/msha](http://www.uab.edu/msha) or the UAB Graduate School of Management (MBA Program), BEC 203, 1530 3rd Avenue South, Birmingham, Alabama 35294-4460.  
 Telephone 205-934-8815  
 E-mail [cmanning@uab.edu](mailto:cmanning@uab.edu)  
 Web <http://www.uab.edu/business/>

## Executive MSHA Program

Qualified students can earn the Master of Science in Health Administration (MSHA) by completing the executive program. This program is open to those with at least 5 years of experience in health care organizations, either as managers or as clinical professionals. Participants in the Executive MSHA program complete both on-campus and distance-learning activities, and a brief field experience, within 2 years of study.

## Additional Information

For detailed information, contact Admissions Coordinator, Department of Health Services Administration, UAB School of Health Professions, SHPB 557, 1720 2nd Avenue South, Birmingham, Alabama 35294-3361.  
 Telephone 205-934-1672  
 E-mail [sarap@uab.edu](mailto:sarap@uab.edu)  
 Web [www.uab.edu/msha](http://www.uab.edu/msha) (Click on Executive M.S.H.A.)

## Health Informatics (M.S.H.I.)

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/health\\_informatics\\_mshi](http://catalog.uab.edu/graduate/admissionchecklists/health_informatics_mshi)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.H.I.
Program Director:	Mrs. Amanda Dorsey
Phone:	(205) 934-3509
E-mail:	mshi@uab.edu
Web site:	www.uab.edu/hi

## Program Information

### Program Admission

Admission to the program is in the fall semester. Application to the program may be made September through April 30, preceding the expected date of enrollment for the next fall term. Applications received after April 30 are considered on a space-available basis. Applications are evaluated against the Graduate School criteria and those criteria developed specifically for the HI program. The ideal size of each entering class is 20 to 25 students.

### Admission Requirements

Admission to the program requires acceptance to the Graduate School of The University of Alabama at Birmingham. Applicants must have completed or anticipate completion of at least a baccalaureate degree from a regionally accredited college or university or from a recognized university abroad before entering the program. As a criterion for unconditional admission, applicants must have no less than a B GPA (3.0 on a 4.0 scale) for the last 60 semester hours of earned undergraduate credit or overall undergraduate credit or overall undergraduate hours. Official transcripts of all previous academic work beyond the secondary level should be submitted. Before matriculation, entering students must have received a final transcript for each degree received.

The applicant should include a carefully drafted statement about his or her personal interests, career goals, and relevant background experience and a professional resume.

Three **confidential** letters of recommendation from individuals qualified to write concerning your potential success in both a graduate program and in the Health Informatics field must be submitted.

Prior to entering the program, applicants should have completed three hours of undergraduate course work or a relevant continuing education course in event-driven programming (e.g., Visual Basic, C++, Java, XML, .Net).

Admission to the HI program is determined by an interview process and the consensus of the Admissions Committee. The decision is based on previous academic record, professional recommendations as evidence of ability to perform graduate-level work, and an interview with two faculty members. The program director reserves the prerogative for final recommendation on admission status to the Graduate School.

Applicants accepted to the program must complete a criminal background check and drug screen at program admission and again prior to clinical placement as required by school policy.

## Additional Information

Deadline for Entry Term(s):	Fall
Deadline for All Application Materials to be in the Graduate School Office:	April 30
Number of Evaluation Forms Required:	Three
Entrance Tests:	(TOEFL and TWE also required for international applicants whose native language is not English.)
Comments:	None

For detailed information, contact Master of Science in Health Informatics Program, UAB School of Health Professions, SHPB 590A; physical address: 1705 University Blvd.; mailing address: 1720 2nd Avenue South, Birmingham, AL 35294  
Telephone 205-934-3509  
Fax 205-975-6608  
E-mail mshi@uab.edu

## Nutrition Sciences

Prospective students should use this checklist (M.S.) ([http://catalog.uab.edu/graduate/admissionchecklists/nutrition\\_sciences\\_ms](http://catalog.uab.edu/graduate/admissionchecklists/nutrition_sciences_ms)) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this checklist (Ph.D.) ([http://catalog.uab.edu/graduate/admissionchecklists/nutrition\\_sciences\\_phd](http://catalog.uab.edu/graduate/admissionchecklists/nutrition_sciences_phd)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D.
Director:	Dr. Jose Fernandez
Phone:	(205) 934-2029
E-mail:	jose@uab.edu
Web site:	www.uab.edu/nutrition

## M.S. Program in Nutrition Sciences

Degree Offered:	M.S.
Director:	Susan B. Miller
Phone:	(205) 934-3223
E-mail:	miller1@uab.edu
Web site:	www.uab.edu/nutrition

The program leading to the Master of Science degree in nutrition sciences is designed to provide training and experience in the treatment and prevention of disease through the science and art of optimal nutritional care. Professionals with backgrounds in the science of nutrition or dietetics will have an opportunity to learn the metabolic and biochemical basis for nutritional care while being involved in direct patient management and in either laboratory or clinical research. Opportunities exist for specialization within clinical subspecialty areas such as pediatrics, children with special health care needs, clinical nutrition research, exercise science, health education, health services administration, community nutrition, and public health.

## Admission

The Nutrition Sciences graduate program recommends fall-term entry. Interested students must first obtain admission to the UAB Graduate School. Graduate School admission standards include

1. a B average computed overall, or alternatively computed over the last 60 semester hours of earned credit;
2. evidence of a bachelor's degree from a regionally accredited university or college in the United States ; and
3. a score of at least 153 on the verbal and 144 on the quantitative sections of the GRE General Test. Additionally, eligible students should be registered dietitians, registration-eligible dietitians, or have a baccalaureate degree from the Accrediting and Credentialing of Education for Nutrition and Dietetics (ACEND) approved Didactic Program in Dietetics. A nutrition research option is offered to non-dietetics students with strong science backgrounds.
4. Complete a criminal background check and drug screen at program admission and again prior to clinical placement as required by school policy. The criminal background check and drug screen are required for the students enrolled in the Dietetic Internship Certificate and Nutrition Sciences, M.S. programs.

## Degree Requirements

The graduate program in nutrition sciences offers the option for Plan 1 (thesis) or Plan 2 (non-thesis). Candidates for the M.S. degree, Plan 1, are expected to complete a minimum of 30 hours of graduate-level course work, and submit and defend thesis research that makes a contribution to the knowledge of nutrition sciences. Candidates for the M.S. degree, Plan 2, must complete a total of 36 hours of graduate-level course work.

## Curriculum Core Requirements

Successful completion of the M.S. degree will require completion of a minimum of 20 semester hours in nutrition sciences core courses and additional courses to be selected from departmental offerings. The thesis option (Plan 1) requires completion of 6 semester hours of thesis research and presentation of a thesis. Students completing Plan 2 will require a total of 36 semester hours in nutrition sciences.

## Additional Information

Deadline for Entry Term(s):	Fall
Deadline for All Application Materials to be in the Graduate School Office:	Six weeks before term begins
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)

For detailed information, contact Susan B. Miller, Assistant Professor and Interim Director, Graduate Program in Nutrition Sciences and Director Dietetic Internship, Department of Nutrition Sciences, UAB School of Health Related Professions, Webb Building, Room 449, 1675 University Boulevard, Birmingham, AL 35294-3360.

Telephone 205-934-3223

E-mail [miller1@uab.edu](mailto:miller1@uab.edu)  
Web [www.uab.edu/nutrition](http://www.uab.edu/nutrition)

## Dietetic Internship Certificate

The Dietetic Internship Certificate is accredited by the Accrediting and Credentialing of Education for Nutrition and Dietetics (ACEND) and is designed to prepare entry-level dietitians for careers in a variety of health care, wellness, and food service facilities. Internship appointments are awarded on a competitive basis through a national computer matching process. Dietetic interns must also be admitted to the Graduate School (admission standards are listed under the M.S. in Nutrition Sciences above) and are required to enroll in a full graduate course load each term during the internship.

An onsite internship is offered in Birmingham, and an offsite internship is offered in each of the following cities in Alabama: Huntsville, Mobile, Montgomery, and Birmingham. Upon completion of the internship, the student will be eligible to take the national examination to become a registered dietitian. Interns earn 12 hours of graduate credit, which may be applied toward the requirements for the M.S. in Nutrition Sciences. Students may elect to continue in the M.S. program in Nutrition Sciences to complete requirements for the M.S. degree on a full or part-time basis.

## Additional Information

For detailed information, contact Susan Miller, Assistant Professor and Interim Director, Graduate Program in Nutrition Sciences Director and Dietetic Internship, Department of Nutrition Sciences, UAB School of Health Related Professions, Webb Building, Room 441 1675 University Boulevard, Birmingham, AL 35294-3360.

Telephone 205-934-3223  
E-mail [dintr@uab.edu](mailto:dintr@uab.edu)  
Web [www.uab.edu/nutrition](http://www.uab.edu/nutrition)

## Ph.D. Program in Nutrition Sciences

The program leading to the Ph.D. in Nutrition Sciences at UAB is designed to provide coursework and research experience that emphasizes the science of nutrition in maintaining the health of individuals and populations and preventing a variety of diseases. The doctoral program combines required and elective didactic coursework in basic sciences and nutrition with research incorporating basic science, clinical applications and translational research conducted in superb facilities in an outstanding research environment.

## Admission

To meet Graduate School and departmental standards, a student must have a combined GRE score of 310, an undergraduate degree with a strong science background, three letters of recommendation based on thorough knowledge of the applicant's background and abilities, and, of great importance, a statement of goals and purpose that delineates the student's motivation and purpose in seeking this degree. Fall-term entry is recommended.

## Coursework and Other Requirements

Successful completion of the Ph.D. will require completion of a minimum of 33 semester hours in core courses (encompassing the disciplines of cellular and molecular biology, biochemistry, physiology, nutritional biochemistry, clinical nutrition, and statistics and experimental design) and at least 24 additional graduate semester hours of elective coursework; passing a comprehensive written qualifying examination;

and defense of a dissertation reporting the results of original scientific research that makes a genuine contribution to the knowledge of nutrition sciences. In fulfilling the latter requirement, a student must author at least three papers that are publishable in peer-reviewed journals.

Core Classes must include:

Requirements	Hours
NTR 701 Advanced Medical Nutrition	3
NTR 718 Nutritional Biochemistry	6
NTR 725 Human Nutr Through Life Cycle	3
NTR 726 Consumer Issues in Nutrition	3
NTR 733 Laboratory Instruments and Methods in Nutrition Research	1-3
NTR 736 Scientific Methods	3
NTR 747 Molecular Biology and Nutrition Sciences	3
NTR 788 Advanced Nutrition Seminar	1
BST 621 Statistical Methods I	3
BST 622 Statistical Methods II	3

Elective classes:

Requirements	Hours
NTR 604 Principles and Practice of Nutrition Support	3
NTR 722 Recent Advances in Nutrition and Cancer Research	1-3
NTR 750 Body Composition and Energy Metabolism	3
NTR 769 Race, Nutrition and Health	3
NTR 779 Obesity in the 21st Century	3

## Additional Information

For detailed information, contact Dr. José R. Fernández, Director of the Ph.D. Program in Nutrition Sciences, Department of Nutrition Sciences, UAB School of Health Related Professions, Susan Mott Webb Nutrition Sciences Building, Room 449, 1675 University Boulevard, Birmingham, AL 35294-3360.

Telephone 205-975-2029

E-mail [phdntr@uab.edu](mailto:phdntr@uab.edu)

Web [www.uab.edu/nutrition](http://www.uab.edu/nutrition)

## Occupational Therapy

Prospective students should use this [checklist \(Entry Level\)](#) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this checklist (Post Professional) ([http://catalog.uab.edu/graduate/admissionchecklists/occupational\\_therapy\\_post\\_professional\\_\\_ms](http://catalog.uab.edu/graduate/admissionchecklists/occupational_therapy_post_professional__ms)) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this checklist (Low Vision Rehabilitation) ([http://catalog.uab.edu/graduate/admissionchecklists/occupational\\_therapy\\_low\\_vision\\_rehabilitation](http://catalog.uab.edu/graduate/admissionchecklists/occupational_therapy_low_vision_rehabilitation)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Master of Science
Director:	Dr. Brian J. Dudgeon
Phone:	(205) 975-6101
Web site:	<a href="http://www.uab.edu/shp/ot/">http://www.uab.edu/shp/ot/</a>

## Program Information

The Department of Occupational Therapy at the University of Alabama at Birmingham offers an entry level Master of Science degree in occupational therapy (MSOT) for individuals who hold a baccalaureate degree in a field other than occupational therapy. For individuals without a baccalaureate degree, this curriculum is also offered in conjunction with the undergraduate Health Care Management program as a 3:2 Fast OT option (<http://www.uab.edu/shp/ot/32-fast-ot>).

## MSOT Occupational Therapy

The MSOT entry-level, or professional program, is a full-time day program.

## Accreditation

The program is fully accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20824-3449; telephone: (301)652-AOTA.

## Credentials Conferred

The Master of Science degree is awarded by the University of Alabama at Birmingham.

## Professional Certification

Graduates of the program are eligible to sit for the national occupational therapist certification examination administered by the National Board for Certification in Occupational Therapy (NBCOT); website: [www.nbcot.org](http://www.nbcot.org) (<http://www.nbcot.org>) After successful completion of the exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

Applicants should be aware that fieldwork placement sites, professional licensing agencies and prospective employers frequently require criminal history disclosures and background checks, although convictions do not necessarily disqualify someone for licensure or employment. Applicants with criminal convictions should recognize that such convictions may impede eventual licensure or employment and that the University of Alabama at Birmingham cannot predict the future decisions of fieldwork sites, licensing agencies, or employers.

## Length of Study

Entry level program: Minimum of 7 semesters (2 1/2 years) as a full-time student.

## Program Entrance Date

Fall semester of each year a new class is enrolled.

## Application Deadline

This program participates in the Occupational Therapy Centralized Application Service (OTCAS); early submission of the application is encouraged. Please consult [www.otcas.org](http://www.otcas.org) (<http://www.otcas.org>) for more information regarding specific OTCAS application requirements, procedures, dates, and fees.

## International Students

See Occupational Therapy Entry Level Admissions Checklist at the top of the page--In addition to these items:

- Complete and submit UAB Graduate School International application;
- Request one (1) official transcript to be mailed by the issuing institution to the UAB Graduate School; a transcript evaluation from World Education Services ([www.wes.org](http://www.wes.org)) or Educational Credential Evaluators ([www.ece.org](http://www.ece.org)) is required;
- Students from countries where English is not the official and primary language must take and receive an acceptable score on the TOEFL or the IELTS;
- Submit official TOEFL test score: Institution code: 1856 or official IELTS score (provide the Graduate School's mailing address to the testing company/center; and
- Mail Financial affidavit of Support

## Requirements for Admission

Selection into the program will be based on the student's academic performance record aptitude for a career as an occupational therapist, and a group interview. The candidate must satisfy the following requirements:

- Hold a baccalaureate degree in a discipline other than occupational therapy from an accredited college or university; or receive a baccalaureate degree in a discipline other than occupational therapy by the time of enrollment;
- Complete required prerequisite coursework with a grade of "B" or better;
- Have a minimum overall GPA of 3.0 (A = 4.0);
- Have a minimum GPA of 3.0 (A = 4.0) in the natural science coursework;
- Have a minimum GPA of 3.0 (A=4.0) in the last 60 hours of coursework;
- If invited, participate in a group interview with members of the faculty of the Department of Occupational Therapy. The interview is scheduled once the application is received and verified.
- Complete a criminal background check and drug screen at program admission and again prior to placement as required by school policy,

## Procedures Following Acceptance

Once accepted, students will be allowed to enroll into the program in the desired entry year only if the following requirements are met:

- Medical clearance requirements posted at [www.uab.edu/studenthealth/](http://www.uab.edu/studenthealth/);
- Application to and acceptance by the Graduate School (online) (<http://www.uab.edu/graduate/online-forms>) including the fee
- Signed Letter of Intent received by the Department of Occupational Therapy; with,
- \$300 nonrefundable deposit to reserve a seat in the program (deposit will be applied to tuition)

## Essential Requirements

Prior to enrollment, students must certify their ability to complete the essential tasks, with or without reasonable accommodation, associated with performing as an occupational therapy student. Reasonable accommodation refers to ways in which the University can assist students with disabilities to accomplish these tasks (for example, providing extra time to complete an examination or enhancing the sound system in a classroom). Reasonable accommodation does not mean that students

with disabilities will be exempt from certain tasks; it does mean that the Department of Occupational Therapy will work with students with disabilities to determine whether there are ways to assist the student with completion of the required tasks.

After enrollment, a student with a disability who wishes reasonable accommodation contacts Disability Support Services (205) 934-4205 or (205) 934-4248 (TDD) or visit 9th Avenue Office Bldg. 1701 9th Ave., provides appropriate and current documentation substantiating the claimed disability, meets the requirements of a disability as described in the ADA, and identifies the needed accommodation. Reasonable accommodation in classroom and in practice settings cannot be provided without the formal request and the required documentation of the ADA defined disability. (Visit <http://www.uab.edu/dss> )

## Essential Tasks

- Students must meet class standards for course completion throughout the curriculum.
- Students must be able to read, write, speak, and understand English at a level consistent with successful course completion and development of positive client-therapist relationships.
- Students must complete readings, assignments, and other activities outside of class hours.
- Students must gather decision-making pieces of information during client assessment activities in class or in the fieldwork setting without the use of an intermediary, such as a classmate, an occupational therapy assistant, or an aide.
- Students must perform intervention activities in class or in the fieldwork setting by direct performance or by instruction and supervision of intermediaries.
- Students must apply critical thinking processes to their work in the classroom and in the fieldwork setting, exercise sound judgment in class and in fieldwork, and follow safety procedures established for each class and fieldwork setting.
- Students must have interpersonal skills as needed for productive classroom discussion, respectful interaction with classmates and faculty, and development of appropriate therapist-client relationships.
- Students must maintain personal appearance and hygiene conducive to classroom and fieldwork settings.
- Students must pass a cardiopulmonary resuscitation course at the health professional level (American Heart Association, Course C) every two years under Alabama guidelines for CPR certification.
- Students must demonstrate appropriate health status prior to enrollment, with annual updates on some items. Requirements are posted at [www.uab.edu/studenthealth](http://www.uab.edu/studenthealth).
- Students must annually complete OSHA-regulated Bloodborne Pathogen Exposure Training.
- Students must follow standards and policies specified in the Department of Occupational Therapy Student Manual, the Letter of Understanding (contract between university and fieldwork sites), and the Graduate Student Handbook. (See Section IX Fieldwork Experience for ADA issues related to fieldwork)

## Program Prerequisites - UAB Equivalents\*

(Course requirements are listed in semester credit hours)

Completion of prerequisite coursework within the last 8 years with a grade of "B" or better. No more than two prerequisites may be incomplete at the time of application; however, all courses must be completed by

June 1st of the entrance year. Depending on the number and type of outstanding prerequisite courses, you may be accepted into the program early with certain conditions such as a requirement to achieve a grade of B or better in a course.

Have a minimum 3.0 (A=4.0) grade point average (GPA) overall, in the natural science courses, and last 60 semester hours.

Requirements	Hours
<b>Prerequisite Courses Required</b>	
Biology with Lab (UAB Equivalent BY 123+L)	4
Human Anatomy with lab (UAB Equivalent BY 115+L)	4
Human Physiology with lab (UAB Equivalent BY 116+L)	4
Physics (UAB Equivalent PH 201)	3
Abnormal Psychology (UAB Equivalent PY 218)	3
Developmental or Lifespan Psychology (must be birth through death) (UAB Equivalent PY 212)	3
Sociology Elective (UAB Equivalent SOC 101)	3
PY 214 Elementary Statistical Methods and Design	3
or MA 180 Introduction to Statistics	
Anthropology Elective (UAB Equivalent ANTH 101)	3

UAB Entry-level Occupational Therapy Program requires taking the GRE.

## Typical Program

(Course requirements are listed in semester credit hours)

### First Year

First Term	Hours
OT 607	3
OT 620	4
OT 667	3-4
OT 675	3
OT 677	3
OT 688	1-2
OT 698	1-6
	<b>18-25</b>

Total credit hours: 18-25

### First Year

Second Term	Hours
OT 605	3
OT 606	3
OT 610	3
OT 623	3
OT 631	4
OT 688	1-2
OT 698	1-6
	<b>18-24</b>

Total credit hours: 18-24

### First Year

Summer Term	Hours
OT 609	3
OT 624	4
OT 632	1
OT 662	4
OT 673	3
OT 688	1-2

OT 698	1-6
	<b>17-23</b>

Total credit hours: 17-23

### Second Year

First Term	Hours
OT 625	4
OT 633	1
OT 661	3
OT 668	4
OT 674	3
OT 688	1-2
OT 698	1-6
	<b>17-23</b>

Total credit hours: 17-23

### Second Year

Second Term	Hours
OT 634	2
OT 653	3
OT 663	2
OT 665	4-5
OT 688	1-2
OT 698	1-6
	<b>13-20</b>

Total credit hours: 13-20

### Second Year

Summer Term	Hours
OT 685	10
	<b>10</b>

Total credit hours: 10

### Third Year

First Term	Hours
OT 686	10
	<b>10</b>

Total credit hours: 10

A minimum total of six credit hours Master's Level Non-Thesis Research must be completed to meet graduation requirements.

For further information contact:

UAB, Department of Occupational Therapy  
Recruitment and Admissions Coordinator

SHPB 353

1720 2nd Avenue South

Birmingham, AL 35294-1212

Telephone 205-934-7323

E-mail [msot@uab.edu](mailto:msot@uab.edu)

Web <http://www.uab.edu/shp/ot/>

## Postprofessional Degree

Deadline for entry term(s): Low vision students enter when low vision coursework starts

Deadline for all application materials One semester preceding the to be in the graduate school office: expected semester of enrollment.

Number of evaluation forms required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments:	None

## Postprofessional Occupational Therapy Program

The program offers postprofessional education to occupational therapists who wish to learn advanced theoretical, practice, and research skills. Currently one online specialization option exists for the postprofessional – low vision. Students interested in low vision must be accepted into the low vision certificate program prior to applying for the postprofessional master's degree. The 33- semester hour program for low vision option guides the student through coursework for the areas indicated including theory, specialty practice application, research methodology, and a final project or thesis. Elective coursework from related departments taken prior to admission may be approved for degree requirements; however, you must submit a copy of the course syllabus and the year and semester you took the course before final decisions are made regarding approval. Graduates of the program may use this degree to enter specialized areas of practice, as part of the requirements for specialty certifications, to assume leadership positions within the profession, or to prepare for doctoral level study.

### Credentials Conferred

The Master of Science degree is awarded by the University of Alabama at Birmingham.

### Length of Study

Approximately 11 semesters are needed to complete this degree. The low vision option was designed specifically for part-time online students.

### Program Entrance Date

Low vision students accepted as post-professional students enter at the inception of low vision coursework. Students who wait until they have taken some of the low vision courses, must apply prior to completing the low vision coursework in order to use their low vision application and fee. If students choose to apply to the postprofessional master's program after completing the certificate, a new application and fee will be required.

### Application Deadline and Procedure

See Occupational Therapy Postprofessional Admissions Checklist at the top of this page.

### International Students

See Occupational Therapy Postprofessional Admissions Checklist at the top of this page, in addition to the items listed below:

UAB Graduate School international application

- Request one (1) official transcript to be mailed by the issuing institution to the UAB Graduate School;
- A transcript evaluation from World Education Services ([www.wes.org](http://www.wes.org)) or Educational Credential Evaluators ([www.ece.org](http://www.ece.org)) is required;

- Students from countries where English is not the official and primary language must take and receive an acceptable score on the TOEFL or IELTS
- Submit official TOEFL test score: (Institution code: 1856) or official IELTS score (provide the Graduate School's mailing address to the testing company/center).

For the postprofessional Master's Degree, the occupational therapy school attended **must** be approved by the World Federation of Occupational Therapy.

## Requirements for Admission

For unconditional acceptance, the student must satisfy the following requirements:

- A baccalaureate degree in occupational therapy from an accredited educational program with a minimum cumulative GPA of 3.0 (A = 4.0) computed over the last 60 hours of course work,
- Eligibility for licensure as an occupational therapist in the United States
- An acceptable score on each section of the GRE general test,
- Completed application for admission to the UAB Graduate School,
- Three letters of reference,
- If accepted, complete the UAB medical requirements posted at [www.uab.edu/studenthealth](http://www.uab.edu/studenthealth).

## Essential Requirements

After acceptance and prior to enrollment into online programs, students must certify their ability to complete the essential tasks, with or without reasonable accommodation, associated with performing as an occupational therapy student. Reasonable accommodation refers to ways in which the University can assist students with disabilities to accomplish these tasks (for example, providing extra time to complete an examination or enhancing the sound system in a classroom). Reasonable accommodation does not mean that students with disabilities will be exempt from certain tasks; it does mean that the Department of Occupational Therapy will work with students with disabilities to determine whether there are ways to assist the student with completion of the required tasks.

After enrollment, a student with a disability who wishes reasonable accommodation contacts Disability Support Services (205) 934-4205 or (205) 934-4248 (TDD) or visit 9th Ave. Office, 1701 9th Ave. S., provides appropriate and current documentation substantiating the claimed disability, meet the requirements of a disability as described in the ADA, and identify the needed accommodation. Reasonable accommodation in classroom and in practice settings cannot be provided without the formal request and the required documentation of the ADA defined disability. (Visit <http://www.uab.edu/dss>).

## Essential Tasks

- Students must meet class standards for course completion throughout the curriculum.
- Students must be able to read, write, speak, and understand English at a level consistent with successful course completion.
- Students must complete readings, assignments, and other activities outside of class hours.
- Students must apply critical thinking processes to their work in the classroom and exercise sound judgment in class during online discussions.

- Students must have interpersonal skills as needed for productive classroom discussion, and respectful interaction with classmates and faculty.
- Students must demonstrate appropriate health status prior to enrollment, with annual updates on some items.
- Students must follow standards and policies specified in the Department of Occupational Therapy Student Handbook, and the University of Alabama at Birmingham Directions Handbook.
- Students must adhere to all policies outlined in the Department of Occupational Therapy Student Handbook which will be displayed in the Resource section of each online course.

## Postprofessional curriculum

(Course requirements are listed in semester credit hours)

Students must specify a specialty area prior to entering the program. Your stated area of interest will dictate the coursework required for completion of the post professional master's degree. Required coursework for the Low Vision Rehab Graduate Certificate (15 hours) can be viewed at [www.uab.edu/lowvision](http://www.uab.edu/lowvision)

Students in both programs need to complete the following courses:

Requirements		Hours
OT 642	Research Design in Occupational Therapy	1-3
OT 643	Data Analysis in Occupational Therapy Research	1-3
OT 644	Project Dissemination - Professional Writing and Presentation	1-3
OT 647	Leadership in Occupational Therapy	3
OT 653	Using the Literature for Evidence Based Practice	3
OT 658	Foundations of Professional Education	4
OT 667	Research Methods	3-4
OT 692	Special Topics in OT	1-3

Electives offered outside of the occupational therapy curriculum in programs at UAB are allowed with the permission of the advisor. Up to 12 hours of coursework taken at other institutions may apply as well but must be approved by the student's advisor and must be completed with a grade of B or better. A copy of the course syllabus is required for approval.

For further information contact:

Laura K. Vogtle, PhD, OTR/L, FAOTA

Program Director

Occupational Therapy Postprofessional Program

UAB School of Health Professions

SHPB-338

1720 2nd Avenue South

Birmingham, AL 35294-1212

Telephone 205-934-3568

E-mail [lvogtle@uab.edu](mailto:lvogtle@uab.edu)

## Low Vision Rehabilitation, Graduate Certificate

The Graduate Certificate in Low Vision Rehabilitation is a practice oriented certificate degree program that prepares occupational therapists to provide comprehensive, competent intervention to adults with visual impairment from age related eye diseases and brain injury. The program is designed for occupational therapists already working in low vision rehabilitation; those interested in starting low vision rehabilitation

programs; and those just interested in expanding their practice skills. The program's flexible web-based distance format allows occupational therapists across the United States and other English speaking countries to obtain these skills while working full time.

## Credentials Conferred

The Graduate Certificate in Low Vision Rehabilitation awarded by the University of Alabama at Birmingham.

## Length of Study

The certificate requires 5 semesters to complete; students take 1 course per semester. Two cohorts of students are admitted each academic year—one for the fall semester and one for the spring semester.

## Program Entrance Date

Spring Semester (begins in January) or Fall semester (begins in August)

## Requirements for Admission

Degree in occupational therapy from an accredited university program.

## Essential Requirements

After acceptance and prior to enrollment into online programs, students must certify their ability to complete the essential tasks, with or without reasonable accommodation, associated with performing as an occupational therapy student. Reasonable accommodation refers to ways in which the University can assist students with disabilities to accomplish these tasks (for example, providing extra time to complete an examination or enhancing the sound system in a classroom). Reasonable accommodation does not mean that students with disabilities will be exempt from certain tasks; it does mean that the Department of Occupational Therapy will work with students with disabilities to determine whether there are ways to assist the student with completion of the required tasks.

After enrollment, a student with a disability who wishes reasonable accommodation contacts Disability Support Services (205) 934-4205 or (205) 934-4248 (TDD) or visit 1701 9th Ave. S., provides appropriate and current documentation substantiating the claimed disability, meet the requirements of a disability as described in the ADA, and identify the needed accommodation. Reasonable accommodation in classroom and in practice settings cannot be provided without the formal request and the required documentation of the ADA defined disability. (Visit <http://www.uab.edu/dss>).

## Essential Tasks

- Students must meet class standards for course completion throughout the curriculum.
- Students must be able to read, write, speak, and understand English at a level consistent with successful course completion and development of positive client-therapist relationships.
- Students must complete readings, assignments, and other activities.
- Students must gather decision-making pieces of information during client assessment activities.
- Students must perform evaluation and intervention activities by direct performance keys.
- Students must apply critical thinking processes to their work in the courses.
- Students must have interpersonal skills as needed for productive discussion, respectful interaction with classmates and faculty.

- Students must demonstrate appropriate health status prior to enrollment with annual updates on some items. Requirements found at [www.uab.edu/studenthealth](http://www.uab.edu/studenthealth).
- Students must follow standards and policies specified in the Department of Occupational Therapy Student Handbook, and the University of Alabama at Birmingham Directions Handbook.
- Students must adhere to all policies outlined in the Department of Occupational Therapy Student Handbook which is posted online at <http://www.uab.edu/shp/ot/student-resources>.

## Application Deadline and Procedure

See Occupational Therapy Low Vision Rehabilitation Admissions Checklist at the top of the page.

### International Students:

See Occupational Therapy Low Vision Rehabilitation Admissions Checklist --In addition to the following items:

- A transcript evaluation from World Education Services ([www.wes.org](http://www.wes.org)) or Educational Credential Evaluators ([www.ece.org](http://www.ece.org)) may be required.
- Students from countries where English is not the official and primary language must also take and receive an acceptable score on the TOEFL, or IELTS.
- Submit official TOEFL test score (Institution code: 1856) or official IELTS score (provide the Graduate School's mailing address to the testing company/center)

### Typical Program (Course requirements are listed in semester credit hours)

The curriculum is designed with the working occupational therapist in mind. Coursework emphasizes practical application of the information taught. Projects are designed to reinforce learning of application to practice. Materials for completion of the courses can be obtained through the internet and required texts. The student must have consistent access to the internet. A high-speed connection (DSL, cable, satellite) is strongly recommended.

Two Tracks Are Available:

### Certificate Only

On completion of the required coursework the student will be awarded a Graduate Certificate in Low Vision Rehabilitation by the University of Alabama at Birmingham and the student's name will appear in the commencement bulletin. A transcript of the coursework taken for the certificate will be available.

The curriculum for the certificate is offered online as web-based distance education for practitioners. Students accepted into the program begin the curriculum in January or August and complete one course per semester. Because one course builds on another, students must take the courses in sequence. The final course requires that the student come to the UAB campus for a one weekend 3 day on campus intensive where they will work in small groups with instructors to demonstrate assessment and intervention skills. This is the only time the student is required to come to the UAB campus during the entire curriculum. Based on these requirements, course work for completion of the certificate will require 5 semesters.

## Low Vision Rehabilitation Certificate/ Postprofessional Master's Degree Program

Students may choose to make the low vision curriculum the major emphasis of the coursework for the Postprofessional Master's Degree offered by the Department of Occupational Therapy. Students completing the certificate program will only need to complete an additional 12 credits of coursework and 6 credits of research to receive the Postprofessional Master's Degree. Coursework for the Postprofessional degree is also online.

### LOW VISION REHABILITATION CURRICULUM

The courses must be completed sequentially in the order listed below.

The list shows the course sequence for both student cohorts—one entering the program in the spring and the other entering in the fall.

#### Typical OT Curriculum Course Sequence

Requirements	Hours
<b>Fall Cohort</b>	
OT 677 Foundations in Low Vision Rehabilitation I (1st Fall Semester)	3
OT 679 Foundations in Low Vision Rehabilitation II (1st Spring Semester)	3
OT 690 Foundations in Low Vision Rehabilitation III (1st Summer Semester)	3
OT 689 Foundations in Treatment of Visual Impairment from Brain Injury (2nd Fall Semester)	3
OPEN students may take the OT 696 or OT 695 elective or a course in the post professional master's program (2nd Spring Semester)	
OT 691 Foundations in Low Vision Rehabilitation IV (2nd Summer Semester)	3
<b>Spring Cohort</b>	
OT 677 Foundations in Low Vision Rehabilitation I (1st Spring Semester)	3
OT 679 Foundations in Low Vision Rehabilitation II (1st Summer Semester)	3
OT 690 Foundations in Low Vision Rehabilitation III (1st Fall Semester)	3
OT 689 Foundations in Treatment of Visual Impairment from Brain Injury (2nd Spring Semester)	3
Students may also take the OT 696 or OT 695 elective	
OT 691 Foundations in Low Vision Rehabilitation IV (2nd Summer Semester)	3

**Total Credits 15 credits**

For further information contact:

Program Coordinator  
 Occupational Therapy Low Vision Rehabilitation Certificate Program  
 UAB School of Health Professions  
 SHPB 355  
 1720 2nd Avenue South  
 Birmingham, AL 35294-1212  
 Telephone 205-975-6860  
 E-mail [lvrcert@uab.edu](mailto:lvrcert@uab.edu)

Web <http://www.uab.edu/shp/ot/low-vision-rehabilitation-graduate-certificate>

## Physical Therapy

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/physical\\_therapy](http://catalog.uab.edu/graduate/admissionchecklists/physical_therapy)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	D.P.T.
Director (D.P.T.):	Dr. Sharon Shaw
Phone:	(205) 934-3566
E-mail:	sshaw@uab.edu
Web site:	<a href="http://www.uab.edu/pt">www.uab.edu/pt</a>

## Program Information

The Doctor of Physical Therapy program is a course of study for students who hold baccalaureate degrees in fields of study other than Physical Therapy. Completion of the program after nine semesters leads to a Doctor of Physical Therapy (DPT) degree and serves as initial preparation for practice as a physical therapist.

### Doctor of Physical Therapy (D.P.T.)

Physical therapists provide services to patient/clients who have body structure and function impairments, activity limitations, participation restrictions, or changes in physical function and health status resulting from injury, disease, and other causes. Physical therapists also address risk and provide prevention services and promote health, wellness, and fitness. Physical therapists interact and practice in collaboration with a variety of professionals. Physical therapists also function in consultative, education, administrative and supervisory roles in many different types of practice, research, and education settings.

**Accreditation:** The program is accredited by the Commission on Accreditation in Physical Therapy Education.

**Credentials Conferred:** The Doctor of Physical Therapy degree is awarded by the University of Alabama at Birmingham.

**License :** Graduates are eligible for the physical therapist licensure examination. Note that state law regulates the practice of Physical Therapy; contact a specific state's Board of Licensure for Physical Therapy to obtain information on that state's eligibility requirements. <http://www.fsbpt.org/LicensingAuthorities/index.asp>

**Length of Study:** Nine semesters.

**Program Entrance Date:** Spring semester.

**Application Procedure:** This program participates in the Physical Therapist Centralized Application Service (PTCAS). Please consult [www.ptcas.org](http://www.ptcas.org) for more information regarding specific PTCAS application requirements, procedures and fees. The PTCAS application needs to be completed by the PTCAS deadline for the class beginning January, 2015. Applicants should send all application materials including GRE scores (use code 7801) directly to PTCAS. PTCAS will verify the application information and send completed applications to the program.

**Requirements for Admission:** The applicant must hold a baccalaureate degree from an accredited college or university within the United States in a field other than physical therapy. Acceptance will be based on

the student's academic ability and aptitude for a career as a physical therapist. The candidate is expected to satisfy the following requirements:

- Complete the PTCAS application based on the PTCAS deadline.
- 75% of prerequisite courses must be completed by the end of the fall semester of the year of application.
- Complete at least 40 hours of documented observation of physical therapy. Various settings are recommended. Documentation should be submitted to PTCAS.
- Submit three letters of recommendation to PTCAS.
- Letters 1 and 2: Written by a physical therapist who has interacted with the applicant for at least 20 hours in a clinical setting.
- Letter 3. Written by a professor with whom the applicant had significant interaction in an academic setting.
- Complete the GRE and have scores sent to PTCAS (code 7801).
- Have a minimum 3.0 (A=4.0) overall, prerequisites, and last 60 semester hours grade point averages. For prerequisite courses, no grade lower than a C will be accepted.
- If invited, complete a personal interview with the Department of Physical Therapy.

Students who are **accepted** into the UAB Doctor of Physical Therapy program must:

- Complete the UAB Graduate School application to include the Graduate School fee.
- Complete the UAB medical history questionnaire and physical.
- Provide proof of required immunizations, and receive satisfactory screening by the UAB Medical Center Student Health Service.
- Send all official transcripts to the UAB Graduate School.
- Complete a criminal background check and drug screen at program admission and again prior to clinical placement as required by school policy.

State law regulates the practice of Physical Therapy. Therefore, applicants are encouraged to review the nonacademic eligibility requirements for licensure to practice physical therapy upon completion of the program. These may be obtained from each individual state's Board of Licensure for Physical Therapy. <http://fsbpt.org/LicensingAuthorities/index.asp>

Variations in these requirements are considered. In instances where applicants do not meet the principle requirements for admission, they may be admitted on probation with the approval of the Graduate School Dean. Such students must establish themselves in good standing by achieving not less than a B average by the time they have completed 1 term of approved work taken at UAB for graduate credit.

## Program Prerequisites—UAB Equivalents

(Course requirements are listed in semester credit hours)

### Arts and Humanities

English Compositions (6)

### Social and Behavioral Sciences

Psychology (9)

### Natural Sciences and Mathematics

Biology (12)

Human/Mammalian Physiology (4)

- Chemistry for Science Majors (8)
- Physics for Science Majors (8)
- Pre-Calculus Trigonometry (3)
- Psychology (9)
- Statistics (3)
- Medical Terminology (3)

*It is strongly recommended that applicants take the following courses: practical reasoning or logic course, biomechanics or kinesiology and upper level biology (physiology).*

**Essential Requirements:** Fundamental tasks, behaviors, and abilities necessary to successfully complete the academic and clinical/residency requirements of the program and to satisfy licensure/certification requirements, if any, have been outlined and are available upon request from the academic program office. Students requesting disability accommodations must do so by filing a disability accommodation request with the UAB Office of Disability Support Services.

**Typical Program**

(Course requirements are listed in semester credit hours)

<b>First Year</b>	
<b>Second Term</b>	<b>Hours</b>
PT 700	4
PT 702	3
PT 711	2
PT 713	3
PT 730	3
PT 760	2
	<b>17</b>

Total credit hours: 17

<b>First Year</b>	
<b>Summer Term</b>	<b>Hours</b>
PT 701	2
PT 712	3
PT 720	3
PT 731	3
PT 770	1
PT 790	1
PT 791	1
	<b>14</b>

Total credit hours: 14

<b>First Year</b>	
<b>First Term</b>	<b>Hours</b>
PT 704	3
PT 706	4
PT 714	1-2
PT 715	3
PT 721	3
PT 771	2
PT 792	1
	<b>17-18</b>

Total credit hours: 17-18

<b>Second Year</b>	
<b>Second Term</b>	<b>Hours</b>
PT 705	4

PT 707	3
PT 740	5
PT 772	2
PT 798	1-3
	<b>15-17</b>

Total credit hours: 15-17

<b>Second Year</b>	
<b>Summer Term</b>	<b>Hours</b>
PT 743	1-3
PT 744	4
PT 761	3
PT 793	1
PT 798	1-3
	<b>10-14</b>

Total credit hours: 10-14

<b>Second Year</b>	
<b>First Term</b>	<b>Hours</b>
PT 741	5
PT 746	4
PT 762	3
PT 799	1-15
	<b>13-27</b>

Total credit hours: 13-27

<b>Third Year</b>	
<b>Second Term</b>	<b>Hours</b>
PT 763	2
PT 764	2
PT 773	8
	<b>12</b>

Total credit hours: 12

<b>Third Year</b>	
<b>Summer Term</b>	<b>Hours</b>
PT 774	9
	<b>9</b>

Total credit hours: 9

<b>Third Year</b>	
<b>First Term</b>	<b>Hours</b>
PT 775	9
	<b>9</b>

Total credit hours: 9

Total Credit Hours for Program: 119

**Additional Information**

For detailed information, contact Betsy Moore, Physical Therapy Department, School of Health Professions, SHPB, Room 333, 1705 University Boulevard (mailing address: SHPB 333, 1720 2nd Avenue South), Birmingham, Alabama 35294-1212.

Telephone 205-934-4363  
E-mail [becol@uab.edu](mailto:becol@uab.edu)

# School of Medicine

The UAB School of Medicine is among a select group of universities recognized for both very high research activity and significant community engagement by the Carnegie Foundation. UAB ranks 27th in funding from the NIH. Total research funding exceeds \$400M annually; \$217M in NIH funds can be attributed to the School of Medicine alone.

In the past few years, the School of Medicine has added more than half a million square feet of space for clinical facilities, research laboratories, classrooms, surgical suites, and administrative space.

Many of our faculty conduct research in university-wide interdisciplinary research centers that span more than one academic school at UAB. UAB is home to the Center for Clinical and Translational Science (<http://www.uab.edu/ccts>)—the state's only CTSA (<https://www.ctsacentral.org>) award—facilitating cross-disciplinary research and advancing scientific innovation on campus and beyond. UAB's interdisciplinary culture presents the medical and scientific community within the university an opportunity to collaborate with colleagues from other schools, departments and disciplines who have comparable or complementary research interests. This approach has essentially eliminated individual silos that tend to prolong the discovery process.

## Interdisciplinary Academic Programs

UAB offers a **NIH-funded Medical Scientist Training Program** (<http://www.nigms.nih.gov/Training/InstPredoc/PredocOverview-MSTP.htm>) (MSTP), a combined MD/PhD program designed to prepare students for careers that combine laboratory investigation of disease mechanisms with the practice and teaching of clinical medicine in an academic setting. The Gerontology Education Certificate Program was established in 1980 through the cooperative efforts of the School of Social and Behavioral Sciences and the Center for Aging. Since that time, the program has expanded considerably and offers diverse academic opportunities. Students have access to a number of faculty members from multiple disciplines who bring research and academic expertise to the study of aging and the aged.

## Gerontology

Certification Program Director:	Dr. Patricia L. Sawyer
Phone:	(205) 934-9261
E-mail:	psawyer@uab.edu
Web site:	<a href="http://www.aging.uab.edu">www.aging.uab.edu</a>

## Program Information

The Gerontology Education Program was established in 1980 through the cooperative efforts of the School of Social and Behavioral Sciences and the Center for Aging. Since that time, the program has expanded considerably and offers diverse academic opportunities. Students have access to a number of faculty members from multiple disciplines who bring research and academic expertise to the study of aging and the aged.

The Gerontology Education Program offers multidisciplinary academic courses in gerontology leading to a graduate certificate. The study of

gerontology at these levels is designed to provide people educated in various disciplines with the background needed to work in programs related to aging and the aged. The main goals are to provide students with a thorough background in existing theory and research in gerontology, and a supplement to their existing backgrounds and professional disciplines. We have designed the program to prepare students for leadership roles in this field of growing importance for both the private and public sectors. Our program's curriculum integrates research, theory, and practice. Its multidisciplinary approach reflects the urban mission of UAB.

The program office is located at the UAB Center for Aging. This academic program is administered by the Director of the Gerontology Education Program, who also serves as Chair of the Guidance Committee on Graduate and Undergraduate Education in Gerontology. This committee is made up of representatives of academic departments and schools throughout the UAB campus active in the study of aging and the aged. The multidisciplinary gerontology program is offered to all UAB students in good standing with the sponsorship and support of the School of Social and Behavioral Sciences, the School of Health Related Professions, and the Center for Aging.

## Student Admissions and Advisement

Although general advisement is handled through UAB student advising and parent departments, student advisement in gerontology is handled formally by the Director of the Gerontology Education Program. The director facilitates student advisement with other members of the Committee on Graduate and Undergraduate Education in Gerontology.

A graduate specialty is offered to students who want a special emphasis in gerontology or geriatrics. The major objective of this specialization is to provide a strong academic background for professional careers in academic and aging-related settings. There are two avenues for undertaking the graduate gerontology certificate requirements. Students in good standing in the graduate school can specialize in gerontology through their primary department. Letters of application also are accepted from students who have already completed requirements for an advanced or professional degree.

Students not currently enrolled in a graduate program at UAB may petition the university for non-degree admission status. Once accepted, the student can undertake a course of study to receive a graduate certificate upon completion of the required sequence of classes.

A careful review of proposed curriculum is recommended before the student enrolls for gerontology study. This will give students an opportunity to receive initial advisement while reviewing available study plans and course schedules.

## Requirements

Students must complete at least 15 credit hours of graduate-level work in gerontology or geriatrics, achieving a grade of B or better in each course. The curriculum consists of a required multidisciplinary course offered through the graduate school (GRD 600), three gerontology electives chosen from a roster of courses approved by the Committee on Graduate and Undergraduate Education in Gerontology, and a required research project or a relevant internship. To ensure a multidisciplinary perspective, courses must represent at least two departments.

## Additional Information

For detailed information, contact Dr. Patricia L. Sawyer, Director, UAB Gerontology Education Program, Center for Aging, Room 201-E1, 933 19th Street South, Birmingham, AL 35294-2041.

Telephone 205-934-9261

Fax 205-934-7354

E-mail [psawyer@uab.edu](mailto:psawyer@uab.edu)

## Medical Scientist Training Program

Degree Offered:	M.D.-Ph.D.
Director:	Dr. Robin G. Lorenz
Phone:	(205) 934-4092 or 934-0676
E-mail:	<a href="mailto:rlorenz@uab.edu">rlorenz@uab.edu</a>
Web site:	<a href="http://www.mstp.uab.edu">http://www.mstp.uab.edu</a>

## Degree Requirements

UAB's outstanding research and clinical training programs provide an unusual opportunity for students interested in careers in basic biomedical research. Such students may be admitted concurrently to the School of Medicine and the Graduate School in order to pursue both the M.D. degree and the Ph.D. degree. Ph.D. study in this program is available in the areas of biochemistry and structural biology; biomedical engineering; biostatistics; cancer biology; cell, molecular and developmental biology; epidemiology; genetics and genomic sciences; immunology; microbiology, neuroscience; nutrition sciences; pathobiology and molecular medicine; sociology; and vision science.

Individuals admitted to this highly competitive program must have excellent undergraduate academic records and MCAT scores. In addition, successful applicants must have demonstrated their commitment to a career pathway as an investigator with active participation in an original research project prior to admission. Fellowship support, including a stipend and payment of tuition and fees, is provided to successful applicants.

In general, M.D.-Ph.D. students will first complete the basic science phase of the medical curriculum and the core curriculum of the basic biomedical sciences designed for Ph.D. students simultaneously. The second phase of study will focus on completion of a dissertation research project leading to the Ph.D. degree. The final phase of the program is a series of clinical rotations and an abbreviated set of acting internships to complete the M.D. degree. Normally, the program involves about 8 years for completion, depending on the time required to complete the dissertation research.

Interested applicants must complete the standard AMCAS application to the UAB School of Medicine and a short supplementary application to the combined degree program. More information is available at <http://www.uab.edu/medicine/mstp/admissions/admissions-process>

Students who have initiated study in the University of Alabama School of Medicine or the UAB Graduate School may also apply to the MD/PhD Program. Please contact the MSTP Director for further information.

# School of Nursing

Degree Offered:	Ph.D.
Director (Ph.D.):	Dr. David Vance
Phone:	(205) 934-7589
Email:	devance@uab.edu

Degree Offered:	M.S.N.
Director (M.S.N.):	Dr. Ashley Hodges
Phone:	(205) 996-7608
Email:	ashleyhodges@uab.edu
Director (Nurse Anesthesia)	Dr. Laura Wright
Phone	(205) 934-7412
Email	wrightel@uab.edu
Director (A.M.N.P.)	Dr. Amy Brooks
Phone	(205) 996-6679
Email	brooks4@uab.edu

Degree Offered:	D.N.P.
Director (D.N.P.):	Dr. Anne Alexandrov
Phone:	(205) 934-6852
Email:	annealex@uab.edu

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/nursing\\_phd](http://catalog.uab.edu/graduate/admissionchecklists/nursing_phd)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D.
Director (Ph.D.)	Dr. David Vance
Phone:	(205) 934-7589
E-mail:	devance@uab.edu

## Ph.D. Program Description

The Doctor of Philosophy in Nursing is designed to prepare professional nurses as scholars, leaders, and researchers who will make a substantive contribution to the body of knowledge for the discipline of nursing and thereby improve health outcomes for those who receive nursing care. The program of studies builds on preparation at the master's or baccalaureate level. Graduates are prepared for culturally effective leadership roles in research and science, education, health policy, and health care. Doctoral students have the opportunity to develop expertise and conduct research in a selected content area. In addition to structured coursework, the program builds upon a mentorship model which recognizes that research skills are learned most effectively by working with a faculty research mentor who provides opportunities to practice the use of research techniques and the design and execution of original research within a focused program of research. In addition to core program course requirements, students complete at least 12 credits of required courses and electives in a selected content area. The PhD program was initiated in 1999. Initiated in 2000, the Post-Bachelor's PhD Option allows individuals with baccalaureate degrees in nursing to complete the PhD in nursing without first obtaining a master's degree.

## Ph.D. Program Goals

The PhD curriculum prepares graduates to examine models, concepts and theories for their application in expanding the body of nursing and health care knowledge to: contribute to nursing science and health care through research that is disseminated in professional publications and presentations to the scientific communities and health care consumers; to conduct health care investigations based upon scientifically sound conceptual and methodological decisions about research designs, measures, and analytic methods; to reflect a consistent commitment to scientific integrity in the design, conduct, and dissemination of research; to initiate and collaborate in interdisciplinary research and scholarly endeavors that contribute to health outcomes in a culturally effective manner; and to assume leadership roles in research and scholarship.

## Ph.D. Admission Requirements

- A Master of Science in Nursing (MSN) degree from an accredited institution in the United States, or approved by the Minister of Education for schools of nursing in foreign countries, equivalent to that in the UAB School of Nursing;
- A minimum grade point average of 3.0 overall (based on a 4.0 scale) on all graduate level coursework;
- Completion of GRE within the past 5 years;
- For applicants from non-English speaking countries: a satisfactory TOEFL score (minimum 550);
- Computer literacy and access is required, with proficiency in word processing and e-mail correspondence, as well as familiarity and experience with the Internet. It is recommended that each student have their own personal computer meeting the specifications of the School of Nursing. (Specifications are available from the School of Nursing website);
- Eligibility for licensure as a Registered Nurse in the United States;
- A written goal statement which evidences congruence between the applicant's research interests and School of Nursing faculty research;
- At least one sample of independent written work (in English) that demonstrates the applicant's scholarship potential. Representative examples include a paper, proposal, report, or publication;
- A current curriculum vitae;
- Three references from individuals with expertise to comment on the applicant's capability for research and scholarship (for example, University professors, employers); at least one of the references must be from a doctorally prepared nurse, and;
- A personal interview.

**NOTE:** For the Post-Baccalaureate PhD option, the corresponding requirements are:

- A Bachelor of Science in Nursing (BSN) degree from an accredited institution in the United States, or approved by the Minister of Education for schools of nursing in foreign countries, equivalent to that in the UAB School of Nursing;
- A minimum grade point average of 3.0 overall (based on a 4.0 scale) on all undergraduate level coursework;
- Completion of GRE within the past 5 years;
- For applicants from non-English speaking countries: a satisfactory TOEFL score (minimum 550);
- Computer literacy and access is required, with proficiency in word processing and e-mail correspondence, as well as familiarity and experience with the Internet. It is recommended that each student

have their own personal computer meeting the specifications of the School of Nursing. (Specifications are available from the School of Nursing website);

- Eligibility for licensure as a Registered Nurse in the United States;
- A written goal statement which evidences congruence between the applicant's research interests and School of Nursing faculty research;
- At least one sample of independent written work (in English) that demonstrates the applicant's scholarship potential. Representative examples include a paper, proposal, report, or publication;
- A current curriculum vitae;
- Three references from individuals with expertise to comment on the applicant's capability for research and scholarship (for example, University professors, employers); at least one of the references must be from a doctorally prepared nurse, and;
- A personal interview.

## Ph.D. Degree Requirements

Candidates for the degree of Doctor of Philosophy in Nursing must complete the following requirements:

- Coursework and experiences based on the student's background and substantive area, with an overall GPA of 3.0 or better, and grades of B or better in all required courses on the approved program of studies;
- A comprehensive examination administered upon completion of an individualized program of studies; and
- A written dissertation demonstrating competence in research, individual inquiry, critical analysis using sophisticated statistical and/or qualitative techniques, and in-depth treatment of a health care problem in the selected content area. The investigation must make a genuine scientific contribution to knowledge, concepts, and theories in nursing. A final defense of the dissertation is required.

## Postdoctoral Study

Postdoctoral studies in nursing are individually arranged based on a student's learning needs in specific areas of interest that match the strengths of the graduate faculty. The focus of postdoctoral study is on expanding and extending the student's knowledge base in nursing theory, practice, research, statistics and data management, and generally centers on a research effort of mutual interest to the student and faculty mentor.

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/nursing\\_\\_dnp](http://catalog.uab.edu/graduate/admissionchecklists/nursing__dnp)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	D.N.P.
Director (D.N.P.):	Dr. Anne Alexandrov
Phone:	(205) 934-6852
E-mail:	annealex@uab.edu

## D.N.P. Program Description

The DNP is a practice-focused terminal degree to prepare graduates to practice at the highest level in specialty practice or to assume leadership positions in healthcare. Graduates of the DNP program will focus on providing care to populations and communities with an emphasis on improving quality and access to under served, diverse populations. The three components of the DNP are advanced clinical specialty practice,

leadership, and practice inquiry. Graduates will employ abilities and skills in these areas to advocate for reasonable, rational, and data-driven health regulations, standards, and evidence-based practices; sustain collaborative and strategic relationships, promote innovative, effective health care programs; and form partnerships with diverse groups to address health disparities. In addition, graduates will be prepared to assume clinical faculty positions to address the critical nursing faculty shortage.

For most students, the Post-Master's DNP curriculum will be a minimum of 34 credits, which includes the development of a practice or leadership focused project. This Scholarly Project is designed to synthesize scholarship in an advanced practice specialty or an area of healthcare leadership and serves as a capstone program experience. All courses are offered in a distance accessible format and students may develop the scholarly project under the direction of program faculty and onsite mentors. Applications will be accepted twice a year for the summer or fall term, to either a full or a part-time cohort. Students enrolled in the DNP program will be required to come on campus between the first and second year for a two to three day intensive experience.

## D.N.P. Program Goals

The D.N.P. program of study is designed to prepare nurses who: evaluate policy, care delivery, and organizational systems for current and future health care needs; translate scientific, theoretical, and ethical principles into healthcare for individuals, families, and populations; incorporate knowledge of current and emerging health technologies to improve care delivery and organizational systems; advocate for social justice, equity, and ethical policies in healthcare; Demonstrate intra and inter-professional collaboration to address health disparities and to improve health care quality across diverse populations and cultures; assume complex leadership roles to advance clinical practice and healthcare delivery at the organizational and systems level and to improve health outcomes of individuals and populations, and assume complex leadership roles to advance clinical practice and healthcare delivery at the organizational and systems level and to improve health outcomes of individuals and populations.

## D.N.P. Admission Requirements

Admission is competitive, based on an assessment of the ability of the applicant to complete the program of studies and on the appropriateness of the requested program of studies to the applicant's stated goals. Because only a limited number of applicants can be accommodated in a given academic year, some well-qualified applicants may not be offered admission. In cases where there are more qualified applicants than slots available, the School of Nursing accepts the most qualified applicants.

**Eligible candidates for admissions will provide evidence of:**

- A master's degree in an area of advanced nursing practice (Nurse Practitioner, Clinical Nurse Specialist, Nursing Administration, or Nurse Anesthetist) from a regionally accredited institution; equivalent to that in the UAB School of Nursing;
- Current professional certification as an Advanced Practice Nurse (if applicable);
- A graduate grade point average of at least 3.0 overall (based on a 4.0 scale) or on the last 60 hours of earned credit;
- Three favorable completed *Evaluation Forms* from persons who have knowledge of the applicant's potential for success for graduate nursing studies and advanced practice nursing;

- Evidence of a license as a (1) Registered Nurse and (2) Advanced Practice Nurse or eligibility in the state in which the applicant plans to practice. Both documents must be notarized if the applicant is not a licensed nurse in Alabama;
- Confirmation of completed clinical hours in advanced specialty;
- Personal goal statement that is congruent with the program goals (300 words or less);
- Resume or Curriculum Vitae; and
- A personal interview by phone or in person with a School of Nursing faculty member or designee.

## D.N.P. Degree Requirements

Candidates for the DNP degree must complete the following requirements: Completion of all coursework and clinical experiences based on the student's Program of Studies, with an overall GPA of 3.0 or better, and grades of B or better in all required courses in the School of Nursing.

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/nursing\\_\\_msn](http://catalog.uab.edu/graduate/admissionchecklists/nursing__msn)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.N.
Director (M.S.N.):	Dr. Ashley Hodges
Phone:	(205) 996-7608
E-mail:	ashleyhodges@uab.edu

## M.S.N. Program Description

The MSN curriculum is designed to prepare nurses for advanced generalist or specialty practice, advanced nursing roles, and doctoral study in nursing. Preparation for advanced study in nursing at the MSN level is available in a variety of specialties and advanced roles including **Nurse Practitioner**, **Nurse Educator**, **Nursing Informatics**, **Nursing and Health Systems Administrator**, and **Clinical Nurse Leader** ([http://www.uab.edu/nursing/home/images/stories/info\\_sa/MSN\\_Flyer\\_MSNCNL.pdf](http://www.uab.edu/nursing/home/images/stories/info_sa/MSN_Flyer_MSNCNL.pdf)). Students are admitted to master's study during the fall and spring terms. All nursing core courses and the majority of the master's specialties are offered in the distance accessible format. The total number of clinical hours required varies depending on the option that is selected. Students must meet the full-time relevant clinical practice experience requirement of the specialty and have a current RN license in the state in which they will do their clinical practice prior to enrolling in the advanced practicum courses. Because only a limited number of applicants can be accommodated in a given academic year, some well-qualified applicants may not be offered admission. In cases where there are more qualified applicants than slots available, the School of Nursing accepts the most qualified who apply.

## Non-Degree Options at the MSN Level

**Post MSN Nurse Practitioner Specialties** MSN graduates who wish to take a designated program of study in preparation for sitting for one of the nurse practitioner certification examinations may apply for non-degree graduate status. This category is called the **Post MSN Nurse Practitioner Option**. Applicants for the Post MSN NP Option are considered on an individual basis, depending on NP practice experience and previous coursework. Applicants that are determined to be ineligible

for the Post MSN NP Option will be encouraged to apply for a second MSN degree.

**Teaching Certificate for Post BSN Applicants**-Additionally, applicants at the post-baccalaureate level may choose to seek certification to prepare for the faculty role.

**Clinical Research Management Certificate** option that allows both nursing students and non-nursing applicants to pursue a Clinical Research Management certificate (paper application).

**Registered Nurse First Assist (RNFA) Certificate for Post-Baccalaureate Applicants**- A Registered Nurse First Assistant (RNFA) is prepared to practice in a variety of acute or critical care settings. The RNFA, in collaboration with the surgeon, provides continuous and comprehensive patient care throughout the perioperative period. (on-line application)

## M.S.N. Program Goals

The MSN program of study is designed to prepare nurses who: synthesize research, theoretical formulations, and principles of scientific inquiry to provide evidence-based practice; assume leadership in managing and evaluating continuous quality improvement processes; use information systems/technology to evaluate programs of care, outcomes of care and care systems; advocate and implement health care policies that improve access, equity, efficiency, and social justice in the delivery of health care; design innovative educational programs for patients, nursing staff, and nursing students using teaching and learning principles; provide ethical, culturally sensitive care in an advanced nursing role independently and collaboratively with professionals from multiple disciplines; monitor the quality of one's own nursing practice based on professional practice standards and relevant statutes and regulations; and apply theories and principles of marketing, economics, consultation, management, and leadership to comprehensively perform an advanced nursing role.

## M.S.N. Admission Requirements

Requirements for admission for the MSN degree include the following:

- BSN degree from a regionally accredited institution, equivalent to the one offered by the School of Nursing, UAB;
- Cumulative grade point average of at least 3.0 on a 4.0 scale or on the last 60 semester hours; (Graduates of baccalaureate degree programs in countries other than the United States must have their baccalaureate degree transcripts evaluated by the Educational Credential Evaluators, Inc. OR The World Education Services Organization);
- Combined score of 297 on verbal and quantitative sections of the GRE; or score of 410 on the MAT; or score of 480 on the GMAT; Test scores submitted to UAB from the GRE, GMAT, or MAT must not be over 5 years old. Applicants with a 3.2 GPA or better may waive the Test Score requirement if they meet the criteria, please see: **GRE/ GMAT/MAT Waiver Process for degree seeking MSN students**;
- International students must achieve a TOEFL examination score of at least 550; and
- Three (3) letters of professional reference attesting to the applicant's potential for graduate study.

## M.S.N. Degree Requirements

Candidates for the MSN degree must complete the following requirements: Completion of all coursework and clinical experiences based on the student's Program of Studies, with an overall GPA of 3.0 or better, and grades of B or better in all required courses in the School of Nursing.

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/accelerated\\_masters\\_entry\\_to\\_nursing\\_pathway\\_\\_amnp](http://catalog.uab.edu/graduate/admissionchecklists/accelerated_masters_entry_to_nursing_pathway__amnp)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.N.
Director (A.M.N.P.):	Dr. Amy Brooks
Phone:	(205) 996-6679
E-mail:	brooks4@uab.edu

## A.M.N.P. Program Description

The Accelerated Master's Entry to Nursing Pathway (AMNP) is an alternate pathway into the existing master's in nursing (MSN degree) for applicants who have a bachelor's degree in a field other than nursing, who are not registered nurses, and who seek MSN preparation.

## A.M.N.P. Admission Requirements

Admission is based on the applicant's academic record and all application materials at the time of the application deadline. \*All grades (UAB and other colleges/universities) from previous college course work must be posted on applicant's UAB transcript by the application deadline. Courses *in progress* must be validated with a letter from the college or university students are attending.

- Applicants must have earned a minimum of a baccalaureate degree from a regionally accredited college/university prior to beginning classes.
- Upon receipt of ALL official transcripts, course work will be evaluated for advisement purposes regarding AMNP Foundational Courses.
- GPA- The minimum cumulative AND foundational GPA for all AMNP applicants is 3.0 at the time of application.
- Combined score of 297 on verbal and quantitative sections of the GRE; or score of 410 on the MAT; or score of 480 on the GMAT; Test scores submitted to UAB from the GRE, GMAT, or MAT must not be over 5 years old.
- International students must achieve a TOEFL examination score of at least 500;
- Three (3) letters of professional reference attesting to the applicant's potential for graduate study.
- A resume, outlining health care interest/experience, campus/community involvement, leadership and employment. Resumes should not be more than one page in length. Applicants are strongly encouraged to provide proof of work/volunteer experience in a healthcare setting as part of the application process. The healthcare work is to be documented by letters from a supervisor (on agency letterhead). Completion of a nursing skills course does not meet this criterion.
- Interviews- Due to the competitive nature, not all candidates that qualify for admission will be invited for interviews. Applicants will be notified within a month of the application submission deadline if

they will be invited to participate in the interview round for continued consideration for admission. You will be given ample time to plan for a trip to campus if you are selected to be interviewed. Students will be notified within a month after the interviews of an admission decision.

## A.M.N.P. Degree Requirements

The Program is divided into two phases: (I) the Pre-licensure phase and (II) the Master of Science in Nursing, MSN, specialty phase. Students in the Phase I must be prepared to dedicate 40 hours or more a week to the coursework and clinical for this program. Students find that it is not feasible for them to work while completing Phase I of this program. This is not a distance accessible program. Students must successfully complete Phase I and Phase II of the program to earn a degree in nursing.

**Phase I:** The pre-licensure phase: 50 Credits, 1395 contact hours

Phase I consists of 12 months of full time study during which students complete the required courses and clinical experiences **equivalent** to a BSN degree in preparation to apply for licensure as a registered nurse. While this will be an intense learning experience, students will emerge with the knowledge and skills required to function as a registered nurse. Upon successful completion of Phase I requirements, the University Registrar at UAB will send a certified letter to the Alabama Board of Nursing stating that students have successfully completed requirements equivalent to a BSN degree and are eligible to take the National Certification Licensure Exam for RNs (NCLEX-RN). Students who successfully complete the NCLEX-RN may subsequently apply for licensure and subsequently apply for employment as a Registered Nurse.

**Phase II: The Master of Science Specialty Phase:**

Phase II consists of four or more semesters of part time study via distance education through the School of Nursing and clinical work as a registered nurse. The typical programs of study are listed on each of the specialty track's individual fact sheet. The spring admission into a master's specialty track will provide you with an estimate length to complete your Master of Science in Nursing degree. **Successful completion of Phase II leads to a Master of Science in Nursing degree (MSN) with eligibility to take a board certification exam in most specialties. Only after successful completion of a board certification exam may the RN use the corresponding designation as part of their professional title.**

## A.M.N.P. Program Goals

The MSN program of study is designed to prepare nurses who: synthesize research, theoretical formulations, and principles of scientific inquiry to provide evidence-based practice; assume leadership in managing and evaluating continuous quality improvement processes; use information systems/technology to evaluate programs of care, outcomes of care and care systems; advocate and implement health care policies that improve access, equity, efficiency, and social justice in the delivery of health care; design innovative educational programs for patients, nursing staff, and nursing students using teaching and learning principles; provide ethical, culturally sensitive care in an advanced nursing role independently and collaboratively with professionals from multiple disciplines; monitor the quality of one's own nursing practice based on professional practice standards and relevant statutes and regulations; and apply theories and principles of marketing, economics, consultation, management, and leadership to comprehensively perform an advanced nursing role.

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/nurse\\_anesthesia\\_\\_msn](http://catalog.uab.edu/graduate/admissionchecklists/nurse_anesthesia__msn)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	M.S.N.
Director (Nurse Anesthesia):	Dr. Laura Wright
Phone:	(205) 934-7412
Email:	wrightel@uab.edu
Website:	www.uab.edu/na

The Nurse Anesthesia program prepares the registered nurse in all aspects of nurse anesthesia practice at the graduate level. The sequence of student coursework combines the knowledge of basic health sciences, scientific methodology in anesthesia, and advanced preparation to include a state-of-the-art scientific paper. Completion of the prescribed coursework and clinical practice comprise the requirements for the degree. The graduate is eligible to take the National Certification Examination, which, upon passing, allows them to practice as a certified registered nurse anesthetist.

The Nurse Anesthesia Program has received a ten-year accreditation in 2010 by the Council on Accreditation (COA) of Nurse Anesthesia Programs.

Council on Accreditation of Nurse Anesthesia Educational Programs  
222. South Prospect Ave.  
Park Ridge, IL, 60068  
Phone: (847) 692-7050  
Website: <http://www.aana.com/aanaaffiliates/accreditation/Pages/Accredited-Programs.aspx>

### Regional Clinical Sites

Students in the Nurse Anesthesia Program (NAP) at the University of Alabama at Birmingham (UAB) are admitted to one of 5 program components as selected by the student in their application. Students from all components attend classes on campus at UAB for the first ten months. The remainder of the program (clinical rotations) are based at the student's corresponding component site.

Alabama:

- Birmingham
- Dothan
- Huntsville
- Montgomery
- Tuscaloosa

## Professional Program Admission Requirements

Qualified candidates are graduates from an accredited registered nursing program with a baccalaureate degree in nursing. All coursework towards a BSN must be completed by December prior to the start of the Nurse Anesthesia program the following August. Applicants are required to provide proof of a valid professional RN license in the U.S. Only candidates with at least one year experience as an RN in a critical care setting are considered for admission. Acceptance will be based upon the student's academic ability, work experience, and aptitude for a career in nurse anesthesia. The candidate is expected to satisfy the following requirements:

- a minimum cumulative grade point average of 3.0 (A = 4.0),
- a minimum cumulative grade point average of 3.0 in science prerequisites,
- a grade of C or better in each prerequisite course,
- all sections of the GRE must be completed prior to application (verbal reasoning, quantitative reasoning, and analytical writing)
- a personal interview with the selection committee, and
- if accepted, complete the UAB medical history questionnaire and physical, provide proof of required immunizations, and receive satisfactory screening by the UAB Medical Center Student Health Service.

## Professional Program Prerequisites

(courses listed in semester credit hours):

Anatomy (3-4 semester credit hours)  
Physiology (3-4 semester credit hours)  
Microbiology (3-4 semester credit hours)  
College Chemistry (3-4 semester credit hours)  
Descriptive Statistics (3 semester credit hours)

## Application Procedure

Applicants interested in the Nurse Anesthesia Program at University of Alabama at Birmingham (UAB) Nurse Anesthesia should apply through NursingCAS. NursingCAS is the online, centralized application service for nursing programs. Visit [www.nursingcas.org](http://www.nursingcas.org) and click "Apply Here" to initiate your application. And then click on "Create Account" and complete the required fields in order to start your application. View this short instructional [video](#) on how to complete a NursingCAS application.

- Early Decision Application Deadline: June 1st

The UAB Nurse Anesthesia Program has added an early decision application cycle. Applicants with a desire to attend the UAB Nurse Anesthesia Program should submit the application with all required materials by June 1st for matriculation in Fall of the following year. The screening process for early decision is more stringent and only a few will be chosen. However, applications not chosen for early decision will automatically roll over to the regular admission cycle in September without penalty. If the application rolls over to the regular admission cycle, only applicable changes to the application need to be submitted by September 1st and no additional application fees will be assessed.

Criteria for acceptance: applicants with a desire to attend UAB Nurse Anesthesia Program, otherwise the criteria used for early acceptance is the same as for the regular application cycle though only the top candidates will be selected for the early decision cycle.

Criteria for maintaining status: early acceptance is contingent on completing one year of ICU experience; other contingencies may be assigned on an individual basis.

## Professional Program Application Deadline

- June 1st for early decision (August for fall following year)
- July - Notification of interviews, interviews, and notification of decision
- September 1st for regular admissions cycle
- November - Notification of interview
- December through February - interviews

- Decision notification two weeks after interview
- August - Students begin the program fall semester

UAB Nurse Anesthesia Program Supplemental Application ([http://www.uab.edu/nursing/home/images/stories/info\\_sa/Nurse\\_Anesthesia\\_Program\\_Supplemental\\_Application\\_2013.pdf](http://www.uab.edu/nursing/home/images/stories/info_sa/Nurse_Anesthesia_Program_Supplemental_Application_2013.pdf))

GPA Calculation Spreadsheet (MAC user please contact Ms. Stacey Smith (205) 934-7412, [staceysmith@uab.edu](mailto:staceysmith@uab.edu))

Applicants are strongly encouraged to complete the GPA calculation spreadsheet and mail with your supplemental application.

## Nurse Anesthesia Curriculum

The Nurse Anesthesia Program begins in the fall semester of each year. It comprises 67 semester hours of didactic instruction and 45 semester hours of clinical practicum and requires 27 months of full-time commitment. Students complete all foundation courses before beginning the clinical practicum, which starts after the first (ten) months of enrollment. The curriculum does not permit enrollment on a part-time basis.

## Deadlines

Note: See summarized fact sheet for experience requirements.

Entry Date	Deadline	Notes
Fall 2014	June 1, 2013	Early decision
	September 1, 2013	Regular admission cycle
Fall 2015	June 1, 2014	Early decision
	September 1, 2014	Regular admission cycle

## Funding

The School of Nursing at UAB has excellent scholarship, traineeship, fellowship and loan programs in which many students participate. Please visit "funding" (<http://www.uab.edu/nursing/home/student-information/acad-prog/nurse-anesthesia>) for more information.

## Outcomes

### Nurse Anesthesia Clinical Education

The Nurse Anesthesia Program not only provides students with coursework designed to learn the skills they need, the program also focuses on the theoretical and clinical aspects of anesthesia. Students spend much of their time in clinical settings receiving valuable experience.

Clinical experiences give students hands-on practice in the field of anesthesia. After their clinical experiences, nurse anesthesia graduates can:

- evaluate and assess patients pre, post, and intraoperatively;
- plan the anesthetic management and immediate pre and post-anesthesia management;
- develop and implement an appropriate anesthesia plan designated for patients of all ages with a variety of pathological conditions;

- recognize emergency patient conditions and perform skills required during emergency life support situations; and
- recognize, evaluate, and prevent anesthesia complications.

Nurse Anesthesia students participate in several clinical assignments:

1. First year students will receive their first assignments in May during their first year. The first schedule is designated as the summer semester schedule (first year student schedule) and extends from July through August.
2. The second clinical schedule (fall semester schedule) extends from September through October.
3. The second year clinical rotation schedule covers a 12-month period that begins in November and ends in October.
4. One last schedule is made in September or October of the last semester in the program. This lists where graduate students will finish their clinical education during the month of November. Some students request this assignment be the site where they have accepted employment. A priority is placed on these requests and all attempts are made to fulfill them.

Graduate students who have begun their clinical rotations are designated on most program forms as SRNAs (student registered nurse anesthetists). SRNAs at clinical sites are under the direction of the Clinical Coordinator. The Clinical Coordinator is a CRNA clinical faculty who serves as the principal contact person for the program and is in charge of the SRNAs clinical training at a particular clinical site.

Clinical Coordinators, CRNAs and Anesthesiologists also serve the students by:

being available to render clinical assistance in the operating room suite or other areas where anesthesia services are required;

- apprising the student of clinical responsibilities;
- serving as a role model; and
- providing evaluation and feedback to the students.
- providing a variety of clinical rotations within the facility

Clinical rotations are adjusted in a manner that will address individual student needs. Students cannot be assigned to all affiliates, but the program will attempt to provide each student with equal types of clinical experience.

# School of Optometry

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**Dean:** Dr. Rod Nowakowski

The UAB School of Optometry (UABSO) was established by the Alabama legislature in 1969 and admitted its first class of eight students on September 27, 1969. The School's first Doctor of Optometry (O.D.) degrees were awarded on June 4, 1973. Since that time, the School has grown to include graduate degrees (M.S., Ph.D.) in Vision Science and post-doctoral residency education. However, the optometry classes still average only 40 – 45 students. This makes us one of the smaller optometry schools in the country – a fact that we feel benefits the educational experience of our students.

## Vision Science

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/vision\\_science](http://catalog.uab.edu/graduate/admissionchecklists/vision_science)) to obtain specific admissions requirements on how to apply to Graduate School.

Degree Offered:	Ph.D.(Traditional and Sensory Impairment tracks), M.S., O.D./M.S.
Program Coordinator:	Dr. Stefanie B. Varghese
Phone:	(205) 934-6743
E-mail:	sbvarghese@uab.edu
Web site:	<a href="http://www.uab.edu/vsgp/">http://www.uab.edu/vsgp/</a>

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/vision\\_science\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/vision_science_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## Program Information

Envision yourself in a lab conducting cutting-edge research that may lead to improved treatments for glaucoma or cataract, gene therapy for blinding retinal diseases, or provide fundamental information on how the brain works so that we can see. Envision yourself using the knowledge and research skills you gain as a student to establish your own research lab, serve as a scientific advisor to governments or the military, or teach at the graduate or undergraduate level. These are just a few of the many possibilities available to graduates of the Vision Science Graduate Program.

Through basic, translational, or clinical research, the Vision Science Graduate Program offers opportunities to investigate all facets of vision, including (but certainly not limited to) visual neuroscience, the genetics of blinding diseases, visual perception, all areas of the eye and the visual regions of the brain using a variety of techniques, including functional brain and eye imaging. Our didactic courses provide fundamental knowledge about the biological bases of vision. Laboratory research provides intensive involvement with a faculty member and other students to prepare students for postdoctoral study or other research environments. We have the most up-to-date advanced equipment to address our research from many avenues of exploration to solve the most difficult problems. We actively foster unique inter- and intra-departmental laboratory collaborative efforts to exploit the full benefits of UAB's resources and explore students' full potential.

## Admission and Financial Aid

Applications for admission to the graduate program in vision science are reviewed by the Graduate Admissions and Advisory Committee.

### M.S. Degree

- GRE Score Required

### O.D./M.S.

- OAT Score Required
- Financial Assistance available to qualified students

### Ph.D. Traditional Track

- GRE Required
- Financial Assistance available to qualified students

### Ph.D. Sensory Impairment Track

- GRE or MAT recommended

### M.S. Degree

Some students may wish to pursue graduate training at the master's level. Two calendar years are needed to complete the M.S. degree in vision science. Each candidate must complete a minimum of 30 hours of credit: 24 credit hours in vision science and 6 credit hours in related graduate courses.

In addition, the candidate must successfully complete a research thesis by the conclusion of the final year.

### O.D./M.S.

Selected students in the UAB optometry professional program are encouraged to combine the O.D. degree with the M.S. degree in Vision Science. Financial assistance is available for qualified students. Potential candidates should have completed an undergraduate degree in a biological, physical, or health science field.

## Ph.D. Degree (Traditional and Sensory Impairment Tracks)

The Ph.D. degree is based upon completion of graduate course work, a qualifying examination, research, and a dissertation and defense. There is considerable flexibility in the coursework for the Ph.D. in vision science.

Each student is required to take the first-year core curriculum for their respective track. Students then take three additional courses, selected by the student in consultation with the mentor, and a course in statistics and ethics. The program is flexible so that, for example, students who have interests in visual neuroscience may take courses in the neuroscience sequence: VIS 729, Introduction to Neurobiology; Cellular and Molecular Neurobiology; Integrative Neuroscience; and Developmental Neuroscience.

Other courses at a similar level can be substituted so that students can take maximum advantage of offerings in other programs. Individuals with clinical backgrounds will have an opportunity for clinical development. Students are also offered an opportunity to gain teaching experience.

## Additional Information

Deadline for Entry Term(s):	Fall, Spring, and Summer
Deadline for All Application Materials to be in the Graduate School Office:	January 15th, November 15th, and April 15th
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.) OAT is considered for the OD/MS program. MAT or GRE is considered for the PhD Sensory Impairment Track
Web site:	<a href="http://visionscience.uab.edu">Visionscience.uab.edu</a>

For detailed information, contact the graduate program coordinator, Dr. Stefanie Varghese, UAB Department of Vision Science, WORB 601A, 1720 2nd Ave S., Birmingham, AL 35294-4390 (office location: Worrell Building, Room 601A, 924 18th Street South).

Telephone 205-934-6743

E-mail [sbvarghese@uab.edu](mailto:sbvarghese@uab.edu)

Web <http://www.uab.edu/vsgp/>

# School of Public Health

## Master of Public Health (M.P.H.)

Prospective students should use this Master of Public Health (M.P.H.) checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

Biostatistics Concentrations:	Biostatistics
Environmental Health Concentrations:	Environmental Health Environmental Health & Toxicology (also online) Accelerated Industrial Hygiene Industrial Hygiene Occupational Health & Safety (also online) Fast Track (EHS)
Epidemiology Concentrations:	Epidemiology Fast Track (EPI)
Health Behavior Concentrations:	Health Behavior Health Behavior/Nursing MPH/Psychology PhD MPH/Sociology PhD Fast Track (HB)
Health Care Organization and Policy Concentrations:	Health Care Organization (also online) General Theory & Practice Maternal and Child Health Policy and Leadership (also online) Public Health Preparedness Management Health Policy Maternal & Child Health/Social Work (also Online) Maternal & Child Health/Nursing MPH/Juris Doctorate MPH/Business Administration MPH/Doctor of Optometry MPH/Public Administration Maternal and Child Health Policy and Leadership Fast Track (HCOP)
General PUH Track	MPH/MD (UAB) MPH/DVM (Auburn)

## Master of Science in Public Health (M.S.P.H.)

Prospective students should use this Master of Public Health (M.S.P.H.) checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_science\\_in\\_public\\_health\\_\\_msph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_science_in_public_health__msph)) to obtain specific admissions requirements on how to apply to Graduate School.

Biostatistics Concentrations:	Clinical and Translational Science (BST)
Environmental Health Concentrations:	Environmental Health & Toxicology Industrial Hygiene
Epidemiology Concentrations:	Applied Epidemiology Pharmacoepidemiology and Comparative Effectiveness Research Clinical and Translational Science (EPI)
Health Behavior Concentration:	Clinical and Translational Science (HB)
Health Care Organization & Policy Concentrations:	Outcomes Research MSPH/ Psychology PhD

## Doctor of Philosophy (Ph.D)

Prospective students should use this Doctor of Philosophy (Ph.D.) checklist ([http://catalog.uab.edu/graduate/admissionchecklists/doctor\\_of\\_philosophy\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/doctor_of_philosophy_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

Biostatistics Concentration:	Biostatistics
Environmental Health Sciences Concentration:	Environmental Health Sciences Industrial Hygiene
Epidemiology Concentrations:	Epidemiology
Health Behavior Concentration:	Health Education and Health Promotion

## Doctor of Public Health (Dr.P.H.)

Prospective students should use this Doctor of Public Health (Dr.P.H.) checklist ([http://catalog.uab.edu/graduate/admissionchecklists/doctor\\_of\\_public\\_health\\_\\_drph](http://catalog.uab.edu/graduate/admissionchecklists/doctor_of_public_health__drph)) to obtain specific admissions requirements on how to apply to Graduate School.

Health Care Organization & Policy Concentrations:	Public Health Management Outcomes Research Maternal and Child Health Policy
Degree Offered:	MPH, MSPH, MS, DrPH, PhD
Phone:	(205) 934-4993
Email:	soph@uab.edu
Web site:	www.soph.uab.edu

## Additional Information

Deadline for Entry Term(s):	Application Deadlines
Terms of admission:	Master's students (MPH and MSPH) should plan to begin studies only in the fall semester of each year. Some programs allow spring admission. Doctoral students (DrPH) may apply for admission anytime but are strongly encouraged to matriculate in the fall.
Entrance Test:	<a href="http://www.soph.uab.edu/graduate/prospective">www.soph.uab.edu/graduate/prospective</a>
International Transcripts:	International transcripts must be submitted to World Education Services (WES) or Educational Credential Evaluators (ECE) for an official course-by-course credential evaluation (document-by-document evaluations will not suffice). All WES or ECE evaluations are to be received by SOPHAS directly from WES or ECE.
Number of Evaluation Forms Required:	Three
School of Public Health Catalog:	<a href="http://www.soph.uab.edu/catalog">www.soph.uab.edu/catalog</a>

For detailed information about the M.P.H., M.S.P.H., and Dr.P.H. programs, please consult the School of Public Health web site at <http://www.soph.uab.edu/> or visit the UAB School of Public Health:

Ryals Public Health Building  
Room 130, Student Services  
1665 University Boulevard  
Birmingham, AL 35294-0022

**Telephone:** 205-934-4993

**E-mail:** [soph@uab.edu](mailto:soph@uab.edu)

**Website:** [www.soph.uab.edu](http://www.soph.uab.edu)

**Facebook:** [www.facebook.com/UABSchoolofPublicHealth](http://www.facebook.com/UABSchoolofPublicHealth)

## Interdisciplinary Programs

The School of Public Health offers several interdisciplinary graduate level programs, which utilize the expertise found in other UAB schools and universities.

### MPH / MD

- **Admissions:** Students must be admitted to the UAB School of Medicine (SOM) MD program before being considered for the Coordinated MD/MPH Program. Interested students will have the School of Medicine forward their application materials to the School of Public Health (SOPH), submit to the Graduate School a SOPH application and career goals statement. Students may elect to apply to both programs at the same time, to the MPH program after they

have matriculated to medical school or, if accepted to the SOM after enrolling in the MPH, the student may transfer to the coordinated degree. The Associate Dean will review the application, make an admission decision, and serve as the advisor for all MD/MPH students.

- SOPH Catalog ([http://www.soph.uab.edu/md\\_mph](http://www.soph.uab.edu/md_mph))

### MPH/DVM

- **Admissions:** Students must be admitted to the Auburn University's Veterinary Medicine program ([http://www.vetmed.auburn.edu/home/education/admissions/admissions-procedures/#Ui-DwT\\_y2vg](http://www.vetmed.auburn.edu/home/education/admissions/admissions-procedures/#Ui-DwT_y2vg)) before being considered for the Coordinated DVM/MPH Program. For more information about the DVM Program please contact the College of Veterinary Medicine at Auburn University; [www.vetmed.auburn.edu](http://www.vetmed.auburn.edu) (<http://www.vetmed.auburn.edu>), phone (334) 844-2685 or email [admiss@vetmed.auburn.edu](mailto:admiss@vetmed.auburn.edu)

To apply to the UAB School of Public Health MPH Program, interested students should submit their application using The University of Alabama at Birmingham's web-based system Apply Yourself ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=uab-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=uab-grad)).

**To View Application Requirements:** <http://www.soph.uab.edu/prospective/degree/requirement/masters>

## Biostatistics

Degree Offered:	M.P.H., M.S., M.S.P.H., Ph.D.
Department Chair:	Naomi Fineberg, Ph.D.
Phone:	(205) 934-4905
E-mail:	<a href="mailto:bstgrad@uab.edu">bstgrad@uab.edu</a>
Web site:	<a href="http://www.soph.uab.edu/bst">www.soph.uab.edu/bst</a>

Biostatistics is the field of statistical methods related to biological research in areas such as public health, medicine, dentistry, and nursing. At UAB, the Department of Biostatistics focuses on the application of existing statistical techniques to studies in these health related fields and development of new statistical techniques.

Dr. Naomi Fineberg is the Chair of the department, Dr. Leslie McClure is the Director of Graduate Studies, and Della Daniel is the department liaison to the graduate program. The Department has 24 faculty members and staff, with a wide variety of research interests. Our department includes a Section on Statistical Genetics (<https://www.soph.uab.edu/ssg>) and a Section on Research Methods and Clinical Trials. (<https://www.soph.uab.edu/RMCT>) We offer training both at the graduate and post-doctoral level. At the graduate level, the Department offers both the MS and PhD degrees in Biostatistics (<https://www.soph.uab.edu/bst/academics>)

Graduate applicants should have a strong quantitative training background including calculus and linear algebra. In post-doctoral training, efforts focus on collaboration in advancing training of clinicians in research methods through a MSPH degree (<https://www.soph.uab.edu/bst/academics>), and offer post-doctoral training of statisticians in the

areas of Statistical Genetics (<https://www.soph.uab.edu/ssg>) and Trials Management (<https://www.soph.uab.edu/RMCT>) .

Research directed by faculty in the Department is supported in excess of \$15 million annually, and includes investigations in diverse areas such as the methodological development of techniques in statistical genetics, understanding the causes of the excess stroke mortality in the southeastern US, and advancing techniques to determine the number of patients needed in randomized clinical trials using data from nested pilot studies.

The Department welcomes the development of collaborative relationships with researchers in health related fields, and is actively involved with many departments in the School of Medicine, School of Dentistry, and School of Nursing at UAB. We also have similar active collaborations with universities throughout the world.

## Admissions

Requirement	Fulfilled By:
Deadline for Entry Term(s):	April 1st
Number of Evaluation Forms Required:New Row	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
SOPH Graduate Catalog Description	<a href="http://www.soph.uab.edu/catalog">http://www.soph.uab.edu/catalog</a>
Department Contact:	Della Daniels
Department Contact Email:	ddaniel@uab.edu

## Biostatistics

### School of Public Health's Biostatistics Student Handbook

School of Public Health's Student Catalog (<https://www.soph.uab.edu/catalog>)

Prospective students should use this [checklist \(M.P.H., M.S.\)](#) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this [checklist \(PhD\)](#) to obtain specific admissions requirements on how to apply to Graduate School.

## The MPH Program

The MPH degree in Biostatistics is intended primarily for those who wish to acquire an MPH degree with an emphasis on statistical methodology. This can include individuals from decision-making positions in health care settings as well as those interested in data management, statistical analyses and interpretation, and presentation of analytical results. This degree can be completed in approximately 2 years. Note that the MPH does not require some of the theoretical courses required for the MS, and as such, it is not a direct route to prepare a student for a PhD. **Students anticipating that they will wish to continue for a PhD in biostatistics are advised to pursue the MS rather than the MPH.**

### Required Courses: MPH in Biostatistics

Requirements		Hours
<b>MPH Core (including the Integrative Experience)</b>		16 or 17
ENH 600	Fundamentals of Environmental Health Science	3
EPI 600	Intro to Epidemiology	3-4
or EPI 610	Prin of Epidemiologic Research	
HB 600	Social and Behavioral Science Core	3
HCO 600	Introduction to Population Based Health Programs	3
PUH 695	The Public Health Integrative Experience	1
GRD 727	Writing & Reviewing Research	3
<b>Biostatistics Core</b>		15
BST 619	Data Collection and Management	3
BST 621	Statistical Methods I	3
BST 622	Statistical Methods II	3
BST 626/BST 626L	Data Management and Reporting with SAS	3
BST 697	Internship in Biostatistics	3
<b>Biostatistics Electives *</b>		9
Outside Electives **		3
<b>Total Hours</b>		43-44

- **Biostatistics Electives:** Minimum 9 credit hours of regular courses of 623 or higher-level.
- **Outside Electives:** A minimum of 3 graduate credit hours of electives must be taken from some field of Biology, Public Health or Medicine.

The academic advisor must approve these courses.

## MS in Biostatistics

The Department of Biostatistics offers an MS degree in biostatistics. This program provides a balance between theory and application, the perspective being the role of statistics and modeling in scientific research. The objective is to produce research-oriented scientists who can advance statistical and modeling theory and can interact effectively with scientists in other disciplines to advance knowledge in those fields. For admission to the MS program, a student's undergraduate curriculum must include a 3-semester sequence of calculus or equivalent, linear matrix algebra, and proficiency in computing. It is preferred that students have additional advanced mathematics courses, e.g., differential equations, advanced calculus including special functions, and complex analysis. Some background in the natural sciences would be helpful. Interested students should contact the department of Biostatistics.

Requirements		Hours
<b>MS Required Courses</b>		27
BST 621	Statistical Methods I	3
BST 622	Statistical Methods II	3
BST 623	General Linear Models	3
BST 626	Data Management and Reporting with SAS	3
BST 626L	Data Management and Reporting with SAS Laboratory	0
BST 631	Statistical Theory I	4
BST 632	Statistical Theory II	4
BST 655	Categorical Data Analysis	3
BST 691	Pre-Doctoral Seminar Series <sup>4 hours required for BST 691:</sup> Biostatistics Pre#doctoral Seminar Series	1
Biostatistics Electives *		6
<b>Biostatistics Electives</b>		6

Required Outside Electives	7
Other Related Courses including Non#Thesis (BST 698)	3
<b>Total Hours</b>	<b>43-46</b>

## PhD in Biostatistics

The PhD degree in biostatistics provides a balance between theory and application. In addition to providing students with an in-depth understanding of statistical theory and methodology, the main objectives of the program are to train students to become independent researchers, effective statistical consultants and collaborators in scientific research, and effective teachers.

All international students must demonstrate proficiency in spoken and written English before graduation, through the Graduate School's ESL Assessment. Dependent on the results of that assessment, the GPC may require additional course work in both written and/or oral English for students not showing proficiency upon arrival, or during any period of their graduate studies.

Requirements	Hours
<b>Required Biostatistics Courses:</b>	<b>44</b>
BST 621 Statistical Methods I	3
BST 622 Statistical Methods II	3
BST 623 General Linear Models	3
BST 626 Data Management and Reporting with SAS	3
BST 631 Statistical Theory I	4
BST 632 Statistical Theory II	4
BST 655 Categorical Data Analysis	3
BST 665 Survival Analysis	3
BST 691 Pre-Doctoral Seminar Series <sup>6 credit hours required</sup>	1
BST 723 Theory of Linear Models	3
BST 735 Advanced Inference	3
BST 760 Generalized Linear and Mixed Models	3
BST 765 Advanced Computational Methods	3
Biostatistics electives *	9
EPI 610 Prin of Epidemiologic Research (Outside Requirement)	4
<b>Outside electives **</b>	<b>3</b>
<b>Readings &amp; Research ***</b>	
<b>Total Hours</b>	<b>75-84</b>

Readings & Research: Students are strongly recommended to take Research in Statistics (BST 698) under various faculty members every semester after completion of the first-year equivalent of course work, until a research advisor is chosen.

## Clinical and Translational Science

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_science\\_in\\_public\\_health\\_\\_msph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_science_in_public_health__msph)) to obtain specific admissions requirements on how to apply to Graduate School.

### School of Public Health's Biostatistics Student Handbook

School of Public Health's Catalog (<https://www.soph.uab.edu/catalog>)

## Master of Science in Public Health (MSPH) in Clinical and Translational Science (CTSB)

There is a growing interest in medical and other health science schools in developing the clinical research skills of faculty members and fellows. This interest has been fueled by increased support from the NIH to prepare such individuals to meet the demand for clinical investigators in the field. Locally, the Schools of Medicine and Public Health have combined efforts to create a training program for young faculty members and fellows from a variety of disciplines.

This program is a post-medical or other health science degree training program, aimed primarily at fellows and faculty members interested in developing skills required for clinical research. It is anticipated that this academic training will supplement extensive training in the content area in which the student is trained, and senior mentoring in the politics and policies of project development and management. A graduate of this program will have the academic training to develop and lead independent research programs and projects. The program consists of a core set of courses common to all students, plus research elective and focus elective courses that reflect the academic interest of the student. At this time, the program can accommodate students with specific interest in **Biostatistics**, Environmental Health, Epidemiology, and Health Behavior. As a result, there will be some variation in the specific knowledge and skills acquired by each graduate. However, the primary learning objectives will apply to all students, irrespective of departmental affiliation. As such, graduates will be able to do the following upon completion of the program:

- design, conduct, and evaluate clinical research studies;
- understand issues of data collection and study management;
- follow appropriate policies and procedures relating to the utilization of human subjects in clinical research;
- demonstrate an understanding of the ethics of research on human subjects;
- prepare competitive applications for extramural research funding;
- prepare manuscripts for publication in the scientific literature; and
- critically evaluate published research

## Admission

Applicants should possess a medical or other health science professional degree. They may be in their final years of training as residents or fellows or hold positions as junior faculty members. The Graduate Record Examination (GRE) is required for applications to all MSPH programs in the School of Public Health. **The required minimum scores are 35th percentile in the Verbal category and 40th percentile in the Quantitative.** The GRE may be waived at the discretion of the committee, for applicants who have been pre-screened by the clinical investigator training grant committee of the School of Medicine. The applicant must produce three letters of reference and a letter stating that he/she will be guaranteed sufficient release time from clinical duties to be able to attend classes regularly and fulfill course requirements in a timely manner. A medical/health sciences mentor should be identified and a setting where the student can gain experience in conducting clinical research. A faculty member within the School of Public Health will be assigned as an advisor based on the stated interests of the applicant.

## Curriculum

The MSPH in Clinical and Translational Science consists of a minimum of 41 credit hours. Of these, 14 hours are required, including 9 hours of specific Biostatistics courses and 5 hours of specific Epidemiology courses. Students then select at least 9 credit hours from a list of approved Masters Research Electives, complete 9 hours of focus specific electives in Biostatistics, Epidemiology, Environmental Health, or Health Behavior, and take at least 9 hours of (698 level) Masters research to fulfill the MSPH requirement for conducting a research project.

Requirements	Hours
<b>MSPH Core Requirement: 14 hours</b>	<b>14</b>
BST 621 Statistical Methods I	3
BST 622 Statistical Methods II	3
BST 625 Design/Conduct Clinical Trials	3
EPI 607 Fundamentals of Clinical Research	3
EPI 680 Topics in Clinical Research	2
<b>Masters Project Research</b>	<b>9</b>
BST 619 Data Collection and Management	3
BST 626 Data Management and Reporting with SAS	3
BST 626L Data Management and Reporting with SAS Laboratory	0
EPI 625 Quant Methods in Epidemiology	3
EPI 703 Special Topics in the Epidemiology of Chronic Disease	3
EPI 709 Theoretical Basis of Epidemiology	3
HB 624 Adv Theory Behav Sci	3
HCO 677 Patient-Based Outcomes Measurement	3
<b>Biostatistics Selectives</b>	<b>9</b>
<b>Masters Project Research</b>	<b>9</b>
<b>Total Credit Hours</b>	<b>41-44</b>

## Environmental Health Sciences

Degree Offered:	M.P.H., M.S.P.H., Ph.D.
Department Chair:	Michelle V. Fanucchi, Ph.D.
Phone:	(205) 934-6080
Website:	www.soph.uab.edu/ehs
Department Contact:	Julie Brown
Department Contact Email:	jebrown@uab.edu

### Program Information and Objectives

The Department of Environmental Health Sciences focuses on understanding the causes, mechanisms, and consequences of environmental and occupational hazards, as well as the prevention and management of these hazards. Principal research areas include: Environmental Toxicology, Free Radical Biology, Cell Signaling, Exposure Assessment, and Occupational Safety.

The objectives of the program leading to a PhD in Environmental Health Sciences are to prepare students for scientific careers in academia, industry, government, and non-governmental organizations. A combination of didactic, laboratory experience, and/or field-based training will be provided to achieve the specific goals for each student. This degree is granted on the basis of distinctive academic achievement, scholarly proficiency, and original research. The Department offers

training in Environmental Health Sciences Research, and Industrial Hygiene.

### At the doctoral level, two foci are offered:

- Environmental Health Sciences Research (ENH)
- Industrial Hygiene (IHY)

### At the master's level, the following programs of study are offered:

- MPH in Environmental Health/Toxicology (ETOX) - also offered fully online
- MPH in Occupational Health and Safety (OHSM) - also offered fully online
- MPH in Industrial Hygiene (IHY)
- MPH Fast Track (5th Yr) Program
- MPH in the Accelerated Program in Industrial Hygiene (AIHY)
- MSPH in Environmental Health Toxicology (ETOX)
- MSPH in Industrial Hygiene (IHY)

## Admission

Applicants should have a bachelor's or higher degree in one of the natural sciences, medical sciences, or engineering fields from an accredited college or university. Regardless of degree, this should include courses in biology; general, organic, and physical chemistry; physics; and mathematics through calculus. Applicants interested in specializing in Environmental Toxicology are encouraged to have completed courses in biochemistry and physiology. Industrial Hygiene applicants are expected to have completed Industrial Hygiene courses in an accredited Industrial Hygiene Masters program or the equivalent, or have significant experience in the practice of Industrial Hygiene. Applicants who do not have adequate preparation in these areas are expected to complete remedial training as part of their didactic requirements. Applicants are required to have a GPA of at least 3.0 and to take the GRE General Test. A score of at least 146 on the quantitative section and 156 on the verbal section is required; consideration will also be given to performance on the analytical section. Deadline for applications to be admitted into the program is April 1, although basic science applicants are encouraged to apply no later than February 1.

## Curriculum

PhD students are expected to complete the department course requirements as well as those courses necessary to prepare them to conduct their dissertation research. The curriculum requirements can be found at <http://www.soph.uab.edu/node/1112>.

## Additional Information

For additional information, please send emails to the address below.

E-mail [jebrown@uab.edu](mailto:jebrown@uab.edu)

## Environmental Health Sciences

School of Public Health's Environmental Health Sciences' Student Handbook

School of Public Health's Catalog (<https://www.soph.uab.edu/catalog>)

## PhD in Environmental Health Sciences

Prospective students should use this checklist (PhD) ([http://catalog.uab.edu/graduate/admissionchecklists/doctor\\_of\\_philosophy\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/doctor_of_philosophy_checklist)) to obtain specific admissions requirements on how to apply to Graduate

The PhD program in Environmental Health Sciences prepares scientists for careers in research, environmental program management, and policy analysis. Education and research in the identification, evaluation, and control of hazards to human health are emphasized in this program. Students may concentrate on a wide variety of areas including exposure assessment, environmental chemistry, non-point source water pollution, risk assessment and management, environmental toxicology, and industrial hygiene. Graduates are qualified to assume upper-level positions in the public or private sector in management, teaching, research, or consulting. Graduates are particularly qualified for teaching or research positions in academic institutions that require sound research training.

## The PhD degree in the Department of Environmental Health Sciences has two foci:

- Environmental Health Sciences Research
- Industrial Hygiene

## Admission

Particular emphasis is placed upon students' interest and their commitment to research. The PhD degree requires an original and carefully thought out research dissertation. Students with previous experience and therefore specific ideas for research are particularly encouraged to apply. The general departmental admission requirements apply to the PhD applicants; however, a previous master's degree is also required. Those students who do not have a master's degree in an appropriate area of environmental health must meet the department's course requirements for the MSPH in environmental health and toxicology or industrial hygiene, depending upon the focus of the PhD dissertation research.

## Curriculum

PhD students are expected to complete the department core course requirements, as well as those courses required for their foci and are necessary to prepare them to conduct their dissertation research. Other courses preparatory to dissertation research will be determined by the student in consultation with his/her academic advisor.

Note that although GRD 717 is required, this course will not be considered in the total credit hours required for the degree.

Requirements		Hours
<b>PhD Departmental Core</b>		31
BST 611	Intermediate Statistical Analysis I	3
ENH 710	Grant Proposal Writing in Biomedical Sciences	1
ENH 790	Seminar: Current Topics in ENH Sciences Research	1
ENH 791	Advanced Environmental Health and Toxicology Seminar	1
ENH 796	Environmental Toxicology Laboratory Rotations	3

GRD 717	Principles of Scientific Integrity	3
<b>Environmental Health Sciences Research Focus</b>		22
ENH 720	Integrated Biomedical Science for Environmental Health I	10
ENH 721	Integrated Biomedical Science for Environmental Health II	8
ENH 722	Integrated Biomedical Science for Environmental Health III	3
<b>Industrial Hygiene Focus</b>		15
<b>Elective*</b> At least one elective at discretion of the student and the research advisor		
<b>Research Hours</b>		Variable
ENH 798	Doctoral Level Directed Res	Variable
ENH 799	Dissertation Research	Variable

Requirements		Hours
<b>Industrial Hygiene Focus</b>		15
BST 612	Intermediate Statistical Analysis II	3
ENH 700	Scientific Basis of Environmental Health	3
ENH 701	Environmental Chemistry	3
ENH 770	Advanced Topics in Environmental Disasters in PUH	3
ENH 705	Special Topics (Readings) in Environmental and Occupational Health	9
<b>Electives*</b> At the discretion of the student and the research advisor		18
<b>Research Hours</b>		Variable
ENH 798	Doctoral Level Directed Res	Variable
ENH 799	Dissertation Research	Variable

## Environmental Health Sciences / Toxicology

### School of Public Health's Environmental Health Sciences' Student Handbook

School of Public Health's Catalog (<https://www.soph.uab.edu/catalog>)

## Environmental Health /Toxicology (MPH, MSPH)

The Department of Environmental Health Sciences offers Environmental Health /Toxicology in both the Master of Public Health and Master of Science in Public Health Programs

Prospective students should use this [checklist \(M.P.H.\)](#) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this [checklist \(M.S.P.H.\)](#) to obtain specific admissions requirements on how to apply to Graduate School.

## MPH in Environmental Health /Toxicology (including 5th Year)

The MPH in Environmental Health / Toxicology studies the links between the environment and public health, studying all aspects of this

process from initial exposure to toxicant action to science-based policy development. We train students to recognize and assess exposures, determine the toxicity risk to the public, and design and properly communicate strategies to reduce risk and help set appropriate policy.

Environmental Health Curriculum: Students pursuing the Environmental Health & Toxicology degree track must complete a total of 42 credit hours including the MPH core courses listed below.

Requirements		Hours
<b>MPH Core</b>		19
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 611	Environmental & Occupational Exposure Assessment	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
HCO 600	Introduction to Population Based Health Programs	3
PUH 695	The Public Health Integrative Experience	1
<b>Departmental Track Requirements</b>		
ENH 612	Assessing & Managing Environmental Risks	3
ENH 650	Essentials of Environmental and Occupational Toxicology and Diseases	3
ENH 660	Fundamentals of Air and Water Pollution	3
ENH 691	CurrT Tpc in ENH Occp Hlth Sft	1
ENH 691	CurrT Tpc in ENH Occp Hlth Sft	1
<b>Departmental Electives *</b>		6
<b>School Wide Requirements</b>		3
GRD 727	Writing & Reviewing Research	3
<b>Internship</b>		
ENH 697	Internship	3
<b>Total Hours</b>		64

## MSPH in Environmental Health Toxicology

The MSPH program in Environmental Health Sciences/Toxicology is designed to provide an intensive educational experience for those with or without previous experience. Environmental health professionals must be able to recognize, evaluate, and control environmental situations that may lead to disease. They may also require knowledge in designing and conducting studies of environmental chemicals to assess the probability that environmental toxic agents present a risk to humans and/or the environment and to define safe limits of human exposure to them.

### MSPH Degree Program Learning Objectives

The objectives of the MSPH program are to assure that students will:

- describe the distribution of chemical, physical, and biological agents in the environment and in the occupational environment;
- apply quantitative methods to measure the concentration or intensity of these agents;
- identify and describe the diseases or other adverse health effects that may result from exposure to these agents and the risk of those outcomes;
- explain and control interventions to reduce or eliminate exposures to these agents;
- recognize regulatory and management considerations relative to these agents;

- critically evaluate published scientific reports; and
- design a sound methodological study to test a new hypothesis, conduct the study, analyze the resulting data and prepare a report of the study.

## Admission:

Students without previous experience, but who have a strong commitment to environmental health science may be admitted.

## Curriculum:

Students must complete a total of 40 credit hours. Electives are chosen in consultation with the student's advisor and should be selected to fit the student's interests, career goals, and academic needs. The degree can be obtained in 21 months of full-time study.

Requirements		Hours
<b>MSPH Core</b>		13
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 611	Environmental & Occupational Exposure Assessment	3
EPI 610	Prin of Epidemiologic Research	4
<b>Departmental Track Requirements</b>		6
ENH 612	Assessing & Managing Environmental Risks	3
ENH 650	Essentials of Environmental and Occupational Toxicology and Diseases	3
<b>Department Elective</b>		3
<b>Masters LLevel Research</b>		13
ENH 699	Masters Level Project Research	3
ENH 699	Masters Level Project Research	3
ENH 699	Masters Level Project Research	3
ENH 699	Masters Level Project Research	4
<b>Seminar/Journal Club</b>		5
ENH 691	CurrT Tpc in ENH Occp Hlth Sft	1
ENH 691	CurrT Tpc in ENH Occp Hlth Sft	1
ENH 691	CurrT Tpc in ENH Occp Hlth Sft	1
ENH 790	Seminar: Current Topics in ENH Sciences Research	1
ENH 790	Seminar: Current Topics in ENH Sciences Research	1
<b>Total Hours</b>		40

## Occupational Health & Safety

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

Health related careers are in high demand. We are searching for occupational health and safety professionals of tomorrow – bright, inquisitive students – with a desire to make a difference in the lives of others! You can make a difference in the lives of workers in your community. Our graduates are at the frontline to protect workers from injuries and illnesses. A safer, healthier workforce is a good thing for everyone. Graduates of our academic programs find rewarding and challenging careers in various employment sectors - working as team members to protect our nation's most valuable asset, **PEOPLE!**

## Occupational Health and Safety Curriculum

Students pursuing the **Occupational Health and Safety** degree track must complete a total of 44-45 credit hours including the MPH core courses listed below.

### Coursework

Requirements		Hours
<b>MPH Core</b>		19
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 611	Environmental & Occupational Exposure Assessment	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
HCO 600	Introduction to Population Based Health Programs	3
PUH 695	The Public Health Integrative Experience	1
<b>Departmental Track Requirements</b>		17
ENH 612	Assessing & Managing Environmental Risks	3
ENH 621	Fund of Industrial Hygiene	3
ENH 650	Essentials of Environmental and Occupational Toxicology and Diseases	3
ENH 670	Fund of Occupational Safety	3
ENH 680	Field Interdisciplinary Studies	1
ENH 681	Interdisciplinary Worksite Evaluations	2
ENH 691	Curr Tpc in ENH Occp Hlth Sft	1
ENH 691	Curr Tpc in ENH Occp Hlth Sft	1
<b>Departmental Electives</b>		
Select electives for 2-3 credit hours *		2-3
<b>School Wide Requirements</b>		
GRD 727	Writing & Reviewing Research	3
<b>Internship</b>		
ENH 697	Internship	3
<b>Total Hours</b>		44-45

\* The department highly recommends ENH 661L (2 credit hours)

## Industrial Hygiene

### School of Public Health's Biostatistics Student Handbook

School of Public Health's Student Catalog (<https://www.soph.uab.edu/catalog>)

### Industrial Hygiene (MPH, MSPH)

This track is designed to provide an intensive educational experience for students without previous experience but who have a strong commitment to occupational health and safety and hazardous substances. Calculus, although not required, is highly recommended. In addition to didactic coursework, these tracks require a three-month internship which is arranged by the program.

Prospective students should use this checklist (M.P.H.) ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this checklist (M.S.P.H.) ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_science\\_in\\_public\\_health\\_\\_msph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_science_in_public_health__msph)) to obtain specific admissions requirements on how to apply to Graduate School.

## MPH in Industrial Hygiene

Combines didactic research instruction and applied research experience for students with or without previous work experience. The industrial hygiene program is designed to develop the students' understanding of the interrelationships between the basic sciences and the causes and prevention of occupational related diseases. Graduates of the program will be capable of developing systematic approaches to identifying and controlling problems in industrial hygiene, designing and implementing research programs to measure the level of work exposure to hazardous agents, and instituting necessary control measures.

The industrial hygiene program is a component of the Deep South Center for Occupational Health and Safety, one of 16 Education and Research Centers partially supported by the National Institute for Occupational Safety and Health (NIOSH).

### Curriculum

Students must complete the basic MPH core (19 credit hours) and an additional 40 credit hours of course work. Included in the curriculum is a three-month internship in which principles learned in the classroom are put into practice. These are generally paid positions in industry. More than 60 industries nationwide have participated in this program.

### Coursework

Requirements		Hours
<b>MPH Core</b>		19
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 611	Environmental & Occupational Exposure Assessment	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
HCO 600	Introduction to Population Based Health Programs	3
PUH 695	The Public Health Integrative Experience	1,3
<b>Departmental Track Requirements</b>		28
ENH 612	Assessing & Managing Environmental Risks	3
ENH 621	Fund of Industrial Hygiene	3
ENH 624	Control of Occupational Hazards	2
ENH 625	Indust Hygiene Case Studies	2
ENH 626	Physical Agents	2
ENH 650	Essentials of Environmental and Occupational Toxicology and Diseases	3
ENH 661L	Environmental Sampling and Analysis Laboratory	2
ENH 670	Fund of Occupational Safety	3
ENH 680	Field Interdisciplinary Studies	1
ENH 681	Interdisciplinary Worksite Evaluations	2
ENH 681	Interdisciplinary Worksite Evaluations	2
ENH 691	Curr Tpc in ENH Occp Hlth Sft	1
ENH 691	Curr Tpc in ENH Occp Hlth Sft	1
<b>Departmental Research</b>		3
ENH 699	Masters Level Project Research	1-9
<b>School Wide Requirements</b>		3

GRD 727	Writing & Reviewing Research (or course determined by Graduate School)	3
<b>Internship</b>		3
ENH 697	Internship	3-9
<b>Total Hours</b>		59

## MPH in Accelerated Program in Industrial Hygiene (AIHY)

This track is designed specifically for and limited to graduates of undergraduate Industrial Hygiene programs financially supported by the National Institute for Occupational Safety and Health (NIOSH). Graduates of these programs have received basic courses from NIOSH, peer-reviewed and approved Industrial Hygiene curricula, and are qualified to practice Industrial Hygiene. The Accelerated Program in Industrial Hygiene will broaden the student's public health knowledge and skills while also preparing students to take leadership roles in Industrial Hygiene.

### Admission

Students who have graduated from a NIOSH funded and ABET accredited undergraduate Industrial Hygiene program and who meet the minimum requirements for admission to the School of Public Health. ABET is the Applied Science Accreditation Commission of the Accreditation Board of Engineering and Technology. Students without previous experience, but who have a strong commitment to occupational health and safety, may be admitted. In addition to the general admissions requirements for the School of Public Health enrollees shall hold a baccalaureate degree based on a minimum of 120 semester hours or the equivalent that shall include 63 or more semester-hour credits in undergraduate or graduate-level courses in science, mathematics, engineering, and technology, with at least 15 of those at the upper (junior, senior, or graduate) level and a minimum of 21 semester-hour credits, or the equivalent, in communications, humanities and social sciences. Remedial courses, designed to remove deficiencies in the background of entering students, are inherently at a level lower than expected in college credit work. Such courses, particularly in the areas of mathematics, basic science, and communications, cannot be used to meet the minimums in curricular content requirements.

### Curriculum

Students must complete the MPH Core (19 credit hours) and an additional 28 credit hours for a total of 47 credit hours. Included in the curriculum is a 3 credit hour (three-month, summer semester) internship and a 3 credit hour thesis/project requirement. The internships are generally paid positions in industry or government. Flexibility is offered in the research experience to allow highly motivated students to graduate after 12 months of study.

### Coursework

Requirements	Hours	
<b>MPH Core</b>	19	
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 611	Environmental & Occupational Exposure Assessment	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
HCO 600	Introduction to Population Based Health Programs	3

PUH 695	The Public Health Integrative Experience	1
<b>Departmental Track Requirements</b>		13
ENH 612	Assessing & Managing Environmental Risks	3
ENH 625	Indust Hygiene Case Studies	2
ENH 650	Essentials of Environmental and Occupational Toxicology and Diseases	3
ENH 680	Field Interdisciplinary Studies	1
ENH 681	Interdisciplinary Worksite Evaluations	2
ENH 691	Currt Tpc in ENH Occp Hlth Sft	1
ENH 691	Currt Tpc in ENH Occp Hlth Sft	1
<b>Departmental Research</b>		3
ENH 699	Masters Level Project Research	3
<b>Departmental Electives</b>		6
Select departmental electives to meet 6 credit hours		6
<b>School Wide Requirements</b>		3
GRD 727	Writing & Reviewing Research	3
<b>Internship</b>		3
ENH 697	Internship	3
<b>Total Hours</b>		47

## The Master of Science in Public Health (MSPH)

Curriculum with a concentration in Industrial Hygiene will provide students with an option for a more concentrated focus on industrial hygiene topics and a more intensive research experience.

### MSPH Degree Program Learning Objectives

The objectives of this degree option are to:

- describe the distribution of chemical, physical, and biological agents in the occupational environment;
- apply quantitative methods to measure the concentration or intensity of these agents;
- identify and describe the diseases or other adverse health effects that may result from exposure to these agents and the risk of those outcomes;
- explain and control interventions to reduce or eliminate exposures to these agents;
- recognize regulatory and management considerations relative to these agents;
- critically evaluate published scientific reports;
- and design a sound methodological study to test a new hypothesis, conduct the study, analyze the resulting data and prepare a report of the study.

The research aspect of this curriculum is conducted under the requirements of the UAB Graduate School, and includes: formation of a research committee, defense of a research proposal, conduct of the research, preparation of a formal thesis, and presentation and defense of the thesis.

### Admission

Students without previous experience, but who have a strong commitment to Industrial Hygiene, may be admitted. In addition to the general admissions requirements for the School of Public Health enrollees should have a strong background in math and science and a

strong commitment to conduct research (laboratory or field based) as the MS level.

## Curriculum

Students must complete a total of 56 credit hours. Electives are chosen in consultation with the student's advisor and should be selected to fit the student's interests, career goals, and academic needs. The degree can be obtained in 21 months of full-time study.

## Coursework

Requirements	Hours
<b>MSPH Core</b>	<b>13</b>
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
ENH 611 Environmental & Occupational Exposure Assessment	3
EPI 610 Prin of Epidemiologic Research	4
<b>Departmental Track Requirements</b>	<b>26</b>
ENH 612 Assessing & Managing Environmental Risks	3
ENH 621 Fund of Industrial Hygiene	3
ENH 624 Control of Occupational Hazards	2
ENH 625 Indust Hygiene Case Studies	2
ENH 626 Physical Agents	2
ENH 650 Essentials of Environmental and Occupational Toxicology and Diseases	3
ENH 661L Environmental Sampling and Analysis Laboratory	2
ENH 670 Fund of Occupational Safety	3
ENH 680 Field Interdisciplinary Studies	1
ENH 680 Field Interdisciplinary Studies	1
ENH 681 Interdisciplinary Worksite Evaluations	2
ENH 681 Interdisciplinary Worksite Evaluations	2
<b>Masters Level Research</b>	<b>10</b>
ENH 699 Masters Level Project Research	5
ENH 699 Masters Level Project Research	5
<b>Seminar/Journal Club</b>	
ENH 691 Curr Tpc in ENH Occp Hlth Sft	1
ENH 691 Curr Tpc in ENH Occp Hlth Sft	1
ENH 691 Curr Tpc in ENH Occp Hlth Sft	1
ENH 790 Seminar: Current Topics in ENH Sciences Research	1
<b>Internship</b>	<b>3</b>
<b>Total Hours</b>	<b>56</b>
ENH 697 Internship	3
<b>Total Hours</b>	<b>56</b>

## Epidemiology

Degree Offered:	Ph.D., M.P.H, M.S.P.H.
Chair:	Donna Arnett Ph.D., M.S.P.H.
Phone:	(205) 975-7699
Web site:	www.soph.uab.edu/epi
Department Contact:	Kimberly Hawkins
Department Contact E-mail:	hawkinsk@uab.edu

Prospective students should use this checklist (M.P.H) (<http://catalog.uab.edu/graduate/admissionchecklists/>)

master\_of\_public\_health\_\_mph) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this checklist (PhD) ([http://catalog.uab.edu/graduate/admissionchecklists/doctor\\_of\\_philosophy\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/doctor_of_philosophy_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## Master's Programs' Learning Objectives:

Graduates with a Master's degree in epidemiology are expected to:

- describe the epidemiology of important diseases, injuries, and causes of death in a population;
- understand and apply the principles of epidemiologic study design and analysis;
- recognize the circumstances in which specific designs are appropriate for an investigation and to identify strategies to minimize and prevent bias in studies;
- design data collection, entry, and management procedures for epidemiological studies;
- compute and interpret the most common epidemiological measures of disease occurrence and association and to perform hypothesis testing and interval estimation on those measures;
- understand and analyze published reports of epidemiologic studies and critically evaluate the data and conclusions presented.

In addition, graduates of the MSPH degree program are also expected to:

- propose a methodologically sound study design for the evaluation of a new hypothesis; and
- manage one or more components of a research project, including instrument design, database design and management, statistical analysis and report writing.

## Admission Requirements

Applicants must meet the requirements for admission to the UAB School of Public Health and must demonstrate their aptitude for biological sciences and mathematics by virtue of their college transcripts and GRE scores. The Department of Epidemiology admits MPH students for the Fall term each year. Interested applicants should apply at: [www.sophas.org](http://www.sophas.org) (<http://www.sophas.org>). International students should also submit a World Education Services (WES/ECE, or similar) transcript evaluation along with your application materials. The deadline to apply through SOPHAS for the MPH program is April 1st each year.

A score of 35th percentile on the verbal and 40th percentile on the quantitative sections of the newly revised GRE exam. GRE exams taken prior to August 1, 2011, a minimum score of 1100 on the combined verbal and quantitative sections, with a verbal score of at least 550 (400 for MPH) and a quantitative score of at least 550, a score of 3.5 on the analytic section of the GRE test, and an undergraduate grade point average of 3.0 or better (on a 4.0 scale). The department also requires a TOEFL score of at least 250 (600 on the old scale) for all international students whose native language is not English.

## For Additional Information

If you have questions please contact Dr. Muntner, Ms. Baker, or Ms. Hawkins:

Dr. John Waterbor, Department of Epidemiology, UAB School of Public Health, RPHB 227C, 1530 3rd Avenue South, Birmingham, AL 35294-0022.

Telephone 205-934-7146 (Dr. Muntner), 205-934-7128 (Judy Baker), 205-975-9749 (Kimberly Hawkins); Fax to Department of Epidemiology, 205-934-8665

E-mail pmuntner@uab.edu; janbaker@uab.edu; hawkinsk@uab.edu

## Applied Epidemiology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_science\\_in\\_public\\_health\\_\\_msph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_science_in_public_health__msph)) to obtain specific admissions requirements on how to apply to Graduate School.

### MSPH in Applied Epidemiology

The MSPH program in Applied Epidemiology is an academic research degree designed for students who wish to receive education and training in epidemiologic research methods. Completion of didactic course work and a thesis research project are required. This degree can be completed in 12-18 months or 4-5 semesters.

**Admission:** The online application to the MSPH-Applied EPI program can be submitted at [www.sophas.org](http://www.sophas.org). (<http://www.sophas.org>) International students should also submit a World Education Services (WES/ECE, or similar) transcript evaluation along with your application materials. The deadline date to apply for admission is April 1st each year. The Department of Epidemiology admits students in the Fall term each year.

Requirements	Hours
<b>MSPH Core Requirements</b>	25
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
BST 613 Intermediate Statis Analy III	3
EPI 610 Prin of Epidemiologic Research & 610L and Principles of Epidemiologic Research - LAB	4
EPI 625 Quant Methods in Epidemiology	3
<b>Masters Level Research Requirement</b>	Minimum of 9
EPI 699 Master's Level Project Research Epidemiology	1-9
EPI 699 Master's Level Project Research Epidemiology	1-9
EPI 699 Master's Level Project Research Epidemiology	1-9

Requirements	Hours
<b>Department Track Requirements</b>	13
EPI 623 Intro SAS Sftware	1
EPI 627 Data Anal in Epi Studies	3
BST 619 Data Collection and Management	3
BST 625 Design/Conduct Clinical Trials	3
Advance BST Elective	3
<b>Total Credit Hours Required</b>	42

## Epidemiology

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

### Program Information

#### MPH in Epidemiology (including the 5th Year)

SOPH Catalog (<https://www.soph.uab.edu/node/1184>)

This program is intended for persons who anticipate careers in public health practice. In addition, students who wish to enter doctoral-level training should consider majoring in epidemiology at the master's level. Graduates of the MPH in Epidemiology may assume faculty or research positions in academia or management positions in government or industry if they have other professional degrees (e.g., MD, DDS) as well. Graduates of the program without professional credentials generally assume mid-level positions in academia, industry or government. The MPH in Epidemiology typically takes 12 to 18 months to complete.

### Admission Requirements

Applicants must meet the requirements for admission to the UAB School of Public Health and must demonstrate their aptitude for biological sciences and mathematics by virtue of their college transcripts and GRE scores. The Department of Epidemiology admits MPH students for the Fall term each year. Interested applicants should apply at: [www.sophas.org](http://www.sophas.org) (<http://www.sophas.org>). International students should also submit a World Education Services (WES/ECE, or similar) transcript evaluation along with your application materials. The deadline to apply through SOPHAS for the MPH program is April 1st each year.

Requirements	Hours
<b>MPH Core Requirements</b>	23
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
ENH 600 Fundamentals of Environmental Health Science	3
EPI 610 Prin of Epidemiologic Research & 610L and Principles of Epidemiologic Research - LAB	4
EPI 625 Quant Methods in Epidemiology	3
HB 600 Social and Behavioral Science Core	3
HCO 600 Introduction to Population Based Health Programs	3
PUH 695 The Public Health Integrative Experience	1

Requirements	Hours
<b>SOPH Requirements</b>	
GRD 727 Writing & Reviewing Research	3
(other GRD courses may be required based on Writing Assessment Exam)	
EPI 697 Internship	3

Requirements	Hours
<b>Track Requirements</b>	7
BST 613 Intermediate Statis Analy III	3
EPI 623 Intro SAS Sftware	1
EPI 627 Data Anal in Epi Studies	3

Requirements	Hours
<b>Electives</b>	5
EPI 601 Vaccinology	3

EPI 602	Epidemiology Chronic Diseases	3
EPI 603	Injury-Epidemiologic Principles and Prevention Strategies	3
EPI 604	Infectious Disease Surveillance and Control: Field Studies in Developing Countries	3
EPI 605	Epidemiology of Infectious Disease	3
EPI 606	Epidemiology of Cardiovascular Disease	2
EPI 607	Fundamentals of Clinical Research	3
EPI 608	Tropical and Infectious Diseases	3
EPI 609	Pharmacoepidemiology and Comparative Effectiveness Research	3
EPI 613	Cancer Epidemiology and Control	3
EPI 614	EPI Methods Applied CER	2
EPI 615	Ecology and Epidemiology of Arthropod-Borne Diseases	4
EPI 616	Environmental Epidemiology	3
EPI 617	Occupational Epidemiology	3
EPI 618	Fieldwork in Public Health	2
EPI 621	HIV/AIDS and STDs	3
EPI 624	Grant Applications in International setting	3
EPI 630	Data Analyses Using EPI Info	3
EPI 632	Molecular and Genetic Basis of Obseity	3
EPI 635	Genetics in Public Health	2
BST 619	Data Collection and Management	3
BST 626	Data Management and Reporting with SAS	3

Requirements	Hours
EPI 695 Epidemiology Seminar	1

**EPI Seminar Requirement (1 Hour) must be taken at least once. Can be taken more than once wih advisor’s approval.**

Requirements	Hours
EPI 698 Master’s Level Directed Research Epidemiology	1-9

## Pharmacoepidemiology and Comparative Effectiveness Research

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_science\\_in\\_public\\_health\\_\\_msph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_science_in_public_health__msph)) to obtain specific admissions requirements on how to apply to Graduate School.

### Masters of Science in Pharmacoepidemiology and Comparative Effectiveness Research

SOPH Catalog (<https://www.soph.uab.edu/node/3908>)

The MSPH-PCER program is an academic research degree that is designed to provide students with special training in Epidemiology research methods as applied to Pharmacoepidemiology and Comparative Effectiveness Research. This MSPH track will present introductory and advanced topics relevant to the field of Pharmacoepidemiology and will include material on information sources used for research in these fields, sources of bias, study designs, analytical approaches, issues of interpretation of research results, and relevant policy and regulatory activities. All trainees will complete a final thesis during their last term

of enrollment or graduation term that typically will be in the form of one or more papers suitable for publication and addressing a topic in Pharmacoepidemiology and Comparative Effectiveness Research. A number of databases are available for trainee projects.

**Admission:** The online application to the MSPH-PCER program can be submitted at [www.sophas.org](http://www.sophas.org) (<http://www.sophas.org>). International students should also submit a World Education Services (WES/ECE, or similar) transcript evaluation along with your application materials. The deadline date to apply for admission is April 1st each year. The Department of Epidemiology admits students in the Fall term each year.

Requirements	Hours
<b>MSPH Core Requirements</b>	
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
BST 613 Intermediate Statis Analy III	3
EPI 610 Prin of Epidemiologic Research & 610L and Principles of Epidemiologic Research - LAB	4
EPI 625 Quant Methods in Epidemiology	3
<b>Masters Level Research Requirements</b>	Minimum of 9 hours
EPI 699 Master’s Level Project Research Epidemiology	1-9
EPI 699 Master’s Level Project Research Epidemiology	1-9
EPI 699 Master’s Level Project Research Epidemiology	1-9
<b>Department Track Requirements</b>	9
EPI 609 Pharmacoepidemiology and Comparative Effectiveness Research	3
EPI 623 Intro SAS Sftware	1
EPI 614 EPI Methods Applied CER	2
GRD 717 Principles of Scientific Integrity	3
<b>Track-Specific Relevant Electives:</b>	10
BST 625 Design/Conduct Clinical Trials	3
<b>Total Hours</b>	<b>43</b>

## Clinical and Translational Science

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_science\\_in\\_public\\_health\\_\\_msph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_science_in_public_health__msph)) to obtain specific admissions requirements on how to apply to Graduate School.

### MSPH in Clinical and Translational Science

SOPH Catalog (<https://www.soph.uab.edu/node/1187>)

There is a growing interest in medical and other health science schools in developing the clinical research skills of faculty members and fellows. This interest has been fueled by increased support from the NIH to prepare such individuals to meet the demand for clinical investigators in the field. Locally, the Schools of Medicine and Public Health have combined efforts to create a training program for young faculty members and fellows from a variety of disciplines.

This program is a post-medical or other health science degree training program, aimed primarily at fellows and faculty members interested in developing skills required for clinical research. It is anticipated that this academic training will supplement extensive training in the content area

in which the student is trained, and senior mentoring in the politics and policies of project development and management. A graduate of this program will have the academic training to develop and lead independent research programs and projects. The program consists of a core set of courses common to all students, plus research elective and focus elective courses that reflect the academic interest of the student. At this time, the program can accommodate students with specific interest in Biostatistics (CRBS), **Epidemiology (CTE)**, and Health Behavior (CRHB).

**Curriculum:** The MSPH in Clinical and Translational Science consists of 42 semester hours. Of these, 26 hours are required, including 9 hours of specific Biostatistics courses and 8 hours of specific Epidemiology courses. The MSPH requires a research project; students must complete a minimum of 9 hours of masters research credits. Students then complete 8 hours of Clinical Research track requirements, and 8 hours of approved elective credits.

## MSPH-CTE Coursework

Requirements	Hours
<b>MSPH Core Requirements</b>	25
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
BST 613 Intermediate Statis Analy III	3
EPI 610 Prin of Epidemiologic Research & 610L and Principles of Epidemiologic Research - LAB	4
EPI 625 Quant Methods in Epidemiology	3
<b>Masters Level Research</b>	minimum 9 hours
EPI 698 Master's Level Directed Research Epidemiology	1-9
EPI 698 Master's Level Directed Research Epidemiology	1-9
EPI 698 Master's Level Directed Research Epidemiology	1-9

Requirements	Hours
<b>Clinical Research Track Requirements</b>	8
BST 625 Design/Conduct Clinical Trials	3
EPI 607 Fundamentals of Clinical Research or BST 625 Design/Conduct Clinical Trials	3
EPI 680 Topics in Clinical Research *	2
GRD 717 Principles of Scientific Integrity	3
Track-Specific Relevant Electives	9
<b>Total Hours</b>	42

## Health Behavior

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

Degrees Offered:	M.P.H.; M.S.P.H.; Ph.D.
Department Chair:	Jalie Tucker Ph.D., M.P.H.
Phone:	(205) 934-6020
Department Contact:	Julie Brown
Department Contact E-mail:	jebrown@uab.edu
Web site:	<a href="http://www.ches.ua.edu/">http://www.ches.ua.edu/</a>

## Program Information and Objectives

The Department of Health Behavior aims to train health promotion specialists/behavioral scientists to conduct research, develop and evaluate programs, implement and disseminate programs and integrate ethical, cultural and social justice topics as they address the public's health.

Health Behavior MPH and PhD students learn to use theories and methods from the social and behavioral sciences to develop programs that encourage - healthy behaviors. They learn state-of-the-art techniques and methods for research and program evaluation. Doctoral students study these topics in depth as they apply their knowledge and skills to conducting research and writing funding proposals and manuscripts. Students have opportunities to become involved in faculty research projects on a broad range of health issues including infectious diseases (HIV/AIDS and other sexually transmitted diseases), tobacco, alcohol, and other substance use, and behaviors related to obesity, aging, cardiovascular disease, cancer, and intentional or unintentional injuries. .

## Degree Programs

- MPH Health Behavior
- MPH Fast Track (5th Year)
- Coordinated MPH/PhD in Health Behavior and Psychology or Sociology
- Coordinated MPH/MSN in Health Behavior
- MSPH Clinical Research

## Admissions Information

Deadline for All Application:	April 1 Fall Term; November 1 Spring Term
Number of Letters of Recommendation Required:	Three
Entrance Tests	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
Comments	For additional information please contact Ms. Julie Brown, M.S (jebrown@uab.edu, phone 205-975-8075, fax 205-934-9325).

## Clinical Research

Department of Health Behavior Student Handbook (<http://www.soph.uab.edu/files/hb/MPH%202013.pdf>)

School of Public Health Catalog (<http://www.soph.uab.edu/catalog2013-2014>)

## MSPH Clinical Research

In response to interest in medical and other health science schools in developing the clinical research skills of faculty members and fellows, the Schools of Medicine and Public Health have combined efforts to create a training program for young faculty members and fellows from a variety of disciplines.

This program is a post-medical or other health science degree training program, aimed primarily at fellows and faculty members interested in developing skills required for clinical research. It is anticipated that this academic training will supplement extensive training in the content area in which the enrollee is trained, and senior mentoring in the politics and policies of project development and management. A graduate of this program will have the academic training to develop and lead independent research programs and projects. The program consists of a core set of courses common to all students, plus research elective and focus elective courses that reflect the academic interest of the student. Graduates will be able to do the following upon completion of the program:

- Design, conduct, and evaluate clinical research studies;
- Understand issues of data collection and study management;
- Follow appropriate policies and procedures relating to the utilization of human subjects in clinical research;
- Demonstrate an understanding of the ethics of research on human subjects;
- Prepare competitive applications for extramural research funding;
- Prepare manuscripts for publication in the scientific literature; and
- Critically evaluate published research.

**Admission:** Applicants should possess a medical or other health science professional degree. They may be in their final years of training as residents or fellows or hold positions as junior faculty members. Applicants must meet the minimum requirements for admission into the School of Public Health. The Graduate Record Examination (GRE) is required for applications to all MSPH programs in the School of Public Health. The GRE may be waived at the discretion of the committee, for applicants who have been pre-screened by the clinical investigator training grant committee of the School of Medicine. The applicant must produce three letters of reference and a letter stating that he/she will be guaranteed sufficient release time from clinical duties to be able to attend classes regularly and fulfill course requirements in a timely manner. A medical/health sciences mentor should be identified and a setting where the student can gain experience in conducting clinical research. A faculty member within the School of Public Health will be assigned as an advisor based on the stated interests of the applicant.

**Curriculum:** The MSPH in Clinical Research consists of a minimum of 41 credit hours. Of these, 14 hours are required, including 9 hours of specific biostatistics courses and 5 hours of specific epidemiology courses. Students then select at least 9 credit hours from a list of approved Masters Research electives, complete 9 hours of focus specific electives in Health Behavior, and take at least 9 hours of (698 level) Masters Research to fulfill the MSPH requirement for conducting a research project.

Requirements	Hours
<b>Required Core Courses</b>	14
BST 611 Intermediate Statistical Analysis I *	3
BST 612 Intermediate Statistical Analysis II *	3
BST 625 Design/Conduct Clinical Trials	3
EPI 607 Fundamentals of Clinical Research	3
EPI 680 Topics in Clinical Research	2

## Masters Research Electives: Nine credit hours should be selected by faculty advisor and student

Requirements	Hours
<b>Masters Research Electives: Nine credit hours should be selected by faculty advisor and student</b>	6
BST 619 Data Collection and Management	3
BST 626 & 626L Data Management and Reporting with SAS and Data Management and Reporting with SAS Laboratory	3
ENH 650 Essentials of Environmental and Occupational Toxicology and Diseases	3
EPI 611 Data Management of Epidemiologic and Clinical Study	4
EPI 625 Quant Methods in Epidemiology	3
EPI 703 Special Topics in the Epidemiology of Chronic Disease	3
EPI 709 Theoretical Basis of Epidemiology	3
HB 624 Adv Theory Behav Sci	3
HCO 677 Patient-Based Outcomes Measurement	3

Requirements	Hours
<b>Focus Specific Electives:</b>	12
HB 630 Health Communications: Theory and Practice	3
HB 641 Research Methods in Behavioral Science	3
HB 643 Health Program Evaluation	3
HB 636 : Developing Interventions to Promote Public Health <sup>Available</sup> Spring 2014	3

## Masters Directed Research: Nine hours of research (698 level) in a clinical setting (directed)

BST 698, EPI 698, HB 698, or ENH 698 (depending upon the area of study)

- \* Students who want to focus their degree on Biostatistics should take BST 621/622 rather than BST 611/612 since the former are prerequisites for more advanced Biostatistics focus courses. In addition, other students who wish to receive higher level mathematical training in Biostatistics could substitute BST 621/622 for BST 611/612.

**Note that care must be exercised when selecting some of these courses since some have prerequisites that must be taken earlier in the sequence of classes or taken concurrently.**

## Health Behavior

Department of Health Behavior Student Handbook (<http://www.soph.uab.edu/files/hb/MPH%202013.pdf>)

School of Public Health Catalog (<http://www.soph.uab.edu/catalog>)

## MPH Programs

The major instructional goal of the department is: to train health promotion specialists/behavioral scientists to conduct research, develop and evaluate programs, implement and disseminate programs and integrate ethical, cultural and social justice topics as they address the public's health.

The Department of Health Behavior offers the following MPH degrees

- MPH
- MPH Fast Track (5th Year)
- MPH/MSN
- MPH/PhD in Psychology or Sociology

## MPH in Health Behavior (including the MPH Fast Track Program)

Students in the MPH in Health Behavior are taught methods to identify and understand factors that affect behaviors related to personal and community health and to develop and evaluate intervention programs that promote healthy lives. Students are required to complete an internship. The internship is three credit hours and takes place following the completion of core course work.

The MPH program admits students with a bachelor's degree. Students in this track take 43-46 credit hours. The number of credit hours you are required to complete is determined before admission by examining your education and professional experiences. The MPH may be completed in four semesters.

The MPH Fifth-year program admits students who are juniors at UAB. Students in this track take 43-46 credit hours. You generally complete this program one year after you complete your undergraduate degree.

Requirements	Hours
<b>MPH Core</b>	19
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
ENH 600 Fundamentals of Environmental Health Science	3
EPI 600 Intro to Epidemiology	3
HB 624 Adv Theory Behav Sci	3
HCO 600 Introduction to Population Based Health Programs	3
PUH 695 The Public Health Integrative Experience	1
<b>Departmental Track Requirements</b>	9
HB 641 Research Methods in Behavioral Science	3
HB 643 Health Program Evaluation	3
<b>Behavioral Science Electives</b>	9
<b>SOPH Requirements</b> GRD Writing Course	3-6
HB 697 Internship	3
<b>Total Hours</b>	43-46

## Coordinated MPH/MSN in Health Behavior

The Coordinated MPH (Health Behavior)/PhD (Sociology or Psychology) degree program is offered with the University of Alabama at Birmingham Departments of Psychology and Sociology and the University of Alabama Department of Psychology. This program will enable you to obtain an MPH in Health Behavior simultaneously with a PhD in psychology or sociology. To be considered for this program, you must first be admitted to the PhD program in psychology or sociology at the University of Alabama at Birmingham or psychology at the University of Alabama (Tuscaloosa). The MPH degree requires a minimum of 43-46 (in Sociology) or 42-45 (in Psychology at UAB) credit hours.

**Admissions:** Students are admitted separately to the MPH and MSN degree programs and must meet admission requirements in both the School of Public Health and the School of Nursing.

Requirements	Hours
<b>MPH Core (including the Integrative Experience)</b>	19
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
ENH 600 Fundamentals of Environmental Health Science	3
EPI 600 Intro to Epidemiology	3
HB 624 Adv Theory Behav Sci	3
HCO 600 Introduction to Population Based Health Programs	3
PUH 695 The Public Health Integrative Experience	1
<b>Health Behavior Track</b>	15
HB 636 : Developing Interventions to Promote Public Health Offered Spring 2014	3
HB 641 Research Methods in Behavioral Science	3
HB 643 Health Program Evaluation	3
HB 697 Internship	3
Any HB Elective course	3
<b>SOPH Requirement</b>	3-6
GRD Writing Course	3-6
<b>Required Nursing Courses for Health Behavior Track*</b>	6
NUR 604 Leadership in Advanced Nursing Practice Roles	3
NUR 605 Research for Evidence-Based Practice	3

\* See the School of Nursing Catalog for the requirements for the MSN portion of the dual MPH/MSN degree. (<http://www.uab.edu/nursing/home/student-information/acad-prog/msn>)

## Coordinated MPH/PhD in Health Behavior and Psychology or Sociology

This dual degree program is offered in cooperation with the UAB Departments of Psychology and Sociology; and the University of Alabama (Tuscaloosa) Department of Psychology. This program enables students to obtain an MPH degree in Health Behavior simultaneously with a PhD in Psychology or Sociology.

**Admission:** Applicants to this program must first be admitted to the PhD program of interest. Applicants must meet the minimum requirements for admission into the School of Public Health.

## Coursework in Psychology

Requirements	Hours
PY 716 Intro to Statistics	3
PY 717 Applied Statistical Methods	3
ENH 600 Fundamentals of Environmental Health Science	3
EPI 600 Intro to Epidemiology	3
HB 624 Adv Theory Behav Sci	3
HCO 600 Introduction to Population Based Health Programs	3
PUH 695 The Public Health Integrative Experience	1
<b>Health Behavior Track</b>	12
HB 636 : Developing Interventions to Promote Public Health Offered Spring 2013	3
HB 641 Research Methods in Behavioral Science	3
HB 643 Health Program Evaluation	3

HB 697 Internship	3
<b>Health Behavior/Psychology Electives*</b>	6
<b>SOPH Requirements</b>	3-6
GRD Writing Course	3-6
<b>Total Hours</b>	42-45

## Coursework for Sociology

Requirements	Hours
<b>MPH Core</b>	21
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
ENH 600 Fundamentals of Environmental Health Science	3
EPI 600 Intro to Epidemiology	3
HB 624 Adv Theory Behav Sci	3
HCO 600 Introduction to Population Based Health Programs	3
PUH 695 The Public Health Integrative Experience	1
<b>Health Behavior Track</b>	12
HB 636 : Developing Interventions to Promote Public Health <small>Offered Spring 2014</small>	3
HB 641 Research Methods in Behavioral Science	3
HB 643 Health Program Evaluation	3
HB 697 Internship	3
<b>Health Behavior/Sociology Electives*</b>	9
<b>SOPH Requirements</b>	3-6
GRD Writing Course	3-6
<b>Total Hours</b>	43-46

\* One course can be from the doctoral program & must be approved as a behavioral science elective

## Health Education and Health Promotion

Department of Health Behavior Student Handbook (<http://www.soph.uab.edu/files/hb/MPH%202013.pdf>)

School of Public Health Catalog (<http://www.soph.uab.edu/node/1197>)

Prospective students should use this checklist (PhD) ([http://catalog.uab.edu/graduate/admissionchecklists/doctor\\_of\\_philosophy\\_checklist](http://catalog.uab.edu/graduate/admissionchecklists/doctor_of_philosophy_checklist)) to obtain specific admissions requirements on how to apply to Graduate School.

## PhD in Health Education and Health Promotion

The PhD program in health education/promotion provides students with instruction and research experience to become practitioners and scientists in health education and health promotion. The program also combines the resources of academic units from the University of Alabama at Birmingham (UAB – School of Public Health, Department of Health Behavior, UAB- School of Education, Department of Human Studies), and the University of Alabama (UA – College of Human Environmental Sciences, Department of Health Science), and utilizes the research expertise common to schools of public health along with the didactic, professional emphasis found in other health education programs. The specific objectives of the program are to enable the students to:

- Develop the skills to effectively plan, implement, and evaluate health education/promotion intervention programs;
- Develop theoretical knowledge from social and behavior sciences;
- Develop the knowledge and skills to become independent researchers;
- Complete a substantive research experience integrating the first three objectives.

## Admission to Ph.D. program in the SOPH Department of Health Behavior

Student applications are reviewed by the faculty in the Department of Health Behavior. Applicants should meet the admissions requirements of the graduate school, including submission of scores on the Graduate Record Exam (GRE). Admission to the program is competitive. Evidence of scholarship, a clear statement of career goals and research interest, professional recommendations, and professional experience are among the factors receiving strong consideration. Candidates for admission must have completed a master’s degree from an accredited institution in public health, health education or a related field.

The PhD program requires completion of a minimum of 67 hours of graduate credit, satisfactory performance on comprehensive exams, and completion of a doctoral dissertation.

Requirements	Hours
<b>Health Education/Promotion Core Courses</b>	12
HB 750 Advanced Theoretical and Scientific Basis of Health Education and Promotion	3
HB 740 Advanced Health Program Evaluation Seminar	3
HB 760 Planning and Administration of Health Education and Promotion Programs	3
HB 770 Doctoral Studies Seminar	3

Requirements	Hours
<b>Advanced Research and Statistical Methods Courses</b>	16
BST 611 Intermediate Statistical Analysis I *	3
EPR 609 Statistical Methods and Research in Ed: Intermed **	3
BST 612 Intermediate Statistical Analysis II	3
EPI 710 Analysis of Case Control Studies	3
BST 619 Data Collection and Management	3
SOC 701 Intro to Soc Research Mthds	3
EPI 610 Prin of Epidemiologic Research	4
EPI 610L Principles of Epidemiologic Research - LAB	0
HB 741: Advanced Research Methods <small>offered Spring 2014</small>	3

## Evaluation/ Research Methods/Statistics Electives 6

## Social and Behavioral Sciences Electives 9

### Directed Research

Requirements	Hours
HB 798 Doctoral-Level Directed Res <small>12 hours required</small>	1-9

### Dissertation Research

Requirements	Hours
HB 799 Doctoral Dissertation Research <small>12 hours required</small>	1-9

\* BST 611 is the prerequisite for BST 612

\*\* EPR 609 is the prerequisite for EPR 710

Specific courses needed for completion of the advanced research and statistical methods requirement may vary and require approval by the student's academic advisor. Specific courses for the social science concentration are selected by the student and his/her academic advisor. Students may transfer a minimum of 12 credits from comparable graduate courses completed previously if those courses were not used to complete another degree, are graduate level, and a grade of at least a B.

## Research Internship

A research internship is required. The internship gives students an opportunity to engage in a meaningful research experience by working with ongoing faculty research projects. The internship may be carried out in any one of the three academic units contributing to the PhD program or with approved research projects in other academic units at UA or UAB, or with the CDC, NIH, or other governmental or private agencies.

## Comprehensive Exam

Doctoral students are required to take comprehensive examinations before proposing a dissertation. At a minimum, the exams cover the scientific and theoretical basis of health education and health promotion, the design and evaluation of health promotion programs and research methods in health promotion. Prior to taking the comprehensive exams, **the student must have completed the Health Education/Promotion Core Courses**. Students will be eligible to take part one after completing 12 hours of the core courses.

## Doctoral Dissertation

The doctoral dissertation is designed to provide students with a comprehensive and original research experience, and it requires the completion of a minimum of 12 hours of dissertation credit. Students complete credits for the dissertation after completing coursework and comprehensive exams, and being admitted to candidacy.

All PhD students must meet the graduation requirements of their department and the Graduate School.

## Health Care Organization and Policy

Requirement	Fulfilled By:
Degree Offered:	M.P.H., M.S.P.H., Dr.PH.
Department Chair:	Meredith Kilgore, Ph.D.
Phone:	205-934-3748
Website:	<a href="http://www.soph.uab.edu/hcop">http://www.soph.uab.edu/hcop</a>
Department Contact:	Brenda Campbell
Department Contact Email:	bcampbel@uab.edu

## Health Care Organization and Policy (Dr.P.H., M.P.H, M.S.P.H.)

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

## Program Information

Research and instructional foci in this department include health economics, public health administration and planning, health policy, outcomes research and health services evaluation.

Programs in the Department of Health Care Organization and Policy (HCOP) are designed to provide training and education at the master's level for those desiring a professional career in the analysis of health services policy options, outcomes research, maternal and child health policy or in the management of public health programs. The didactic programs of the department require that students master the major concepts of:

- Health economics,
- Public health management and planning,
- Health policy,
- Outcomes research,
- Health services evaluation, and
- Policy and leadership in maternal and child health

## The department offers Master of Public Health (MPH) degree options:

- MPH in Health Care Organization (HCOP)
- MPH in General Theory and Practice (GTP)
- MPH in Health Policy (HPOL)
- MPH in Public Health Preparedness Management and Policy (PHPM)
- MPH in Maternal and Child Health Policy and Leadership (MCPL)
- MSPH in Outcomes Research (OR)
- Coordinated MPH-JD in Public Health and Juris Doctor (PHJD)
- Coordinated MPH-MBA in Public Health and Business Administration (PHBA)
- Coordinated MPH-OD in Public Health and Optometry (PHOD)
- Coordinated MPH-MPA in Public Health and Public Administration (PHPA)
- Coordinated MSPH-PhD in Public Health and Psychology (HCPY)
- Coordinated MPH-MSN in Maternal and Child Health Policy
- Coordinated MPH-MSW in Maternal and Child Health Policy
- Doctoral Program in Health Care Organization and Policy

## Doctor of Public Health in Health Care Organization and Policy (DrPH)

The DrPH degree is the highest professional degree in public health. The DrPH Program in HCOP develops leaders and research faculty who have proficiency in data analysis, management, critical thinking, teaching, and translating research into policy and practice. Students will be exposed to complex practical problems facing public health practitioners and policy-makers. This program, housed within the Department of HCOP has three concentrations:

1. Public Health Management
2. Maternal and Child Health Policy
3. Outcomes Research

## Admissions

Requirement	Fulfilled By:
Deadline for Entry Term(s):	April 1st
Number of Evaluation Forms Required:	Three
Entrance Tests:	GRE (TOEFL and TWE also required for international applicants whose native language is not English.)
SOPH Graduate Catalog Description:	<a href="http://www.soph.uab.edu/catalog">http://www.soph.uab.edu/catalog</a>
SOPH Admissions:	<a href="http://www.soph.uab.edu/graduate/prospective">http://www.soph.uab.edu/graduate/prospective</a>

## Health Care Organization

### Master in Public Health in Health Care Organization

The MPH in health care organization is designed to train individuals for management positions in public health and other health care organizations. Students are introduced to the public health system and the fundamental skills necessary for managing health care organizations. Required coursework includes basic management disciplines and selected content in economics, finance, marketing, law and insurance.

### Health Care Organization Learning Objectives

- Describe the economic, legal, organization, and political underpinnings of the US health system;
- Apply principles of management, finance, marketing, accounting and strategic planning in health care organizations; and
- Apply basic planning and management skills necessary for successful administration of health care organizations.

### The Department of Health Care Organization has the following MPH Programs

- MPH in Health Care Organization (HCOP)
- MPH in General Theory and Practice (GTP)
- Coordinated MPH-JD in Public Health and Juris Doctor (PHJD)
- Coordinated MPH-MBA in Public Health and Business Administration (PHBA)
- Coordinated MPH-OD in Public Health and Optometry (PHOD)
- Coordinated MPH-MPA in Public Health and Public Administration (PHPA)
- Coordinated MPH-MSN in Maternal and Child Health Policy
- Coordinated MPH-MSW in Maternal and Child Health Policy
- Coordinated MSPH-PhD in Public Health and Psychology (HCPY)

## MPH in Health Care Organization (including the 5th Year and Online HCOP MPH)

SOPH Catalog (<https://www.soph.uab.edu/node/1204>)

**Curriculum:** Students in this track take 43 credit hours. The work can generally be completed in two years or less.

### MPH Core Curriculum - 19 hours

Requirements	Hours
BST 611 Intermediate Statistical Analysis I	3
BST 612 Intermediate Statistical Analysis II	3
EPI 600 Intro to Epidemiology	3
ENH 600 Fundamentals of Environmental Health Science	3
HB 600 Social and Behavioral Science Core	3
HCO 600 Introduction to Population Based Health Programs	3
PUH 695 The Public Health Integrative Experience	1

### HCOP MPH Track Requirements

Requirements	Hours
<b>SOPH Requirements</b>	3
GRD 727 Writing & Reviewing Research	3
<b>Department Track Requirements</b>	15
HCO 601 Health Economics	3
HCO 613 Health Information Techn Polic	3
HCO 615 Finance for Health Professionals	3
HCO 620 Health Ins/Managed Care	3
HCO 670 Social and Ethical Issues in Public Health	3
<b>Electives</b>	3
HCO 603 Public Health Policy	3
HCO 612 Strategic Management in Health Programs	3
HCO 618 Management Concepts in Public Health Programs	3
<b>Internship</b>	3
HCO 697 Internship	3
<b>Total Hours</b>	43

## Coordinated MPH-JD in Public Health and Juris Doctor (PHJD)

SOPH Catalog (<http://www.soph.uab.edu/node/1208>)

The department offers a coordinated Master of Public Health and Juris doctor degree program in cooperation with the Cumberland School of Law at Samford University (<http://cumberland.samford.edu>), also located in Birmingham. The purpose of the program is to offer future attorneys exposure to the broad areas of public health.

**Admission:** Students enrolled in this program must be enrolled at the Cumberland School of Law. In order to be admitted to the coordinated programs, a student must have a GPA of 2.5 at the end of the first year of law school. A minimum law school GPA of 2.5 each semester and a minimum 3.0 GPA each term in public health are required for students to continue in the coordinated program. Interested students should contact the Office of Student and Academic Services at the School of Public Health for MPH application materials and Cumberland Law School for J.D. application materials.

Requirements		Hours
<b>MPH Core Curriculum</b>		19
HCO 697	Internship	3
GRD 727	Writing & Reviewing Research	3

Requirements		Hours
<b>Department Track Requirements</b>		6
HCO 601	Health Economics	3
HCO 603	Public Health Policy	3

### Choose One of the following - 3

Requirements		Hours
<b>Transfer of Credit For Following Law School Courses</b>		13
Law 502:	Torts	4
Law 506:	Contract I	3
Law 507:	Contracts II	2
Law 526:	Business Organizations	4

Requirements		Hours
<b>Total Hours</b>		47

## Coordinated MPH-MBA in Public Health and Business Administration (PHBA)

### SOPH Catalog

This program's purpose is to provide students without relevant advanced degrees and/or without previous public health experience with those skills necessary for advanced positions in health management. Also, students with experience and/or a relevant advanced degree who wish to pursue a health management credential with broad applicability should seriously consider this coordinated program.

**Admission:** Students admitted to this program will have at least a bachelor's degree. Students are admitted separately to the MPH and MBA programs. The School of Business should be contacted for MBA application materials and the School of Public Health should be contacted for MPH application materials. The GRE will be accepted in lieu of GMAT. An undergraduate calculus course is also required for admission. If an applicant does not meet this requirement additional information can be found at MBA Admission website <http://www.uab.edu/business/degrees-certificates/mba/mba-admission>.

Requirements		Hours
<b>MPH Core Curriculum</b>		19
HCO 697	Internship	3
GRD 727	Writing & Reviewing Research	3

Requirements		Hours
<b>Department Track</b>		12
HCO 601	Health Economics	3
HCO 603	Public Health Policy	3
HCO 613	Health Information Techn Polic	3
HCO 620	Health Ins/Managed Care	3

Requirements		Hours
<b>MBA Track Requirements</b>		33-36
MBA 609	Financial Accounting for Managers	3
MBA 610	Strategic Cost Management	3
MBA 611	Management Information Systems	3

MBA 620	Corporate Finance	3
MBA 630	Social Ethical and Legal Environment	3
MBA 632	Managerial Processes and Behavior	3
MBA 633	Operations Management	3
MBA 634	Strategic Management	3
MBA 641	Macroeconomics Analysis and Decision Making	3
MBA 650	Modern Marketing Concepts	3
MBA 651	Marketing Strategy	3
MBA 661	Decision Science	3
<b>Elective</b>		3
MBA 624	Global Financial Management	3
MBA 635	International Business Policy	3
MBA 654	International Marketing	3
<b>Total Hours</b>		76-79

## Coordinated MPH-OD in Public Health and Optometry (PHOD)

SOPH Catalog (<https://www.soph.uab.edu/node/1210>)

**Admission:** Applicants to the concurrent MPH/OD program must meet the following requirements: enrollment and good standing in the School of Optometry (<http://www.uab.edu/optometry/departments/department-of-optometry>), interview by MPH/OD committee in the School of Optometry, approval and recommendation by the dean of the School of Optometry, and apply and be accepted for admission to the School of Public Health.

**Curriculum:** Students in the concurrent MPH/OD program are expected to complete the curriculum of the optometry professional program, and a total of 45 credit hours in the MPH program. Work in the public health program can be completed over a four-year period, including summers. Students may begin their MPH program in the summer prior to their entering the Optometry professional program.

Requirements		Hours
<b>MPH Core Curriculum</b>		19
HCO 697	Internship	3
GRD 727	Writing & Reviewing Research	3

Requirements		Hours
<b>Department Track Requirements</b>		21
HCO 601	Health Economics	3
HCO 603	Public Health Policy	3
HCO 686	Integrative Health Policy Analysis	3
Electives		12
<b>Total Hours</b>		46

## Coordinated MPH-MPA in Public Health and Public Administration (PHPA)

SOPH Catalog (<https://www.soph.uab.edu/node/1211>)

The MPH/MPA degree program provides students with the knowledge base of public health and the skills required to work effectively in a responsible, administrative position in the public sector. Through this coordinated degree program, students in the MPH program can satisfy some of their requirements through courses in the MPA program and vice versa.

**Admission:** Students entering this program must meet the minimum requirements for admission into the School of Public Health. The student must apply to and be admitted to both programs. The graduate School should be contacted for MPA application materials and the School of Public Health should be contacted for MPH application materials.

Requirements		Hours
<b>Core Requirements</b>		16-19
HCO 600	Introduction to Population Based Health Programs	3
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
or		
MPA 607	Quantitative Methods for PA	
ENH 600	Fundamentals of Environmental Health Science	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
PUH 695	The Public Health Integrative Experience	1
<b>SOPH Requirements</b>		3
GRD 727	Writing & Reviewing Research	3
HCO 697	Internship	3

Requirements		Hours
<b>MPA Core Requirements</b>		27
MPA 600	Administrative Ethics	3
MPA 601	The Public Policymaking Process	3
MPA 602	Administrative Theory and Behavior	3
MPA 603	Public & Nonprofit Budgeting	3
MPA 604	Human Resources Management	3
MPA 605	Information Technology in the Public Sector	3
MPA 606	Foundations of PA Research	3
MPA 674	GIS for Managers	3
MPA 697	Grad Res Paper or Portfolio Mt	3

Requirements		Hours
<b>MPH Public Health Concentration Elective</b>		12
HCO 601	Health Economics	3
HCO 603	Public Health Policy	3
HCO 612	Strategic Management in Health Programs	3
HCO 672	Perinatal Hlth Issues	3
HCO 620	Health Ins/Managed Care	3
HCO 640	Disaster and Emergency Management	3
HCO 641	Health Preparedness and Response Policy	3
HCO 643	Emergency Preparedness Exercise, Evaluation & Communication	3
<b>Total Hours</b>		61-64

## Coordinated MPH-MSN in Maternal and Child Health Policy

SOPH Catalog (<https://www.soph.uab.edu/node/2220>)

The coordinated MPH/MSN degree is designed to address the dynamic health care needs of women and children. This program prepares nurse practitioners to participate in the development, implementation, and evaluation of innovative maternal and child health (MCH) programs and policies. This dual degree builds on the synergy generated through two complementary curriculum tracks. In this educational experience,

advanced clinical skill is combined with expertise in program planning and evaluation.

**Admissions:** Students are admitted separately to the MPH and MSN degree programs and must meet admission requirements in both the School of Public Health and the School of Nursing at UAB.

Requirements		Hours
<b>MPH Core Curriculum</b>		19
HCO 697	Internship	3
GRD 727	Writing & Reviewing Research	3

Requirements		Hours
<b>Department Track Requirements</b>		15
HCO 601	Health Economics	3
HCO 605	Fundamental of MCH Part 1:Issues, Program and Policies	3
HCO 606	Fundamentals of Maternal and Child Health Part II: Application of Essential MCH Skills	3
HCO 618	Management Concepts in Public Health Programs	3
HCO 625	Adv. Leadership/Prac MCH Pt. I	1
HCO 626	Advanc Ldrshp Prac MCH II	1
HCO 627	Adv Ldrshp Prac MCH III	1
<b>Selectives that are shared with School of Nursing</b>		6
NUR 602	Issues Affecting Advanced Nursing Practice	3
NUR 612	Advanced Pathophysiology	3
<b>Total Hours</b>		46

## Coordinated MPH-MSW in Maternal and Child Health Policy

SOPH Catalog (<https://www.soph.uab.edu/node/2221>)

The MPH/MSW degree program is coordinated between the School of Social Work at the University of Alabama (<http://socialwork.ua.edu>) (MSW) and the Department of Health Care Organization and Policy (HCOP). The coordinated program prepares social workers for interdisciplinary practice in public health programs concerned with the promotion and improvement of the health of diverse populations, including women, children, and families. Students who have been admitted to the MSW program in the School of Social Work and wish to pursue the coordinated degree option should contact the Department of Health Care Organization and Policy. Students will attend classes in Tuscaloosa and Birmingham.

**Admissions:** Students who choose the coordinated degree plan will be required to first secure admission to the University of Alabama (Tuscaloosa) School of Social Work (for the MSW) and, at the end of the first semester, to apply separately to the Department of Health Care Organization and Policy (for the MPH). Acceptance in the MSW program does not automatically insure acceptance into the MPH program and vice versa.

Requirements		Hours
<b>MPH Core Curriculum</b>		19
HCO 697	Internship	3
GRD 727	Writing & Reviewing Research	3

Requirements		Hours
EPI 623	Intro SAS Sftware	1

Requirements		Hours
<b>Department Track Requirements</b>		15
HCO 601	Health Economics	3
HCO 605	Fundamental of MCH Part 1:Issues, Program and Policies	3
HCO 606	Fundamentals of Maternal and Child Health Part II: Application of Essential MCH Skills	3
HCO 612	Strategic Management in Health Programs	3
HCO 619	Social Work in Public Health	3
<b>Social Work course to be counted toward total MPH hours</b>		3
SW 510: Human Behavior in Social Environments	(taken at UA School of Social Work)	3
<b>Total Hours</b>		44

## Coordinated MSPH-PhD in Public Health / Doctor of Philosophy (Psychology)

SOPH Catalog (<https://www.soph.uab.edu/node/1212>)

The department offers coordinated Master of Science in Public Health and PhD degrees in cooperation with the department of Psychology at the University of Alabama at Birmingham or at the University of Alabama (Tuscaloosa).

Admission: To be considered for this program, students must first be admitted to the PhD program in clinical psychology at UAB or in the PhD in psychology at the University of Alabama (Tuscaloosa). Students must meet the admission criteria for the School of Public Health and remain in good standing in their PhD program.

Requirements		Hours
<b>MSPH Core Curriculum</b>		9
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
EPI 610	Prin of Epidemiologic Research	4
<b>PhD Track</b>		21
HCO 601	Health Economics	3
HCO 670	Social and Ethical Issues in Public Health	3
HCO 687	Empirical Methods for Health Research	3
HCO 677	Patient-Based Outcomes Measurement	3
HCO 721	Clinical Decision Making and Cost Effectiveness Analysis	3
HCO 722	Cost-Effectiveness Research Methods	3
HCO 691	Policy Analysis: Modeling & Simulation	3
<b>Electives: Selected by faculty advisor and student to complete total hours required</b>		3
BST 613	Intermediate Statis Analy III	3
BST 625	Design/Conduct Clinical Trials	3
HB 714	Survey Research Methods	3
HCO 675	Improving Health Care Quality and Outcomes	3
HCO 680	Aging Policy	3
HCO 694	Special Problems in Policy Analysis	3
<b>Masters Level Research</b>		9
HCO 699	Master's Level Project Research Health Care Organization and Policy	9
<b>Minimum Credit Hours Required</b>		42

Students receiving a MSPH are required to complete a 13 hour online course entitled "Overview of Public Health" by the end of their second

semester. Students with prior public health education (coursework in each of the public health core disciplines) may be waived from this requirement by permission of the Associate Dean.

## General Theory and Practice

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

## MPH in General Theory and Practice

SOPH Catalog (<https://www.soph.uab.edu/node/1205>)

This program is available to students who prefer a generalist background rather than a more specialized track with additional course requirements. The instructional program is formulated by students and their advisors to meet the specific needs of practicing professionals and to provide a broad, interdisciplinary review of public health theory and practice.

**Admission:** Students must meet the general admission requirements for the Master of Public Health degree program. Only persons with doctoral level professional degrees and/or five years or more of senior level experience in public health or a closely allied field may apply to this program. Students who have been admitted to medical school also may apply to this program. Applicants with a previously earned doctoral credential may, upon request, be waived from the requirements to submit a GRE score.

## Core Requirements

Requirements		Hours
<b>MPH Core Requirements</b>		19
HCO 600	Introduction to Population Based Health Programs	3
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 600	Fundamentals of Environmental Health Science	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
PUH 695	The Public Health Integrative Experience	1

SOPH Requirements		Hours
GRD 727	Writing & Reviewing Research	3
HCO 697	Internship	3

Requirements		Hours
<b>Department Track Requirements</b>		9
HCO 601	Health Economics	3
HCO 603	Public Health Policy	3
elective		3
<b>Other Electives</b>		9
electives		9
<b>Total Hours</b>		43

## Health Policy Quantitative Policy Analysis

Prospective students should use this checklist (M.P.H) (<http://catalog.uab.edu/graduate/admissionchecklists/>)

master\_of\_public\_health\_\_mph) to obtain specific admissions requirements on how to apply to Graduate School.

## Master of Public Health (in Health Policy) Quantitative Policy Analysis

SOPH Catalog

The MPH in health policy is designed to train policy analysts at the master's level to work in government agencies, voluntary health organizations, local, state, and federal legislative bodies, managed care organizations, private industry, and consulting firms. The quantitative variation emphasizes skills appropriate to an active mid-level research career.

Requirements		Hours
<b>Core Requirements</b>		19
HCO 600	Introduction to Population Based Health Programs	3
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 600	Fundamentals of Environmental Health Science	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
PUH 695	The Public Health Integrative Experience	1

Requirements		Hours
SOPH Requirements		
GRD 727	Writing & Reviewing Research	3
HCO 697	Internship	3

Requirements		Hours
<b>Department Track Requirements</b>		15
HCO 601	Health Economics	3
HCO 603	Public Health Policy	3
HCO 687	Empirical Methods for Health Research	3
HCO 691	Policy Analysis: Modeling & Simulation	3
BST 619	Data Collection and Management	3
Elective		3
<b>Total Hours</b>		43

## Public Health Preparedness Management and Policy

Prospective students should use this checklist ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

## MPH in Public Health Preparedness Management and Policy (PHPM)

SOPH Catalog (<https://www.soph.uab.edu/node/1213>)

This specialized degree covers all hazards preparedness topics including, event typologies, response organization, leadership and management, hazard and risk assessment policy development and evaluation and risk communication.

**Admission:** Applicants must meet the general admission requirements for the Master of Public Health degree program. Applicants with a previously earned doctoral degree may be waived from the requirement

to submit a GRE score. Students may apply for admission to this program at any time and once admitted may begin taking classes the next semester.

**Curriculum:** Students in this track take 46 credit hours. The work can generally be completed in two years. All of the required courses for this program are offered on weeknights.

Requirements		Hours
<b>MPH Core Requirement</b>		19
HCO 600	Introduction to Population Based Health Programs	3
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 600	Fundamentals of Environmental Health Science	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
PUH 695	The Public Health Integrative Experience	1

Requirements		Hours
<b>SOPH Requirements</b>		
GRD 727	Writing & Reviewing Research	3
HCO 697	Internship	3

Requirements		Hours
<b>Department Track Requirements</b>		46
HCO 640	Disaster and Emergency Management	3
HCO 641	Health Preparedness and Response Policy **	3
HCO 643	Emergency Preparedness Exercise, Evaluation & Communication	3
HCO 670	Social and Ethical Issues in Public Health	3
HCO 698	Master's Level Directed Research Health Care Organization and Policy	1-9
ENH 610	Environmental Disasters	3
EPI 605	Epidemiology of Infectious Disease	3
<b>Total Hours</b>		46

\*\* Course offered every other year: HCO 641 odd years and ENH 610 even years

## Maternal and Child Health Policy and Leadership

Prospective students should use this checklist (M.P.H.) ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_public\\_health\\_\\_mph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_public_health__mph)) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this checklist (Dr.P.H.) ([http://catalog.uab.edu/graduate/admissionchecklists/doctor\\_of\\_public\\_health\\_\\_drph](http://catalog.uab.edu/graduate/admissionchecklists/doctor_of_public_health__drph)) to obtain specific admissions requirements on how to apply to Graduate School.

## MPH in Maternal and Child Health Policy and Leadership

SOPH Catalog (<https://www.soph.uab.edu/node/2218>)

The MPH programs in the maternal and child health concentration are designed to educate individuals who will plan, administer, and evaluate programs in maternal and child health. The programs provide information

about the special problems faced by women and children, including children with special health care needs, and their families. The programs develop and integrate skills from maternal and child health, health policy and leadership and demonstrate their application in problem solving and systems development.

Requirements		Hours
<b>MPH Core Requirements</b>		19
HCO 600	Introduction to Population Based Health Programs	3
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
ENH 600	Fundamentals of Environmental Health Science	3
EPI 600	Intro to Epidemiology	3
HB 600	Social and Behavioral Science Core	3
PUH 695	The Public Health Integrative Experience	1

## SOPH Requirements

Requirements		Hours
GRD 727	Writing & Reviewing Research	3
HCO 697	Internship	3

Requirements		Hours
<b>Department Track Requirements</b>		15
HCO 601	Health Economics	3
HCO 605	Fundamental of MCH Part 1:Issues, Program and Policies	3
HCO 606	Fundamentals of Maternal and Child Health Part II: Application of Essential MCH Skills	3
HCO 618	Management Concepts in Public Health Programs	3
HCO 625	Adv. Leadership/Prac MCH Pt. I	1
HCO 626	Advanc Ldrshp Prac MCH II	1
HCO 627	Adv Ldrshp Prac MCH III	1

Requirements		Hours
<b>Departmental Electives</b>		6
HCO 603	Public Health Policy	3
HCO 608/708	Reproductive Health	3
HCO 611/711	Child Health and Development:Womb to Young to Adulthood	3
HCO 613	Health Information Techn Polic	3
HCO 615	Finance for Health Professionals	3
HCO 620	Health Ins/Managed Care	3
HCO 631	Public Health Demography	3
HCO 670	Social and Ethical Issues in Public Health	3
HCO 672	Perinatal Hlth Issues	3
HCO 624	Healthy Lifestyles for MCH Populations: Intergrating Nutrition Physi Activity Comm-based Approach	3
<b>Total Hours</b>		46

## Outcomes Research

Prospective students should use this checklist (M.S.P.H.) ([http://catalog.uab.edu/graduate/admissionchecklists/master\\_of\\_science\\_in\\_public\\_health\\_\\_msph](http://catalog.uab.edu/graduate/admissionchecklists/master_of_science_in_public_health__msph)) to obtain specific admissions requirements on how to apply to Graduate School.

Prospective students should use this checklist (Dr.P.H.) (<http://catalog.uab.edu/graduate/admissionchecklists/>)

doctor\_of\_public\_health\_\_drph) to obtain specific admissions requirements on how to apply to Graduate School.

## MSPH in Outcomes Research

SOPH Catalog (<https://www.soph.uab.edu/node/1207>)

The health care field is placing increasing emphasis on the identification and measurement of clinical decision making and cost/utility analysis. Continuing pressure for the development and measurement of both efficient and effective protocols and health care policies is the driving force underlying this emphasis. Increasingly, employers are seeking qualified analysts to study treatment effectiveness. Graduates of this track will work in clinical settings, government agencies, managed care organizations, insurance companies, health associations, pharmaceutical firms, and consulting firms analyzing cost effectiveness, utilization and treatment effectiveness.

## Admission

The track is open to students with a bachelor's degree and strong mathematics preparation. An undergraduate grade point average of a 3.0 on a 4.0 scale and a minimum combined score of 1080 on the verbal and quantitative portions of the Graduate Record Examination General Test (GRE) is desirable for admission consideration.

Requirements		Hours
MSPH Core Requirements		10
BST 611	Intermediate Statistical Analysis I	3
BST 612	Intermediate Statistical Analysis II	3
EPI 610	Prin of Epidemiologic Research	4
EPI 610L	Principles of Epidemiologic Research - LAB	0

Requirements		Hours
<b>Outcomes Research Track</b>		21
HCO 601	Health Economics	3
HCO 621	Clinic Decisions/Cost Analysis	3
HCO 622	Cost Effect Resear Mthds	3
HCO 670	Social and Ethical Issues in Public Health	3
HCO 677	Patient-Based Outcomes Measurement	3
HCO 687	Empirical Methods for Health Research	3
HCO 691	Policy Analysis: Modeling & Simulation	3
Electives: Selected by faculty advisor and student to complete total hours required for degree		3

Requirements		Hours
<b>Masters Level Research</b>		9
HCO 699	Master's Level Project Research Health Care Organization and Policy	1-9
HCO 699	Master's Level Project Research Health Care Organization and Policy	1-9
HCO 699	Master's Level Project Research Health Care Organization and Policy	1-9
<b>Total Hours</b>		43

Students receiving a MSPH are required to complete a 3 hour Online course entitled "Overview of Public Health" by the end of their second semester. Students with prior public health education (coursework in each of the public health core disciplines) may be waived from this requirement by permission of the Associate Dean.

# The Graduate School

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Today's researchers, scientists, and academics face an increasingly competitive world. This is true not only in their fields of study, but in the areas of professional presentations, university teaching, publishing, interdisciplinary collaboration, and fellowship and grant writing. Indeed, many leading institutions view these communication abilities as prerequisites for career advancement. This is why UAB's Professional Development Program offers ongoing support for graduate students, post-doctoral fellows and visiting scholars who want to take advantage of the school's resources to enhance their skills. The Professional Development program offers semester-long credit courses as well as day-long workshops in a variety of areas, such as

- Career Support & Advancement
- Academic & Grant Writing
- Teaching at the College Level
- Presentation & Discussion Skills
- Academic English for Internationals
- Pronunciation & Accent Improvement

Click on Professional Development Courses and Professional Development Workshops for a detailed list of offerings. To view special courses and sections designed for English language learners, see Academic English for Internationals. Check out the Current Schedule for a list of available offerings.

## Graduate School Professional Development Program

[graduate/profdev](#)

Program director:	Dr. Julia Austin
Phone:	(205) 975-6359
Email:	<a href="mailto:jaustin@uab.edu">jaustin@uab.edu</a>
Web site:	<a href="http://www.uab.edu/graduate/profdev">www.uab.edu/graduate/profdev</a>

### Program Information

These courses and workshops are offered to improve the academic and professional communication skills of graduate students, postdoctoral fellows, and other UAB research staff with the goals of supporting scholarship, research integrity, productivity, effective communication, and the development and refinement of professional skills.

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