



# 2019-2023 Graduate School Catalog



**SOUTHERN UNIVERSITY AND A&M COLLEGE**  
Baton Rouge, Louisiana

# Southern University and A&M College

## 2019-2023 Graduate Catalog



### A Message from Our Dean

Thank you for your interest in graduate education at Southern University. We welcome you to explore the many offerings of our graduate programs here at Southern University. Our catalog is intended to provide information and resources to those interested in graduate education programs and also is here for our current students, by helping them to make the best decisions, in order to maintain and continue their academic progress, while on the way to their professional and personal goals.

Now, more than ever, graduate education plays a crucial role in the economic, intellectual, and cultural vitality of our region and the nation overall. Graduate degree-holders fuel this vitality in their roles as captains of industry, government leaders, entrepreneurs, educators, gifted communicators, and skilled artists/ artisans, among others. I hope that graduate education at Southern University is in your future. Our programs are designed to give students the opportunity to pursue advanced studies under the guidance of distinguished faculty members and learn the methods of independent scholarship and research.

Graduate students are vital contributors to the university's missions of education and research. Whether you are a prospective or current student, I welcome you to Southern University School of Graduate and Professional Studies. I look forward to the contributions that you will bring to our institution, our community, the state of Louisiana, and our world.

If you are a member of our esteemed alumni, I thank you for your continued interest in graduate education and encourage you to stay involved by making a gift to support a fellowship or by serving as a mentor or providing a real world learning experience for a current graduate student. Your investment provides the foundation that allows our graduate students to pursue and achieve greatness. We welcome your interest and value your participation.

With best wishes,

Habib P. Mohamadian

Interim Dean of The Graduate School

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## ADMINISTRATIVE OFFICERS

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*President-Chancellor*

**James Ammons, Ph.D.**  
*Executive Vice President/Executive Vice Chancellor*

**Flandus McClinton, M.B.A., CPA**  
*Vice President for Finance and Administration*

**Benjamin W. Pugh**  
*Vice Chancellor for Finance and Administration*

**Kimberly Ferguson-Scott, Ph.D.**  
*Vice Chancellor for Student Affairs and Enrollment Management*

**Michael Stubblefield, Ph.D.**  
*Vice Chancellor for Research and Strategic Initiatives*

*Academic Deans*

**Habib Mohamadian, Ph.D.**  
*Interim Dean of the Graduate School*

**C. Ruben Walker, PhD**  
*Interim Chancellor-Dean, College of Agricultural, Family and Consumer Sciences*

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*Dean, College of Business*

**Damien Ejigiri, Ph.D.**  
*Dean, Nelson Mandela College of Government & Social Sciences*

**Cynthia Downing Bryant, Pd.D.**  
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**Patrick Carriere, Ph.D.**  
*Dean, College of Sciences and Engineering*

**Diola Bagayoko**  
*Dean, Dolores Margaret Richard Spikes Honors College*

**Barbara Carpenter, Ph.D.**  
*Dean of International Education and Director of Continuing Education and Center for Service Learning*

**Emma Bradford Perry, Ph.D.**  
*Dean of Libraries*

## THE GRADUATE COUNCIL

The Graduate Council represents the members of the graduate faculty of the University in making policy decisions related to graduate degree programs. It is composed of nine Graduate faculty members representing all the graduate programs including the Library and the Office of the Registrar.

The current members of the council are:  
**Habib Mohamadian, Ph.D., Secretary**  
*Interim Dean of the Graduate School*

**Sandra C. Brown, D.N.S.**  
*Professor, School of Nursing and Allied Health*

**Jered Landor, Ph.D.**  
*Associate Professor, Department of Behavioral Studies*

**Patrick Mensah, Ph.D.**  
*Associate Dean of Research and Graduate Programs*

**Charlotte M. Henderson, M.L.I.S., Ph.D.**  
*Assistant University Librarian for Collections & Resource Development*

**Charles Vincent, Ph.D.**  
*Professor and Chair, Faculty Senate*

**Cheryl Taylor, Ph.D.**  
*Associate Professor, Graduate Nursing Program*

**Yadong Qi, Ph.D.**  
*Professor, Urban Forestry and Natural Resources Department*

**Ashagre Yigletu, Ph.D.**  
*Professor and Director, Department of Master of Business Administration*

**Diana Gilbert Depron**  
*SUBR Registrar. Ex officio*

## GENERAL INFORMATION

The Southern University System is composed of the system office and five campuses located in Baton Rouge Shreveport, and New Orleans, Louisiana. The governing body of the Southern University System is the Southern University Board of Supervisors. The Chief Administrative Officer of Southern University Baton Rouge is the Chancellor. Directly reporting to the Chancellor are the Vice Chancellor for Academic Affairs, Vice Chancellor for Student Affairs, Vice Chancellor for Research, Vice Chancellor for Finance and Administration, and the Director of Athletics.

**The Baton Rouge campus** is located on beautiful Scott's Bluff, overlooking the Mississippi River, in the northern part of the city, and encompasses 512 acres of land with an additional 327-acre experimental station located five miles north of the campus. The University is a publicly supported, land-grant, comprehensive institution that is focused on research, teaching, and service to the community.

Baton Rouge is the second-largest metropolitan city in Louisiana with a population estimated at 230,000. The Greater Baton Rouge area, however, has a population of **825,000** while the urban area has close to **600,000 people**. Baton Rouge is the capital of the State of Louisiana and serves as an important cultural, political, educational, and industrial center.

## HISTORY

Our history embodies a proud tradition of providing quality education to students from around the globe. Southern was



chartered in April of 1880, and recognized as a land-grant college in 1890. In 1914, the University was re-located from New Orleans. Today, Southern University-Baton Rouge is part of the only historically black Land-Grant university system in the United States, with two other campuses located in New Orleans and Shreveport. The Southern University Law School was established in 1948 and has the nation's most racially diverse student enrollment. Southern University-Baton Rouge is poised to provide quality graduate education in a number of degree programs, thereby opening new opportunities to pursue advanced degrees in a multicultural environment.

## **SOUTHERN UNIVERSITY AND A&M COLLEGE BATON ROUGE**

### **Physical Facilities**

Southern University-Baton Rouge has one of the most beautiful campuses in the country. Lake Kernan flows through the center of the campus and the Mississippi River forms its western boundary. New buildings with more than 200,000 square feet of floor area have been constructed in the last 30 years. These include the following:

The Smith-Brown Memorial Student Union is known as the campus "living room" and serves as a major center for extracurricular activities. The Union features a food court with popular food vendors; barber and beauty shops; television rooms; a 12-lane bowling alley; a game room for billiards; video games; an art gallery; a browsing room; a ballroom; meeting and conference rooms; and a branch of the United States Post Office.

F.G. Clark Activity Center is a 7,500-seat multi-purpose arena in Baton Rouge, Louisiana that opened in 1975. It is home to the Southern Jaguars basketball and Southern Lady Jaguars basketball teams. The arena also holds concerts and other events. The arena is named for Dr. Felton Grandison Clark, who was the second president of Southern University from 1938 to 1969.

The John B. Cade Library's collection totals more than one million volumes. Special Collections include the Camille Shade African- American Collection, archives, music, art, and architecture. The Library is a partial depository for Louisiana and U. S. Government documents.

The College of Sciences and Engineering is housed in the new P.B.S. Pinchback engineering building --a state-of-the-art facility that increased the size of the Engineering Complex by 117,000 square feet. The building features computer laboratories, a state-of-the- science advanced technology educational and research laboratories, a high-tech classroom, and multi-media classrooms. P.B.S. Pinchback engineering building houses the departments of civil engineering, electrical engineering, electronics engineering technology and mechanical engineering.

### **Statement of Purpose**

Southern University and A&M College, a publicly supported, coeducational, land-grant, historically black, comprehensive institution, prepares students to compete globally in their respective professions, and to engage in advanced study in graduate and professional schools. The University provides a core of liberal arts courses as well as quality academic

programs and support services to meet the diverse needs and abilities of all qualified students.

The University's admissions policy is grounded in the belief that opportunity and quality can coexist in a diverse educational environment. To this end, the University offers a wide range of learning opportunities designed to allow students of different abilities to obtain an education that will withstand rigorous scrutiny.

The University offers programs of study ranging from bachelor's degrees to doctoral and professional degrees. Educational opportunities are provided for traditional and nontraditional students offering scholarly interaction among diverse people. The University is committed to a broad program of research, both basic and applied, and creative work to stimulate the faculty and students in a quest for knowledge and to aid society in resolving its scientific, technological, socioeconomic and cultural problems.

Southern University renders service to the community through urban/rural programs and makes available educational, cultural, and developmental resources to enhance the quality of life. Adhering to the spirit of its function as an 1890 Land-Grant institution, the University's public service programs have assumed a prominent posture throughout the State of Louisiana, nationally and internationally.

## **THE GRADUATE SCHOOL**

Southern University views diversity as vital to the health of any educational enterprise. To support this philosophy, the University takes affirmative steps to maintain a multicultural faculty, staff and student body. The diversity is achieved principally through assertive recruitment efforts and through multifaceted international programs.

The University seeks to recruit and maintain a faculty which, through its preparation and scholarly activities, exerts a profound effect on various institutions in the state, region, nation, and world. Beyond their traditional roles, faculty members perform distinguished services that complement and enhance both teaching and research initiatives and provide an additional mechanism for Southern University to have an impact on the community at large.

The University develops and maintains a physical environment that is safe and conducive to intellectual growth and development while operating in accordance with the highest standards of fiscal and administrative management. This environment is enhanced through the use of the most recent information technology, which offers the University community access to resources from throughout the world.

### **Organization**

The Graduate School is housed in the Office of Graduate Studies which consists of a dean, a director of admissions, admissions counselors, an executive assistant, an administrative assistant, and an administrative coordinator. The Dean of the Graduate School reports to the Executive Vice President/Executive Vice Chancellor.

The Office of Graduate Studies is responsible for enforcing minimum general standards of graduate work at Southern University-Baton Rouge and for the coordination of graduate



degree programs in the various schools and colleges. General policies and standards of the Graduate School are established by the Graduate Council. The responsibility for the detailed, day-to-day operations of graduate programs lies with the individual departments, schools, and colleges.

The Office of Graduate Studies processes approximately 2,000 applications and serves about 1,000 enrolled students each year. This includes the receipt and processing of all Graduate School admission applications; registration of graduate and post-baccalaureate students; and the processing and clearing of graduation applications for all graduate students for all graduate students.

## History of the Graduate School

On April 28, 1956, the State Board of Education requested officials of Southern University to establish a graduate school. In the spring semester of 1957, Southern University admitted its first students into the Graduate School. On August 8, 1958, at the end of the summer session, Southern University conferred its first master's degrees on eight candidates.

In the relatively brief period since 1958, graduate education at Southern University has grown steadily. Master's programs in biology, chemistry, and mathematics were added in the 1960s, and in 1983, master's programs in accountancy, computer science, public administration and special education were implemented. The Master of Engineering (MEng) degree program was approved by the Louisiana Board of Regents on September 27, 2001 and was initiated in the College of Engineering in the Spring Semester of 2002. The Master of Engineering program will offer five specialty area options. The options are: Environmental and Water Resources Engineering, Electronic Materials and Processing Engineering, Telecommunications and Computer Network Engineering, Material Science and Engineering, and Thermal Science and Engineering.

To meet the challenges of the next millennium, Southern University and A&M College at Baton Rouge is rapidly becoming a Doctoral research institution. Graduate studies have gained momentum because of new and redesigned graduate degrees, and a dedicated graduate faculty—a committed group that includes Fulbright Scholars, distinguished researchers, and mentors. Opportunities exist in a number of academic disciplines, including Ph.D. programs in public policy, science/mathematics education, nursing, environmental toxicology, and urban forestry.

The PhD degree in urban forestry was established in 2004. Urban Forestry students have a variety of job opportunities in State and Federal agencies, industries, and academia. Curriculum for the Ph.D. in Urban Forestry Degree Program at SU has the most comprehensive Urban Forestry Higher Education Program in the nation and has been recognized as a leader in graduating the diverse, talented next generation of urban forestry and natural resources professionals for the country.

Science Math Education (SMED) was established in 1998, enrolled its first students in spring of 1999. This Doctor of Philosophy program is the only Ph. D. program in science and mathematics education, with master's level proficiency in mathematics and science content in Louisiana. This interdisciplinary doctoral program is designed for students who

have completed a bachelor's or master's degree in mathematics, computer science, physics, chemistry or biology.

Southern University's Ph.D. Program in Environmental Toxicology train students to conduct basic and applied research on the molecular mechanisms of chemically induced toxicity, to advance Environmental Toxicology as a science, to communicate the concepts and findings of toxicological research and evaluations, and to serve as an information resource on toxicological matters to the state and the general public.

The PhD doctor of Philosophy degree in nursing is offered with a focus on scientific research related to vulnerable populations. The DNP Doctorate of Nursing Practice degree prepares nurse practitioners to lead and transform health care systems for better patient outcomes.

The Ph.D. program at Southern University Public Policy prepares students for careers in academia, industry, and government. It emphasizes a rigorous foundation in microeconomics, econometrics, and political economy, along with in-depth study of particular substantive areas associated with policy and policy-making. Today, numerous research centers, computer and learning laboratories, facilities for distance learning and multi-media instruction, and a library with more than one million volumes are among the wide range of resources. Graduate fellowships and assistantships are available to qualified students.

## Mission

The mission of the Graduate School at Southern University Baton Rouge is to serve the University, its faculty and students, the nation, and the world by producing intellectually stimulated individuals who possess advanced knowledge in their fields and are prepared to excel in their future careers. To achieve its mission, the Graduate School at Southern University Baton Rouge will:

- Seek, attract and maintain Graduate faculty of the highest caliber
- Attract and retain a highly qualified and culturally diversified graduate student population
- Enhance and maintain the highest standards of excellence in all graduate programs, scholarly activities (teaching, research publications) and professional practice
- Develop and strengthen the use of technology in graduate education
- Stimulate faculty development and research
- Maximize resources to their fullest potential to meet current and future needs of students and graduate faculty more effectively
- Enhance sensitivity to ethical issues and promote an atmosphere of the highest ethical standards

## Vision

The vision of the Graduate School at Southern University Baton Rouge is to become nationally and internationally recognized

for the high quality of its graduate programs, graduate faculty and scholarly achievement, while producing competitive and intellectually stimulated individuals who can provide bold leadership in new directions and excel in their respective future careers. We believe that:

Graduate education is an integral component of any research university and has an impact on education at all levels.

The Graduate School represents Southern University's best expression of its major purposes of existence—teaching, research, and public service,—and, therefore, must be a prime center of excellence.

The Graduate School should assume an effective leadership role in the University's current initiative to transform itself from a comprehensive teaching institution to a Doctoral Research University.

## Objectives

The objectives of the Graduate School Office are to:

- Enforce policies and standards set forth by the Graduate School
- Maintain graduate student records
- Represent the interests of graduate students and graduate faculty
- Develop, publish, and disseminate publications pertaining to graduate degree programs, and Graduate School policies and standards
- Formulate general academic policies, standards, and procedures pertaining to graduate education
- Provide appropriate support in the implementation of new graduate degree programs
- Encourage and support research activities as a component of graduate education
- Maintain standards of academic quality in all graduate programs
- Facilitate the Graduate School admission and registration process for students
- Serve graduate students, the faculty the University, and the public in a prompt efficient, and courteous manner.

## ADMISSION REQUIREMENTS

**Admission Policy:** Admissions are done at the departments. Each department is required to file a copy of its admission criteria approved by the faculty. Applications must be evaluated and recommended by the departmental committee to the Graduate School for processing.

## GRADUATE DEGREE PROGRAMS

Graduate education at Southern University-Baton Rouge has gained momentum on the strengths of well-established undergraduate and professional programs. Current degree programs include the following:

### ***Doctoral Programs***

- Ph.D. in Environmental Toxicology (PhD/ENTX)
- Ph.D. in Nursing (PhD/NURS)
- DNP in Nursing ((DNP/NURS)
- Ph.D. in Public Policy (PhD/PPAM)
- Ph.D. in Science/Mathematics Education (PhD/SMED)
- Ph.D. in Urban Forestry (PhD/UFOR)

### ***Master's Programs***

#### **MASTER OF ARTS**

- Clinical Mental Health Counseling (MA/CMHC)
- Social Sciences (MA/SOSI) with
  - History Concentration
  - Political Science Concentration
  - Sociology Concentration

#### **MASTER OF EDUCATION**

- Educational Leadership (MED/EDLD)

#### **MASTER OF BUSINESS ADMINISTRATION (MBA/BUSN)**

#### **MASTER OF SCIENCE**

- Biology (MS/BIOL)
- Computer Science (MS/CMPG)
- Criminal Justice (MS/CRJU)
  - Exec Master in Criminal Justice (MS/EMCJ)
- Mathematics and Physics (MS/MAPH)
- Rehabilitation Counseling (MS/REHC)
- Speech-Language Pathology (MS/MSSL)
- Therapeutic Recreation (MS/THRE)
- Urban Forestry (MS/UFOR)

#### **MASTER OF ENGINEERING (ME/ENGR)**

#### **MASTER OF CRIMINAL JUSTICE**

- Criminal Justice (MS/CRJU)
- Exec Master in Criminal Justice (MS/EMCJ)

#### **MASTER OF PUBLIC ADMINISTRATION**

- Public Administration (MPAD/PADM)
- Exe Public Administration (PADM/EPDM)

**MASTER OF SCIENCE IN NURSING (MS/ENGR)****ADMISSION TO THE GRADUATE SCHOOL**

Admission to the Graduate School is dependent upon the presentation of a baccalaureate degree from an accredited college or university, as well as other required documents. Undergraduate transcripts must accompany all applications. No application will be considered unless the complete official transcripts of the applicant's entire undergraduate (and graduate if any) work is submitted to the Graduate School. Also, no transcript will be accepted as official unless it is received directly from the registrar of the institution where the work was completed. Official supplementary transcripts are required as soon as they are available for any work completed after application for admission has been submitted.

Prospective students must satisfy the requirements of the department and the Graduate School to be admitted to graduate study.

The Graduate School requires a minimum cumulative grade point average of **2.50** for all undergraduate students in addition to acceptable scores on the verbal, quantitative, and analytical sections of the Graduate Record Examination (GRE) General Test, or the GMAT if applying to the College of Business.

Although the Graduate School publishes no specific GRE scores, some departments may require certain minimum scores on the Graduate Record Examination, GMAT or similar tests as well as grade point average above those stated for the Graduate School. Inquiries about specific requirements should be addressed to the department of interest. Deviations may be made from the above requirements when these and other criteria, including letters of recommendation and statements of purpose, are reviewed by the department, recommended by the department, and approved by the Dean of the Graduate School.

**GRE REQUIREMENTS FOR STUDENTS SEEKING SECOND GRADUATE DEGREE**

Students seeking a second graduate degree are not required to retake the GRE test if the scores are within the last seven years upon the time of admission into the program. However, it should be noted that some departments require a certain score to be made on the test for admission into their program.

**General Admission Requirements**

- Minimum requirements for admission to the Graduate School at Southern University include the following:
- For doctoral students, official transcripts showing all graduate work pursued. If you are applying to a doctoral program that accepts students with a bachelor's degree, then you must provide official transcripts of all undergraduate work
- For master's students, official transcripts showing all undergraduate work (and graduate work pursued, if any).  
**APPLICATIONS WILL NOT BE PROCESSED WITHOUT TRANSCRIPTS**

- For international students, credential evaluation statement.
- Acceptable scores on the general test of the Graduate Record Examination (GRE).
- Three letters of recommendation sent directly to the Graduate School Director of Admissions
- A Statement of Purpose
- For international students, a minimum score of 525 (computer based) or 77 (Internet based) on the Test of English as a Foreign language (TOEFL) as evidence of proficiency in English and an Affidavit of Support (U.S. Department of Justice form I-134)

With the exception of international students, applicants who do not meet all the criteria for admission may be granted admission with conditional or provisional status. The student must receive the recommendation of the appropriate academic department. International applicants are not eligible for conditional or provisional admission status. The circumstances under which applicants may be considered for conditional or provisional admission are described below.

**Conditional Admission**

Applicants who do not meet all admission criteria, may be admitted for up to one academic year on a conditional basis, upon recommendation of the applicant's department of interest, provided additional evidence of capacity to do satisfactory work is presented.

By the end of one academic year of such conditional admission, the department must evaluate the student's performance and notify the graduate school and the student of the final action to be taken on the student's admission status as either fully accepting the student or recommending the student be dropped from degree-seeking status. It should be noted that some department requirements for conditional status may vary from the Graduate School.

**Provisional Admission**

Students who have applied for admission to the Graduate School, but whose credentials were not completed by the admissions deadline, may be admitted provisionally, for one semester, upon recommendation of the department to which they have applied. Final action on such applications will be reserved until all credentials and any required documents have been received and evaluated by the academic department selected by the student. One semester only is allowed for students who are admitted provisionally to have their credentials completed. Provisional admission has a limitation of one semester, therefore it cannot be extended or granted for the second time to the same student.

**Application for Admission**

Admission forms and information concerning admission procedures should be obtained from the Graduate School (<http://www.subr.edu/page/1236>). Prospective students are urged to apply for admission as early as possible. Applications, which meet minimum standards, are referred to the graduate selection committees of the department of interest for approval

or disapproval.

## Admission Applications Deadlines

Fall Semester	May 1
Spring Semester	November 1
Summer Semester	April 15

## Admission to a Doctoral Program

You must:

- Hold a baccalaureate degree granted by a regionally accredited institution (or a recognized university, if you are an international student)
- Hold a master's degree (unless you are applying to a program that accepts students without a master's degree)
- Have earned a cumulative grade point average (GPA) of at least 3.0 in all graduate work completed. (Please note that if your GPA is less than 3.0, you may still be considered for conditional admission at the discretion and upon the recommendation of your chosen program of interest)
- Submit acceptable scores in the General Test of the Graduate Record Examination
- Satisfy any additional requirement of the academic department in which the chosen degree program is housed

## Admission to a Master's Program

You must:

- Hold a baccalaureate degree granted by a regionally accredited institution (or a recognized university, if you are an international student)
- Have earned a cumulative grade point average (GPA) of at least 2.5 in all undergraduate work pursued and at least 3.0 on all graduate work completed. (Please note that if your GPA is less than 2.5 but at least 2.5, you may still be considered for conditional admission at the discretion and upon the recommendation of your chosen program of interest)
- Submit acceptable scores in the General Test of the Graduate Record Examination
- Satisfy any additional requirements of the academic department in which the chosen degree program is housed

## Admission of Transfer Students

Students who have attended another regionally accredited graduate school should be eligible for readmission at the college or university from which they transfer in order to be admitted to SUBR Graduate School. Students applying to transfer from other graduate schools should have their institutions submit transcripts and evidence of eligibility for readmission as part

of their application to the Southern University Graduate Office. Failure to provide the above credentials will delay the admissions process.

## International Student Admission

An applicant is considered international if they are not a U.S. Citizen or Permanent Resident. An international applicant who has completed undergraduate degree requirements at any accredited United States institution must follow the admission procedures previously described. An applicant who has not completed undergraduate degree requirements at an accredited United States institution must present the following:

- Complete an accurate chronological outline of all previous college-level education;
- All graduate students are required to provide proof of the attainment of a Bachelor's degree before enrolling at the Southern University. Credential Evaluations are completed in house at the Graduate School
- International transcripts and degree certificates must be sent to Southern University Graduate School in envelopes sealed and stamped by the issuing university to be considered official. Electronic academic documents sent from international institutions will not be accepted.
- Certifications of the availability of sufficient funds to meet all costs while studying at Southern University
- Scores on the Test of English as a Foreign Language (TOEFL) or IELTS (International English Language Testing Service) for international applicants whose native language is not English
- TOEFL or IELTS score is an essential part of the student's application. The student must pass the test to be considered eligible for admission to Graduate School.
- An international student also must provide an Affidavit of Support and a Form I-20 issued before admission can be granted, even if the student completed undergraduate degree requirements in the United States.

A *complete* academic record for an International student is:

1. Transcript of all semesters attended
2. Degree Certificate/Diploma
3. English Translation of Transcript
4. English Translation of Degree Certificate/Diploma
5. The transcripts should be completed all the required fields are completed, especially:
  - ✓ "Date"
  - ✓ "Signature of the administration officer"
  - ✓ "Stamp of the Institution".

## Form I-20 Documents & Financials

The Graduate School will not consider for admission any person



who has entered the United States on an I-20 issued by another institution unless that person has been previously enrolled at the institution issuing the I-20.

## INTERNATIONAL STUDENT OFFICE

The International Student Office is established to:

- ✓ Assist international students with the services required to facilitate their matriculation at the University
- ✓ Assist international students in meeting various Bureau of Citizenship and Immigration Services (BCIS) requirements throughout the study period
- ✓ Provide information designed to facilitate the adjustment of international students to life in the United States and at Southern University

The office is located in Smith-Brown Memorial Student Union, second floor, Suite 203. The International Student Advisor may be reached at (225) 771-2940. The Facsimile (FAX) number is (225) 771-2202.

Regulations of the United States Department of Homeland Security, Bureau of Citizenship and Immigration Services, governing nonimmigrant F-1 students, require international students in this category to pursue a full course of study while maintaining nonimmigrant student status.

Under this regulation, a graduate student will be required to register for a minimum of nine semester hours of course work in a degree program. Any modification of these requirements resulting in non-degree study or a course load less than the above minimum requirements must be authorized by the International Student Advisor in consultation with the Department Chair, advisor and the Dean of Graduate Studies.

Students who fail to observe the above requirements will not be eligible to receive a Certificate of Eligibility (Form I-20) and other letters of certification in support of their continuation in the nonimmigrant F-1 student status. Students in the Exchange Visitor Visa (J-1) category requesting transfer to the University's Private Exchange Visitor program from another program must obtain approval from the International Student advisor before admission to the University becomes valid. Questions concerning United States Bureau of Citizenship and Immigration Services (BCIS) regulations should be directed to the International Student Advisor.

## Admission of Special Needs Students

Southern University does not discriminate on the basis of disability in the recruitment and admission of students, in the recruitment and employment of faculty and staff, or in the operation of any of its programs and activities, as specified by federal laws and regulations. The designated coordinator for compliance with Section 504 of the Rehabilitation Act of 1973, as amended, is the Coordinator of Student Services, 246 Augustus C. Blanks Hall, (225) 771-3950.

Students who have been officially admitted into a graduate program of study who have special needs which qualify for accommodations under the Rehabilitation Act of 1973,

particularly Section 504 and the Americans with Disabilities Act, must report their disability to the Office for Services to Students with Disabilities located in Augustus C. Blanks Hall, Room 246. Information on making a request for services and accommodations on how to report a disability can be secured by writing to:

**Southern University and A&M College  
Office for Services to Students with Disabilities**

**246 Augustus C. Blanks Hall  
Southern University  
Baton Rouge, LA 70813  
Phone: 225.771.3546 (V/TTD)-Fax:225.771.3949**

## READMISSION

Any student previously enrolled in graduate study at Southern University with regular status, who has not been in attendance for two consecutive semesters should apply for readmission to the Graduate School at least four weeks prior to the first day of registration for the term in which the student expects to resume studies. Admission forms may be obtained from the Graduate Office and returned to that office when completed. They should be returned 30 days prior to the beginning of the semester or term that the student wishes to re-enter.

## Undergraduate (Privileged Seniors)

### REGISTRATION IN GRADUATE COURSES

A graduating senior at Southern University who has earned a "B" average on all work pursued and who lacks no more than seven semester hours (four in the Summer session) for the completion of his/her baccalaureate degree may enroll in graduate courses for graduate credit. Prior approval of the Dean of the Graduate School, the student's undergraduate department chair and the course instructor is required. A maximum of six semester hours of advanced standing from the graduate credits may be accumulated while the student is enrolled as an undergraduate. After a student has enrolled in the Graduate School, these six credit hours of graduate-level courses earned with a grade of A or B and taken under this provision may be applied toward a graduate degree at Southern University provided that: Credits for the courses have not been used for an undergraduate degree at Southern University provided that:

- Credits for the courses have not been used for an undergraduate degree
- Transfer is approved by the student's chosen department
- Transfer is made as soon as the student is admitted into a graduate program
- Credits may be transferred only from non-degree status at the university and a regionally accredited university or college in courses where a grade of "B" or better has been earned.

It should be noted that this provision is only a permission for a superior graduating senior to take graduate courses and should not be construed as admission to Graduate School.

## CONCURRENT GRADUATE DEGREE

## PROGRAMS

A graduate student who wishes to pursue degrees in two programs concurrently must have the written approval of the chairperson of each department involved and the Dean of the Graduate School. Any student interested in pursuing concurrent degrees should discuss the proposed study with the Graduate School's Admissions Office staff prior to applying for the programs. If the request is approved, the student must be officially admitted to both programs through regular procedures. If the student is approved to pursue two master's programs, no more than six hours of course work from one-degree program may be applied toward meeting the requirements for the second master's degree. These six hours must be petitioned by submitting a request to the Dean of the Graduate School.

## NONDEGREE APPLICANTS

Graduates of accredited colleges and universities, who wish to enroll in selected courses, but not pursue a formal degree program at the undergraduate or graduate level, may be considered for admission as non-degree students in the Graduate School. Applicants who seek non-degree status are required to submit an official transcript and a completed admission application with an application fee. The non-degree status is intended to provide an applicant permission to take courses. Therefore, applicants who are granted non-degree status should note that acceptance, as a non-degree student does not in any way imply and/or guarantee subsequent change to regular admission status. Such applicants must also note the following policies of the Graduate School concerning the non-degree status.

- Non-degree students are permitted to take a maximum of six credit hours per semester (Fall and Spring) and three credit hours during the Summer term. Exceptions to the rule must receive prior approval from the dean of the graduate school.
- A maximum of twelve semester credit hours taken as a non-degree student may be applied toward a graduate degree, if the student is admitted into a graduate program at a later date, provided that:
- Those twelve credit hours consist of graduate level courses (500 level and above or equivalent)
- Those twelve credit hours are part of the Plan of Study for the specific selected degree program and are accepted by the selected department
- An advisor, the department chairperson, and the academic dean of the graduate school have approved those courses. Southern University encourages applications from qualified applicants of both sexes from all cultural, racial, religious, and ethnic groups. The University does not discriminate based on race, religious belief, national origin, disability or age in admission or access to its programs and activities.

## General Regulations

It is the responsibility of the graduate student to be informed of and to observe all regulations and procedures required by the Graduate School as well as the program the student is pursuing. The student must be familiar with those sections of

the Graduate Catalog that outline general policies, regulations and requirements, specific degree program and department requirements, and the requirements of the Graduate School. Lack of knowledge of a rule does not constitute a basis for waiving that rule. Any exception to the policies stated in the Graduate Catalog requires the approval of the Dean of the Graduate School.

After admission to the Graduate School, but before the first registration, a student should consult the faculty advisor and/or the graduate coordinator in the major department concerning course transfers, degree requirements, and special regulations of the department. All plans of study, courses, and class schedules require the approval of the Chair or a designated advisor in the chosen degree program.

## Student Conduct

Graduate students are subject to the same rules of behavior that govern undergraduates. Administrative regulations governing the conduct of students enrolled at Southern University are contained in the Code of Student Conduct. Included in that publication are rules and regulations governing student rights and responsibilities, the University Judicial System, disciplinary sanctions, penalties, violations, and types of offenses.

A copy of the Code of Student Conduct may be obtained from the Office for Students Affairs.

## Family Educational Rights and Privacy Act

In accordance with the Family Educational Rights and Privacy Act of 1974 (PL. 93-380, Section 513, amending the General Education Provisions Act, Section 438) students enrolled at Southern University are hereby informed of their right of access to their official records as described in the Act. For additional information, contact the Office of the Registrar.

The Family Educational Rights and Privacy Act defines the term "directory information" as the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational institution attended. The University will make public information about each student limited to these categories in ways such as those described above. Information from all these categories, however, is not made public in every listing.

Students who do not wish to have any or all of such directory information made public without prior consent must notify the Office of the Registrar in a signed and dated statement specifying the information that they do not wish to be published. The notice must be received by the Office of the Registrar by the end of the registration period of the semester or summer term of first enrollments, or after an absence and re-enrollment, and by the end of each fall registration period thereafter.

## Records of Students

Final grades for each semester are officially recorded and filed in the Office of the Registrar. Grade reports are submitted to



students. However, approximately 10 days will be required to post grades and issue transcripts for students who have completed courses and wish this work to be included on their transcripts.

Transcripts cannot be released until all debts to the University are paid in full.

### ***Regulations Governing Student Records***

Campuses comprising the Southern University System shall comply fully with regulations of Section 438, Privacy Rights of Parents and Students, of the General Education Provisions Act. This insures students access to their educational records maintained by the University, and prohibits the release of personally identifiable information except as specified by the law.

The Chancellor shall inform students of the rights accorded them by law.

- To gain access to their academic records, students must submit written requests or present themselves to the Office of the Registrar.
  - Personally identifiable information from educational records cannot be released without the student's permission except:
  - To Southern University personnel who have legitimate educational interest as determined by the University
  - To other educational institutions in which the student seeks to enroll, (the student may obtain a copy of the record that was transferred)
  - To public agencies as specified in the Act
  - To agencies and offices requesting records in connection with the student's application for financial aid
  - To accrediting agencies
  - To parents of students who are dependents for income tax purposes
  - To courts of law in response to court orders or subpoenas
- Policies governing disciplinary procedures for the University are included in the Code of Student Conduct manual, available in the Office of the Vice Chancellor for Student Affairs.

Requests for access to educational records by any person other than the Graduate Student shall be refused unless the student has submitted a written, dated, and signed waiver to allow access to the records. The waiver must specify the records to be released, the reasons for the release, and names of persons to whom records should be released.

## **ACADEMIC STANDARDS**

Graduate students of Southern University are governed by the following regulations regarding scholarship standards:

- The minimum standard for graduate work is a letter grade of "B" applied to the plan of study used to meet degree requirements.

- Earn a minimum cumulative Grade Point Average of 3.0 on all graduate course work, and all course work applied specifically to the degree.
- However, only two "C" grades are permissible towards a degree program and the "C" grade must not be in the required courses. **NO GRADE OF "D" COUNTS TOWARDS A DEGREE PROGRAM.**

Any graduate student may be denied further registration in a graduate program if the cumulative grade point average falls below a 3.0. Disciplinary actions will be taken against students with unsatisfactory scholarship. Such actions may include probation or suspension. The following are the conditions for the respective disciplinary actions:

### **Probation**

A student whose cumulative GPA, in either graduate or undergraduate course work while enrolled in Graduate School, falls below 3.0 for the first time. Students on academic probation are expected to take steps to improve their situation and raise their GPA to 3.0 or above. The cumulative grade point average is computed as follows: total quality points divided by total hours pursued (including transfer credits), except for repeated courses.

A graduate student will remain on probation until a cumulative grade point average of 3.0 or above is achieved.

Failure to earn a cumulative grade point average of 3.0 or above a semester, maymester, or summer term average of 3.0 while on probation will result in suspension (see below).

Graduate students with cumulative grade point averages between 2.51 and 2.99 will receive an academic warning that they are below the 3.0 minimum cumulative GPA required for graduation.

When a cumulative grade point average of 3.0 or above is achieved, the student is in academic good standing.

### **Suspension**

A graduate student who is placed on probation for two consecutive periods, will be suspended if a cumulative GPA of 3.0 is not achieved at the end of the second probationary period. **Summer is excluded.**

### ***Academic Appeals Process for Suspension***

A graduate student may appeal a suspension only if it is the first one for the student and the student is able to provide strong supporting documentation as well as compelling reasons for reconsideration.

All appeals should be directed to the Graduate School's Appeal Committee and submitted to the Graduate School by certified mail. The hearing schedule will be determined by Graduate School's Appeals Committee.

**A student who is placed on suspension must remain out of school (and not allowed to register) for the**

**semester or summer session immediately following such suspension, unless there is/are extenuating circumstance(s) that are documentable. A suspended student shall follow the steps listed below:**

- a) The student submits a written appeal with supporting documentation to the Graduate School by certified mail
- b) If the student is successful with such appeal, the removal of suspension is submitted to the Registrar for posting and the department is notified. If appeal is not successful, the student may appeal to Academic Affairs.

## Expulsion

A student who fails to earn a cumulative 3.0 GPA after readmission following a suspension will be expelled from the Graduate School. The student may submit an appeal to the Office of Academic Affairs, if they have compelling reasons or documentation to support extenuating circumstances that affected their academic performance.

**A student who is expelled from a program ineligible for readmission to the program from which they were expelled.**

## Plagiarism

Plagiarism is using someone else's work without giving proper credit, a failure to cite adequately. (Council of Writing Program Administrators, 2003) Citing sources allows writers to give credit to their sources for the original author's work and ideas; and, provides a roadmap for readers who are interested in learning more about the topic.

In an academic environment, if you fail to cite your sources adequately, you are guilty of plagiarism, which is taken very seriously. Plagiarism is considered academic dishonesty. Academic dishonesty can result in a failing grade in the paper, failing grade in the course, academic probation, expulsion from the university, or recreating the research process.

## ACADEMIC GRIEVANCE PROCEDURE

A special conference between the teacher and the student should be arranged under optimum conditions. If conditions do not allow for this to occur or the matter remains unresolved the student can submit a grievance as outlined below:

1. The student shall submit a grievance, in writing, to the teacher's department chair or director where the incident occurred. The completed form, with all supporting documents, shall be submitted within ten (10) working days subsequent to the occurrence of the incident precipitating the grievance. Grievances must be filed at the departmental level within the academic area where the incident occurred.
2. The department chair or director will acknowledge receipt of the grievance in writing, within three (3) working days of receiving the grievance. The written acknowledgement will be provided to the student in person or by mail or through the official university email or through the student's email.

3. The department chair or director will respond expeditiously, in writing, to the grievance submitted, but no later than ten (10) working days after the acknowledgment of receipt of the grievance. The department chair or director may appoint a committee to review and submit recommendations regarding the grievance. The department chair or director will review findings and make a ruling on the grievance. The response to the grievance will be provided to the student in person. The student, upon receipt, must state on the grievance form whether he/she is satisfied or unsatisfied with the ruling. If the student is satisfied the matter is closed; but if the student is unsatisfied with the ruling of the department, the student has three (3) working days to take the grievance to the Dean of the College.
4. The Dean will respond expeditiously, in writing, to the grievance submitted, but no later than (ten) 10 working days following receipt from department chair or director. The Dean may appoint a committee to review the department chair or director's ruling or review the findings independently. The Dean will provide ruling to the student in person or by mail or by official university email or the student's email. If the student is satisfied, the matter is closed, but if the student is unsatisfied with the ruling, the student can file an appeal to the Dean of the Graduate School.
5. The Office of the Graduate School will respond expeditiously, in writing, to the appeal submitted, but no later than ten (10) working days after acknowledgement of receipt of the appeal. The Graduate School Dean may appoint a committee to review the grievance or act independently. The Graduate School Dean will review the findings and make a ruling on the appeal. The Graduate School Dean will communicate the ruling to the student in person or by mail or by the student's email. If the student is satisfied the matter is closed. If the student is unsatisfied with the ruling, the student can file an appeal to the office of the Vice Chancellor of Academic Affairs.
6. The student must file the appeal to the Office of the Vice Chancellor of Academic Affairs within three (3) working days of being notified of the Graduate School ruling. The office of the Chancellor will acknowledge the receipt of the appeal, in writing, within three (3) working days of receiving the appeal. The written acknowledgement will be provided to the student in person, by mail, through the official university email, or the email provided by the student. The office of Academic Affairs has 7 working days from the date of acknowledgement to render a decision. If the student is not satisfied, the student may appeal with the Chancellor within 3 days.
7. The office of the Chancellor will respond expeditiously, in writing, to the appeal submitted, but no later than seven (7) working days after receipt of the appeal. The Chancellor will communicate the ruling to the student in person, by certified mail, through the official university email, or the email provided by the student and the Chancellor's ruling is final.

## CHANGE OF MAJOR OR PROGRAM

A graduate student who wishes to change his/her major or program must submit a formal application through the Office of Graduate Studies and receive approval of the appropriate department chairpersons (the student's current department and desired new department). Approval must be obtained prior to making the change. Upon approval, a student may enroll in courses in the chosen new program toward a graduate degree.

*However, students who change program/major should note the following:*

- Requests for all changes (including curriculum, program, degree, etc.) must be submitted to the dean of the Graduate School at least one semester prior to the date of graduation
- A maximum of six credit hours of course work pursued before the change of major/program may be used to satisfy the requirements for the new program, only if those hours are applicable to the new plan of study
- For graduation and other purposes, students who change major/program, will be evaluated using the Graduate School Catalog and University policies and regulations that are in force at the time of the change

## COMMENCEMENT

Candidates who are eligible to receive graduate degrees are required to participate in commencement in order to accept personally the honor indicated by the appropriate academic hood. Students are responsible and must arrange through the University Bookstore for the proper academic attire to be worn at commencement.

Candidates are required to participate in commencement exercises unless excused by the Dean of the Graduate School. Students who wish to graduate in absentia and have verifiable legitimate reasons must submit a written request to the Dean of the Graduate School for approval prior to the day of commencement. A mailing fee will be assessed for mailing the diploma within and outside the continental United States for students who are excused from commencement by the university.

## COURSE AUDITING

A student who wishes to audit a course must first obtain permission from the instructor, the chairperson of the department in which the course is taught, and the Dean of the Graduate School.

The student must also be eligible to enter the University as a regular, visiting or special student in order to be eligible to audit a course. Students who sign up to audit courses will be permitted to register only during the restricted registration period (after the registration periods designated for degree-seeking and non-degree seeking graduate students). Students who wish to audit courses must be aware of the following:

- No credit can be earned for audited courses.
- No examination for credits at a later date will be permitted for audited courses

- No more than two courses may be audited by a student during a given semester/term
- Regular tuition fees must be paid for all audited courses
- Courses audited will be included in the computation of a student's course load
- The instructor for each audited course must record a grade of "Aud."

## COURSE LOADS

Southern University operates on a semester system consisting of two 16-week periods. In addition, Southern offers two four week summer terms, and a concurrent eight-week summer term. One credit under the semester system is equal to 1.5-quarter credits.

**Full-time Graduate students** may enroll in a maximum of 12 hours in fall and spring semesters or 9 hours in summer term. Graduate students with assistantships may enroll in a maximum of 12 hours in the fall and spring semesters. Minimum registration for full-time graduate students is nine credits during the fall and spring semester. The minimum for the summer term is six credits.

A normal academic load for a full-time graduate student is 9-12 credit hours; however, under specific circumstances, individual programs may require more. Fifteen (15) hours may be allowed in Fall/Spring with a GPA of 3.5 and above and a supporting letter of justification from the chair/advisor.

**Part-time Graduate students** must register for a minimum of 3 credit hours and no more than 8 credit hours to maintain part-time enrollment status in the fall and spring semesters. While graduate students may be required by their major program to register for a greater number of credit hours, they must enroll at least for the required minimum credit hours.

**Independent Studies:** No Graduate students shall be allowed to take more than two (2) courses in any program of study per semester.

## Course Numbering System

Undergraduate courses numbered 100–399 may not be used as any part of the graduate degree requirements, including the requirement for a period of concentrated study. A maximum of two undergraduate courses (400–499) may be used for graduate credit when taken as part of an approved graduate program, provided:

- The student advises the instructor, prior to taking the course, that it is being taken for graduate credit
- The instructor assigns the student additional work (over and above the work of an undergraduate student).

Courses numbered 500 and above are limited to graduate students, with the exception of the policy described under Undergraduate Student Registration (privileged seniors) in Graduate Courses.

A complete list of approved graduate courses appears in the section of this catalog entitled Fields of Instruction. Departments reserve the right to decide which of these

graduate courses will be offered in a given semester and the departments should be consulted concerning available courses.

## Course Repetition

A student may repeat a graduate course only once for credit and it must be a repeat and delete of the same course enrolled in at the university. When a course is repeated at Southern University, hours pursued, hours earned, and quality points of previous attempts are excluded from the calculation of cumulative averages. When a student repeats a course for credit, the last grade earned is the official grade. Both grades will appear on the transcript. Students repeating courses must identify such courses on their registration forms or on the program change forms. However, courses designated as variable credits (e.g. 1–15 credit hours) may be repeated for credit up to the maximum number of credit hours indicated for those respective courses. Variable credits are primarily courses such as research, thesis, dissertation, clinical, practicum, etc.

This policy does not provide a provision for students who fail graduate courses at the university and wish to enroll in a similar course at another university for a repeat/delete. The Graduate School does not have policy agreements with other universities and colleges regarding repeat/delete of graduate courses taken at Southern University-Baton Rouge.

## Course Substitutions

Substitutions of courses in a student's approved Plan of Study may be permitted upon the written approval of the student's advisor, the department chair, the dean of his/her college and the Dean of the Graduate School. The dean of the Graduate School will make the final decision on course substitutions. A request for course substitutions must be submitted on forms designated for this purpose and available in the Graduate School.

*Students who wish to request course substitutions should be aware of the following:*

- Three typed copies of the request must be fully completed. The student, the student's advisor, the department chairperson and the dean of the student's college, must sign all copies before being submitted to the Graduate School
- Undergraduate courses (below the 500 level) cannot be substituted for graduate courses (at the 500 level or above), except in special cases where appropriate supporting documentation can be provided by the course instructor to the effect that 400 level courses involved graduate level content (limited to a maximum of two courses) and were taken for graduate credit
- The content of the substitution course must be similar or comparable to the required course being substituted. Three copies of the course outline, catalog description, or syllabus of both the substitution course and the course being substituted must be attached to the request for course substitution
- The number of credit hours of the substitution course must be equal to or greater than the number of credit hours for

the course being substituted (e.g. a two-credit course cannot be substituted for a three credit course)

- Requests for substitution must be submitted for approval prior to the substitution course(s) being taken. It is suggested that requests be submitted no later than one month prior to the beginning of the semester in which the student intends to take the substitution course
- Master's degree substitutions are limited to a maximum of twelve credit hours, including credits transferred from other institutions. For doctoral degrees, a maximum of six semester credit hours may be substituted as indicated under the requirements for Ph. D. degrees

**PLEASE PLAN AHEAD.** *Poor planning and/or the desire to graduate in a certain semester is not an acceptable reason/ excuse to violate the above or any other policies and procedures of the Graduate School.*

## Grading System

The Graduate School adheres to the quality point system of four points per semester hour for an "A," three points for a "B" two points for a "C", one point for a "D" and 0 point for "F". For example, 3.0 indicates a "B".

The only grades accepted for graduate credits are "A," "B," "C", and "P". A grade of "D" will not be accepted for graduate credit.

A grade of "P" is usually awarded only in the following courses: Supervised Research, Supervised Clinical or Practicum, Master's Research, Special Project, Advanced Research, Doctoral Research Thesis and Dissertation.

Additional courses for which a grade of "P" may apply are noted in the departmental listings. No other courses—graduate or undergraduate—may be taken for a "P" grade. Grade points are not designated for "P" grades; "P" grades are not used in calculating the grade-point average.

## GRADE OF N/C (NO CREDIT)

Students enrolled in thesis, dissertation, research, or special project who failed to complete or make satisfactory progress within a given semester or term should receive a grade of NC (non- credit). Since these courses are designated as having variable credits (e.g., 1-15 credit hours), they may be repeated up to the maximum number of credit hours required for the respective disciplines. If a student receives a grade of NC, action cannot be reversed by a grade change. NC grade does not carry any quality points and it does not affect the overall grade-point average. However, NC grade will only be counted towards attempted credit hours. The student must register again for the required credit hours and receive a passing grade in order to receive academic credit. The Maximum number of NC grades is determined by the respective department.

Students registering for thesis, dissertation and research project hours must be registered in class sections assigned to the chair or supervisor of their thesis/dissertation/research committee. The chair/supervisor of the research committee is responsible for determining the grade earned and must have the responsibility, as the instructor of record, of assigning the grade.



## NONTRADITIONAL MODE OF DELIVERING GRADUATE COURSES

A faculty member who proposes to teach a course using a nontraditional mode must present the appropriate documents to the departmental chairperson and dean of the college for approval. Examinations must be similar to those of regular classes and should be given and graded according to the established course syllabus. Students are required to complete all the requirements including projects and assignments as delineated in the course syllabus. Nontraditional mode of course delivery is usually designed to fulfill the needs of nontraditional students and people in the community.

### Incomplete Grades

Work that is of passing quality but, because of extenuating circumstances, is not completed by a student in a given semester or term may be given an "I" (incomplete) grade. Students must initiate an incomplete grade request through the course instructor and obtain approval of the department head and the Dean of the Graduate School. The instructor must submit the "Incomplete Grade Report" and file the form with the Office of the Registrar by the deadline for submitting grades to the Registrar.

If a request is not received from the student prior to the issuing of a final grade, the instructor should consider the delinquent work to be of failing quality and the student should be given a failing ("F") grade and not an "I" grade.

A grade of "I" received during a semester or term should be removed as soon as possible, but **no later than the end of the semester/term following the one in which such grade was received** (excluding Maymester and Summer Sessions).

Incomplete grades are removed only by completion of the course work, not by repeating the course. A grade of "I" becomes a grade of "F" if not removed by the end of the semester/term following the semester/term in which the "I" grade was received. A grade of "I" carries no quality points and does not lower the overall grade-point average. All grades of "I" must be removed prior to the submitting an application for graduation and receiving a graduate degree.

### Change of Grades

Any change of grade must be initiated on the required form available in the Office of the Registrar by the instructor who originally assigned the previous grade. Grades that have been submitted to the Office of the Registrar can be changed only by submitting the official Change of Grade Form certifying that an error was made in recording the grade. Materials submitted by a student after the official completion of a course by means of the final examination or otherwise may not be used as a means of continuing the course and thus changing a previously submitted grade.

A change of grade must be approved by the department head and the Dean of the Graduate School before the Registrar will make changes on the student's record. Any grade change must be received in the Office of the Registrar no later than 60 calendar days immediately following the beginning of classes in the semester following the one in which the grade was given or omitted. For a Summer term, the changes are due in the

Office of the Registrar no later than 60 calendar days immediately following the beginning of classes in the succeeding Fall semester. If a student is not enrolled the following semester, then the grade change is due 60 calendar days following the beginning of classes in the next semester in which the student is enrolled.

## PREPARATION FOR GRADUATION

By the completion of the semester immediately preceding the final semester of study, students must apply for graduation within the guidelines established by the Graduate School. **It is the student's responsibility to ensure that all requirements have been met and that every deadline is observed.** The Graduate School, college, school, or department sets forth in the University Calendar all deadline dates. Students should obtain copies of Thesis/Dissertation Guidelines from the Graduate School and review them carefully prior to putting the thesis/dissertation into its final form.

**Graduation Policy:** Departments have the responsibility to clear prospective graduates for graduation and must follow the Graduate School policy on graduation requirements.

***The following is a summary of critical items required for graduation:***

- Candidates must complete and file an "Application for Graduation" with the Graduate School during the semester preceding the semester in which graduation is anticipated, within the deadline established by the Graduate School.
- The Candidate's graduation application form must be signed by the advisor and chairperson of the department and accompanied by a completed and approved "Plan of Studies".
- Candidates whose applications are approved must officially "check out" of the University, i.e., satisfy all financial responsibilities and obtain clearance from the appropriate offices/divisions on campus.
- Students who have completed all required courses and satisfied all departmental requirements may register for "Graduation Only" during the semester they intend to graduate.
- Candidates must pay a nonrefundable graduation fee during the term in which the degree is to be received, a student must be registered unless the only remaining requirement is the final comprehensive examination.
- Candidates who apply but fail to graduate must reapply and reregister for graduation during a subsequent semester or Summer, after correcting any and all deficiencies

## RESIDENCY (ON-CAMPUS) REQUIREMENTS

### Doctoral Degree Program

A student enrolled in a Doctoral program must complete at least a full year of residency as a full-time student on the Southern University-Baton Rouge campus. A student may satisfy the residency requirement by continuous enrollment for a total of 18 semester hours in one academic year, including Maymester and Summer terms.

## Master's Degree Program

To satisfy residence requirements for a master's degree program, a student must complete a minimum of 18 semester hours of degree program credit in residence on the Southern University Baton Rouge campus or one of the approved remote sites. Students who take courses toward graduate degrees at the remote sites operated by Southern University must register through the Graduate School.

## Senior Citizens (60 and Above) Program

Any person over the age of 60 years who registers for one or more courses of instruction at Southern University – Baton Rouge and who is a resident of the state shall be exempt from the payment of tuition ONLY for up to three credit hours.

## STATUTE OF LIMITATIONS (Time Limitations)

### Doctoral Degree Programs

Requirements for a doctoral degree must be completed within eight (8) calendar years from the initial date of registration in graduate school. All work for the doctoral degree must be completed within five (5) calendar years after the qualifying examination, or the examination must be repeated.

### Master's Degree Programs

Requirements for a master's degree must be completed with credits and transcripts (including the allowable 12 transfer credit hours) that are no more than seven (7) years old.

## STUDENT ADVISING AND MENTORING

An integral part of graduate education is the advisement and mentoring of students. Therefore, each student must be assigned an advisor by the department chair. This advisor will be a mentor to the student during his/her entire program of study. However, each student is personally responsible for knowing all requirements established for his/her degree and for adhering to all published regulations of the University. It is the student's responsibility to be aware of and adhere to these regulations and to satisfy his/her degree requirements. A student's advisor or counselor may not assume that responsibility. Any substitution, waiver, or exemption from any established departmental or college requirement or academic standard may be accomplished only with the recommendation of the Dean of the Graduate School and approval of the Vice Chancellor for Academic Affairs.

### ***Advisement procedures and responsibilities are as follows:***

- Every graduate student must be assigned an advisor in his/her academic department. At the time of admission, the student, in consultation with the department chairperson and the graduate coordinator, will select an advisor
- A Plan of Study is to be formulated at the beginning of the first semester in Graduate School by the advisor and student, signed by the advisor, and submitted for review to the Graduate School. The

signed original will be filled with the student's graduate records. The department shall maintain appropriate records, which indicate the progress of the student in fulfilling the requirements of the graduate degree. The advisor,

- through appropriate department channels, will process applications for candidates for graduation and submit them to the Graduate School
- Students who wish to take graduate courses under a non-degree (non-matriculated) status, must seek permission from the academic department offering those courses
- Even though advisors are appointed to assist graduate students in every practicable way, it is the personal responsibility of each graduate student to know the rules, standards, and requirements as stated in the current University catalog and to observe all regulations, and meet all requirements of the Graduate School, the respective academic program, and Southern University.

## RESPONSIBILITIES OF THE REGISTRAR

- Assists colleges and departments by providing access to copies of official student academic records
- Exercises final authority for certifying that all requirements for graduation have been met and forwards recommendations for graduation to the Academic Council

## RESPONSIBILITIES OF THE DEPARTMENT CHAIR

- Convenes departmental admission committee and submits admission recommendation to the dean of the Graduate School.
- Ensures that requirements for department majors are kept current by timely notifying students and faculty of changes.
- Maintains central records file for all majors, including student advisement records.
- Forwards all graduation applications to the dean of the Graduate School before the established deadline. Upon receipt of an application for graduation, completed and signed by the advisor and the student, conducts an independent review of the student's application to ensure compliance with all University and state requirements.
- Notifies in writing, the advisor and the student of any discrepancies noted. Such discrepancies are to be resolved before the forwarding of the application to the dean.

## RESPONSIBILITIES OF STUDENT

- Submits completed admission application with all relevant documents and meets the published deadline.
- Knows rules and regulations of the University, college, and department and satisfies all degree requirements, including meeting all deadlines.
- Initiates regular meetings with the assigned advisor each academic term, over the course of the program of study at the University. It is also the responsibility of the student to bring any concerns or problems encountered first to the attention of the advisor.
- Follows course sequences and prerequisites, as listed in approved department and college curriculum plans, and



meets all departmental, Graduate School, and University published guidelines.

- Files a properly completed and signed graduation application, in the major department, in the term prior to the term of expected graduation. The application must bear the signatures of the student and his/her assigned advisor.
- Ensures that an official record of all transfer credits has been submitted to Office of the Registrar no later than 45 days after the beginning of the term following that in which the credits were earned

## TRANSFER OF CREDIT

The Graduate School has no articulation agreements for courses at the graduate level with other Universities in the State of Louisiana.

### Transfer of Graduate Credit from Other Institutions toward a Master's Degree

- Graduate credits may be transferred only from a regionally accredited university or college (a recognized university, if international) and in a course where a student has earned a grade of "B" or better. Transfer credits must not be more than seven years old at the time of graduation (date on which degree is awarded).
- Graduate credits may be transferred only when they can be reconciled with the requirements of the student's chosen degree program.
- A maximum of 12 semester hours of courses whose age will not exceed seven years at the time of graduation may be transferred.
- Only graduate level courses (500 level and above) may be transferred.
- Credits that were previously used toward a degree cannot be applied toward another degree.
- A transfer of credit application form, with approvals by a departmental advisor and chairperson, official transcripts, and a plan of study must be submitted to the Graduate School for approval not later than the end of the first semester of enrollment in a graduate degree program.

### Transfer of Graduate Credit from Other Institutions toward a Doctoral Degree

- Graduate credits may be transferred only from a regionally accredited university or college (a recognized university, if international) and in courses where a student has earned a grade of "B" or better.
- Graduate credits may be transferred only when they can be reconciled with the requirements of the student's chosen degree program.
- For those programs that do not require the master's degree as a pre-requisite for admission into the doctoral program, a maximum of twenty-seven (27) semester hours may be transferred to substitute for those programs not requiring a master's degree. The 27 semester hours will not result in

a master's degree being awarded by this institution and cannot be used as substitute courses in doctoral programs.

- A maximum of six (6) hours of doctoral level courses taken at a doctoral degree granting institution may be transferred provided that:
  - those six credit hours are comparable to courses listed on the student's plan of study
  - those six credit hours are at an age that will render them not more than five years old at the time of initial enrollment in a doctoral program at Southern University
- Only graduate level courses (500 level and above) may be transferred.
- Credits that were previously used toward a degree (other than the 27 credits described in item "3" above) cannot be applied toward another degree.
- A transfer of credit application form with approvals by a department advisor and chairperson, official transcripts and a plan of study must be submitted to the Graduate School for approval no later than the end of the first semester of enrollment in a graduate degree program

### Transfer of Graduate Credit Taken As a Nondegree Student toward a Graduate Degree

- Graduate credits may be transferred from a non-degree status at the university and regionally accredited university or college (a recognized university, if international) and in courses where a student has earned a grade of "B" or better.
- Graduate credits may be transferred only when they can be reconciled with the requirements of the student's chosen degree program.
- A maximum of 12 semester hours of courses, taken while enrolled as a non-degree student may be transferred toward a degree provided that the ages of the courses being transferred will not exceed seven years at the time of graduation.
- Only graduate level courses (500 level and above) may be transferred.
- Credits that were previously used toward a degree (with the exception of the 27 credits permitted for doctoral students to meet the requirement of completing a master's degree) cannot be applied toward a second degree.
- A transfer of credit application form with approvals by a departmental advisor, chairperson, official transcripts and a plan of study must be submitted to the Graduate School for approval no later than the end of the first semester of enrollment in a graduate degree program.

## MASTER DEGREE REQUIREMENTS

### *Please Note:*

Extension courses taken at Southern University and/or other institutions may not be transferred as graduate credits or used toward a graduate degree.

Graduate credits will not be officially transferred without a fully executed application form, appropriate supporting

documents and the required approvals as outlined in this policy.

## Withdrawal from Course(S)/University

- Students who must discontinue enrollment prior to the end of a semester or Summer term, must complete and submit a withdrawal form obtained from the Office of the Registrar within the published deadlines. All University accounts must be cleared prior to withdrawal.
- Students who withdraw on or before the 14th class day of any semester, or on or before the 7th class day during a Summer session, will receive a "W."
- Students may not withdraw less than two calendar weeks prior to the first day of the final examination period. In a Summer term, students may not withdraw from the University less than one calendar week prior to the first day of final examinations.
- Students who fail to officially withdraw or satisfactorily complete courses in which they are enrolled or students who withdraw but fail to settle pending university accounts will receive "F" grades in all courses in which they were enrolled. Furthermore, students who fail to settle outstanding university accounts after withdrawal will forfeit all rights to a Statement of Honorable Dismissal and jeopardize their readmission to the University or their transfer to another accredited institution.

## ACADEMIC REQUIREMENTS FOR A DEGREE

To receive a graduate degree, the Graduate School requires the student to have a minimum grade point average of 3.0 on all graduate course work, and all course work applied specifically to the degree. A grade of D or F in any course work shall not be used to satisfy degree requirements. Only two grades of C's are acceptable for credits toward graduate degree.

## Requirements for Master's Degrees

The Master of Arts degree usually is awarded to qualified candidates in the humanities, the social sciences, education and all nonscientific fields except public administration, some programs in education and other specialized fields. The Master of Science degree is awarded to candidates in the natural, physical, mathematical, and agricultural sciences and in nursing.

The following regulations represent the minimum and general requirements of the Graduate School. Colleges and departments may have additional regulations beyond those stated below. Therefore, satisfaction of the minimum requirements of the Graduate School does not relieve graduate students of the responsibility for satisfying any additional requirements of the degree programs in which they are enrolled. No departmental standard shall override the graduate school standard.

## Course Requirements

The programs of course work for a master's degree must be approved by the student's advisor, supervisory committee and

the chairperson of the department. No more than six credits from a previous master's degree program may be applied toward a second master's degree. These credits are applied only with the written approval of the dean of the Graduate School and the graduate faculty and chairperson of the second (new) department.

## Degree Requirements

Unless otherwise specified, for any master's degree, the student must:

- Successfully complete a minimum of 30 semester credit hours of graduate work, 24 hours of which must be in course work, if the thesis option is chosen. For programs not requiring a thesis and a student's electing to do a research project (non-thesis) in lieu of a thesis, the minimum requirement is 36 semester credit hours of course work (30 hours of coursework and 6 for project/report).
- Include in his/her degree program a minimum of 18 semester credit hours in the field of study. A maximum of six credit hours of thesis may be counted as part of these 18 semester hours. A maximum of two 400-level undergraduate courses may be utilized to meet the 30 semester credit hours requirement provided these two courses meet the conditions set forth in the course numbering section of this catalog.
- Earn a minimum cumulative Grade Point Average of 3.0 on all graduate course work, and all course work applied specifically to the degree.
- Only two "C" grades are permissible towards a degree program and **NO GRADE OF "D" COUNTS TOWARDS A DEGREE PROGRAM.**
- The "C" grade must not be in the required courses towards the degree.

## Supervisory Committee

The student's supervisory committee should be appointed as soon as possible after the student has been admitted to the Graduate School but in no case later than the second semester of graduate study.

Supervisory committees for graduate degree programs are chosen by the student in consultation with the department chairperson, approved by the graduate faculty of the department, and appointed by the dean of the Graduate School. Only members of the graduate faculty may be appointed to supervisory committees. The chairperson must be from the major department. The dean of the Graduate School is an ex-officio member of all supervisory committees.

The supervisory committee for a master's degree with a thesis must consist of at least two members selected from the Graduate Faculty. It is recommended that the third member be selected from a field external to the student's department. The supervisory committee for a master's degree without a thesis may consist of one member of the Graduate Faculty who advises the student and oversees the program. The duties of the supervisory committee are to advise the student, to check on the student's qualifications and progress, to supervise the preparation of the thesis, and to conduct the final examination.

information should be transmitted.

## Examination

The candidate must pass a final comprehensive examination. This examination, held on campus with all participants present, will cover at least the candidate's field of concentration, and in no case may it be scheduled earlier than the term preceding the semester in which the degree is to be conferred.

## Thesis

Candidates for the master's degree with thesis must prepare and present a thesis (or the equivalent in creative work) acceptable to the supervisory committee and the Graduate School. If human subjects or animals are involved in a project, approval must be sought from the University's Institutional Review Board. The candidate should consult the "Thesis Guidelines" published by the Graduate School for instructions concerning the form of the thesis. The University Calendar specifies final dates for submitting the original and or copy of the thesis to the Graduate School. After the thesis is accepted by the Graduate School. After the thesis has received final approval and accepted by the Graduate School, the student will submit the final copy on CD in PDF format to the University Library for processing.

## Thesis/Non-Thesis Options

Master's degree programs may include both a "thesis option" and a "non-thesis option," provided that each has been set forth in writing, and approved by the Graduate School. The overall level of achievement for a master's degree should be the same, whether the option chosen requires completion of a thesis or not.

The thesis option is recommended for those students wishing to conduct basic research and perhaps pursue a doctoral degree at another institution in the future. Under thesis option, a minimum of 30 or more semester credits (a minimum of 24 course credits and 6 credits of thesis) must be completed. The non-thesis option is intended for students and/or working professionals who may wish to do a final capstone project or report in lieu of conducting basic research. Under a non-thesis program, a minimum of 36 semester credit hours are required (a minimum of 30 credit hours of course work and 6 credits for a project/ report). The final capstone project or report should be the result of an in-depth independent investigation. It is important to note that the non-thesis option is expected to be viewed as a thesis with a little less originality and depth.

## Final Comprehensive Examination

The student who elects the non-thesis option must pass a comprehensive examination on the major field of study. This comprehensive examination must be taken within six months of the date the degree is to be awarded.

When the faculty in an academic unit currently offering a master's program which includes a thesis requirement wishes to add a non-thesis option, a statement should be transmitted to the Graduate School, for approval, describing in some detail the reason for requesting the non-thesis option, its aims and objectives, its courses and other significant requirements, and the proportion of master's students expected to enroll for each option. Conversely, when a faculty offering a non-thesis master's program wishes to offer a thesis option, similar

## Change from Thesis to Non-Thesis Option

A student who wishes to change from the thesis to the non-thesis option for the master's degree must obtain the permission of the supervisory committee to make such a change. This permission must be forwarded to the Graduate School for approval at least one full semester prior to the intended date of graduation. The candidate must meet all the requirements of the non-thesis option as specified above. A maximum of three credits for a master's thesis can be counted toward the degree requirements with a non-thesis option only if converted to credit as "A" or "B" in individual work. In addition, the supervisory committee must certify that the work (the three credits of thesis) was productive in and of itself and warrants credit as a capstone project or final report.

## Time Limitation

*(Statute of Limitations for Masters' Degrees)* All work, including transferred credit, counted toward the master's degree must be completed during the seven (7) years immediately preceding the date on which the degree is awarded.

## REQUIREMENTS FOR THE PH.D. DEGREE

The Doctor of Philosophy is the highest degree offered by Southern University. Award of the degree testifies to independent mastery of an established subject area, successful acquisition of acceptable research skills, and a concentration of knowledge in a specific field. Consequently, doctoral programs are more flexible and varied than those leading to master's degrees. The Graduate School does not specify what courses will be required for the Ph.D. degree. The general requirement is that the program should be unified in relation to a clear objective, that it should have the considered approval of the student's entire supervisory committee, and that it should include an appropriate number of credit hours of doctoral research.

## Course Requirements

The Doctoral program requires a minimum of 60 semester hours of course work beyond the bachelor's degree, exclusive of the doctoral dissertation, thesis, and research, and/or a minimum of 33 semester hours of course work beyond the master's degree, exclusive of the thesis, doctoral dissertation, and research.

## Course Substitution

A maximum of six doctoral level semester credit hours may be substituted for comparable courses in a student's doctoral plan of study, with departmental approval, toward the minimum requirement of 33 semester credit hours. However, those six credits must be no more than five years old at the time of initial enrollment in a doctoral program and must be doctoral level courses, taken at a doctoral degree-granting institution.

## Major

A student working for the Ph.D. must elect to do the major work in a department or interdisciplinary unit specifically approved for the offering of doctoral courses and the supervision of dissertations. These departments are listed under Graduate Programs.

### *Minor*

A student may select a minor field of study with the approval of the student's doctoral advisor and doctoral committee. A representative from the student's minor field must serve on the student's doctoral committee and may serve on the dissertation committee. The minor field must be registered with the Dean of the Graduate School and a minimum of 12 semester hours of course work must be approved by the student's doctoral committee. The course requirements for doctoral degrees vary from field to field and from student to student. The student's supervisory committee has the responsibility for recommending individual courses of study for each doctoral student.

### *Supervisory Committee*

Supervisory committees are nominated by the department chairperson and appointed by the dean of the Graduate School. The supervisory committee for a candidate for the doctoral degree shall consist of no fewer than four members selected from the Graduate Faculty. At least two members, including the chairperson, will be from the department recommending the degree, and at least one member will be drawn from a different educational discipline. The committee should be appointed as soon as possible after the student has begun doctoral work and in general no later than the end of the second semester of equivalent full-time study. The dean of the Graduate School is an ex-officio member of all supervisory committees.

#### ***Duties of the supervisory committee are as follows:***

- To inform the student of all regulations governing the degree sought. It should be noted, however, that this does not absolve the student from the responsibility of informing himself/herself concerning these regulations.
- To meet immediately after appointment to review the qualifications of the student and to discuss and approve a program of study.
- To meet to discuss and approve the proposed dissertation project and the plans for carrying it out.
- To give the student a yearly letter of evaluation in addition to the Southern University grades awarded for the research.
- The chair should write this letter after consultation with the supervisory committee.
- To conduct the qualifying examination or, in those cases where the examination is administered by the department, to take part in it. In either event, no fewer than five faculty members shall be present with the student for the oral portion of the examination. This examination must be given on campus.
- To meet when the work on the dissertation is at least one half completed to review procedures, progress, and expected results and to make suggestions for completion

To meet on campus when the dissertation is completed and conduct the final oral examination (defense) to assure that the dissertation is a piece of original research and a contribution to knowledge. No fewer than five faculty members, including all members of the supervisory committee shall be present with the candidate for this examination. However, only members of the official supervisory committee may sign the dissertation and they must approve the dissertation unanimously.

The Graduate School desires each supervisory committee to function as a University committee, as contrasted with a departmental committee, in order to bring University-wide standards to bear upon the various doctoral degrees.

A co-chairperson may be appointed to serve on a student committee and to serve as a chair in the absence of the chairperson.

### *Foreign Language Requirement*

A student pursuing a doctoral degree may be required to demonstrate a reading knowledge of at least one foreign language in which there exists a significant body of literature relevant to the major field of study. The student's doctoral committee will determine the specific language required. In lieu of a foreign language, the student's doctoral committee may substitute six semester hours of course work in any one of the following areas: computer science, statistics, or sign language, depending on the discipline. Any foreign language requirement, or a substitute thereof, for the Ph.D. is established by the major department with approval of the college. The student should check with the graduate coordinator of the appropriate department for specific information. The ability to use the English language correctly and effectively, as judged by the supervisory committee, is required of all candidates.

#### ***Period of Continuous (Concentrated Study) Registration***

A student enrolled in the doctoral program must complete a minimum of a full year of residency as a full-time student on the Baton Rouge campus of Southern University. A student may satisfy the residency requirement by continuous enrollment for a total of 18 semester credit hours, during one academic year (including enrollment in the "Maymester" intersession and Summer sessions).

### *Qualifying Examination*

A qualifying examination is required of all candidates for the degree of Doctor of Philosophy. Some departments may administer a preliminary examination to all students enrolled in their programs. The purpose of a preliminary examination shall be to make an assessment of the student's progress to date and to provide a basis for advising the student relative to the cessation or continuation of his/her course of study. It is important, therefore, that such decisions be made as early as possible.

The final qualifying examination may be taken any time after the third semester of doctoral study. There must be a minimum of two semesters between the oral portion of the qualifying examination and the date of the degree.



The primary purpose of the qualifying doctoral examination is to assess the student's understanding of the broad body of knowledge in a field of study. This examination also affords the student's doctoral committee an opportunity to review the student's proposed or ongoing research and his/her understanding of research methodology and literature in the field of study. If the examination results indicate the existence of deficiencies in any of these areas, the student's doctoral committee may prescribe course work, re-examination or the discontinuation of doctoral study. The student must be registered in school in the term in which the qualifying examination is given.

The examination, prepared and evaluated by the full supervisory committee of the major and minor departments (if a minor is chosen), should have both a written and oral component covering the major subjects (and minor subjects where applicable). At least five faculty members, including the supervisory committee, must be present with the student at the oral portion. If a student fails the qualifying examination, the Graduate School must be notified immediately. The supervisory committee has the responsibility at this time of deciding whether the student is qualified to continue work toward a Ph.D. degree. A re-examination may be requested, but it must be recommended by the supervisory committee and approved by the dean of the Graduate School. At least one semester of additional preparation is considered essential before re-examination. A student may request a maximum of two re-examinations. Successful completion of the general examination is required before a student becomes a candidate for the degree. After candidacy has been achieved a student has five calendar years to complete all requirements for the doctoral degree.

After the examination, the major advisor shall communicate the results to the candidate as soon as a final decision can be made and immediately send the official report on the examination bearing the signature of each member of the advisory committee to the Graduate School.

### *Admission to Candidacy*

A graduate student does not become a candidate for the Ph.D. degree until granted formal admission to candidacy. Such admission requires the approval of the student's supervisory committee, the department chairperson, the college dean, and the dean of the Graduate School. The approval must be based on (1) the academic record of the student, (2) the opinion of the supervisory committee concerning overall fitness for candidacy, (3) an approved dissertation topic, and (4) passing a qualifying examination as described above. Application for admission to candidacy should be made as soon as the qualifying examination has been passed and the student's supervisory committee has approved a dissertation topic. A student may register for Research for Dissertation in the term when he or she is admitted to candidacy for a doctoral degree.

### *Dissertation*

Every candidate for a doctoral degree is required to prepare and present a dissertation that shows independent investigation and is acceptable in form and content to the supervisory committee and to the Graduate School. The dissertation must be written in English.

Before preparation of the dissertation is well underway, the student shall file a dissertation proposal of the proposed research, using the special form obtained from the Graduate School and follow the guidelines. Failure to file the proposal early may result in wasted effort on a dissertation if changes are required in the project. If human or animal subjects are involved in the proposed research, the major advisor certifies by signing the dissertation proposal form that all required institutional (and external approvals where appropriate), have already been obtained and that documentary evidence of these approvals can be produced by the major advisor upon request. When the dissertation proposal has been completed and signed by the student, the members of the supervisory committee must also approve it. The proposal then is submitted to the head of the department or program to which the student was admitted who then submits it to the Graduate School for approval. Since doctoral dissertations are published electronically by ProQuest, it is necessary that the work be of publishable quality and that it be in a form suitable for publication. The dissertation proposal must be approved at least one semester prior to the dissertation defense.

The original copy of the dissertation must be presented to the dean of the Graduate School on or before the date specified in the University Calendar or Graduate School Calendar. It must contain an abstract and be accompanied by a letter of transmittal from the supervisory chairperson and all doctoral forms. After corrections and editorial work have been made, and no later than the specified formal submission date, the fully signed copy of the dissertation, together with the signed Final Examination Report and four copies of the abstract, should be returned to the Graduate School. One original copy of the dissertation is delivered to the library and submitted electronically to ProQuest for publication. The supervisory chairperson and the candidate will each need a copy and, if required, another should also be provided for the departmental library.

### *Dissertation Defense*

Permission for holding the dissertation defense will be granted by the dean of the Graduate School upon recommendation of the student's advisor and doctoral committee. The defense shall be oral and under the jurisdiction of the advisory committee. It shall deal mainly with the subject matter of the dissertation. The defense shall be held within the time period designated by the Graduate School.

The oral dissertation defense is scheduled by the chair of the committee and the coordinator of doctoral programs. For scheduling to take place, the student must submit the REQUEST FOR APPROVAL TO SCHEDULE DISSERTATION DEFENSE form with signatures of all committee members. Signatures on this form indicate that the committee members have received the final draft of the dissertation and have committed to attend and participate in the defense at the indicated date and time.

Announcement of the defense will be made in the appropriate university news media and communicated to appropriate members of the university community through the Office of Graduate Studies. The oral defense is open to the public; the university community and all interested individuals are encouraged to attend.

Five or more faculty members, including all members of the candidate's advisory committee, shall participate in the final examination unless written approval for a lesser number has

been secured in advance from the dean of the Graduate School.

It is required that notification of the time and place of the examination be sent to the Graduate School no later than seven days prior to the examination.

The decision as to whether a student is successful or fails the defense rests solely with the supervising committee. Satisfactory performance on the examination and adherence to all Graduate School regulations outlined above complete the requirements for the degree. The Graduate School may return work deemed poor quality.

Immediately following the examination, the major advisor shall communicate the results to the student and send the official report on the examination to the Graduate School. While the Graduate School sets minimum requirements, it is important for students to realize that work toward this degree is not merely a matter of accumulating course credits or of satisfying other requirements. The degree will be conferred only after the supervisory committee and the Graduate Faculty are convinced that the student has developed independence of judgment and mature scholarship in the chosen field. An individual may not earn more than one Ph.D. degree in a single field of study at this institution.

## Time Limitations

### *(Statute of Limitations for Doctoral Degrees)*

All work for a doctoral degree must be completed within five calendar years after the qualifying examination, or this examination must be repeated. However, all doctoral work must be completed and the degree must be earned in no more than eight years from the time of initial enrollment in a doctoral program, regardless of the time of completion of the qualifying examination.

## Application for Graduation

Formal application for graduation must be filed on the official form at the Graduate School. If filing is not timely, degree conferral is delayed to the next conferral period, even though all other degree requirements may have been on time.

## LOUISIANA RESIDENCY CRITERIA

### LOUISIANA RESIDENCY CRITERIA FOR ESTABLISHING RESIDENT STATUS AND ELIGIBILITY FOR NONRESIDENT FEE EXEMPTIONS

#### Introduction

As a public institution of the state of Louisiana, Southern University provides educational services to both resident and nonresident students. Students who meet certain criteria during the application and/or admission process, may be eligible for designation as a resident of the state of Louisiana or for the exemption of all or a portion of the nonresident fees that are assessed students enrolling at the University. Following are the guidelines and criteria for determining the eligibility of persons seeking such designation.

#### Guidelines for Establishing

#### Resident Status

For purposes of assigning tuition and fees at institutions in the Southern University System, a resident student shall be defined as an individual who has abandoned all prior domiciles, established a domicile of his/her own in the state of Louisiana and who has been domiciled in the state of Louisiana continuously for a period (herein called the "domiciliary period") of at least one full calendar year immediately preceding the first day of classes for which resident classification is sought. The individual's physical presence within this state solely for education purposes will not be sufficient for resident classification, regardless of the length of time he/she has been present in the state.

## Definition of a Louisiana Resident

A person herein termed as a bona fide Louisiana resident is an individual who qualified as a resident in accordance with the regulations prescribed in this section. An individual who is certified under one of the mandated criteria as a resident student by any one of the Southern University System's institutions shall be so recognized by every institution within the system, provided the individual's certifying category does not change.

An applicant for certification at any campus in the Southern University System as a resident student must provide the documentation that meets the criteria of at least one of the following categories:

- Spouse of a Louisiana resident
- Louisiana resident by virtue of full-time employment
- Military personnel stationed in Louisiana, their spouses and dependents

The following criteria will determine the eligibility of an applicant for resident status. Persons applying for certification of resident status under this part must submit the documents for the applicable eligibility category to the office of the designated certifying officer for the campus, on or before the deadline for receipt of the certification application for the semester that he/she intends to enroll.

Certification as a resident student that is established following the beginning of the semester and/or after the payment of fees shall be applicable for the next semester.

In addition to other documentation indicated herein, the following facts or circumstances, while not necessarily conclusive, may support the eligibility claim of an applicant seeking certification under these provisions:

- The applicant's or spouse's possession of a valid Louisiana voter registration card and record of voting in Louisiana for at least one year
- The applicant's or spouse's school and employment records which designates Louisiana as his or her permanent address
- The applicant's or spouse's possession of a valid Louisiana driver's license (if applicable) for at least one year
- Continuous presence in Louisiana during periods when not enrolled as a student



- Commitments indicating intent to stay in Louisiana permanently
- Establishing an abode where one's permanent belongings are kept in Louisiana Licensing for professional practice (if applicable) in Louisiana
- The absence of these indicia in other states during any period for which domicile in Louisiana is asserted

### Criteria for Establishing Resident Status

An individual applying for "resident" designation must provide to the Graduate School, all of the documentation required for establishing his/her eligibility for certification in at least one of the following categories on or before the published deadline date for the semester in which he/she intends to enroll.

### *Spouse of Louisiana Resident*

The spouse of a natural Louisiana resident must submit the following to the office of the campus' certifying officer on or before the deadline indicated herein:

- Copy of marriage certificate
- Copy of spouse's Louisiana birth certificate
- Copy of spouse's Louisiana high school diploma
- Copy of spouse's Louisiana tax forms for past year(s)
- Copy of spouse's 1040 Federal tax forms for past year(s)
- Copy of spouse's W-2 form
- Certified copy of employment verification form for spouse. Sufficient documentation to reflect that at the
- time of submission of the request for certification, the applicant's spouse has continuously resided in the state for the calendar- year period (at least 12 months) immediately preceding the date of application.

If the applicant is a resident alien and legally married to a natural Louisiana resident, he or she must also present his/her permanent resident alien (**green**) card from the United States Immigration Service to the Director of Graduate Admission or his/her designee, along with the certification application and the documentation required in Section A of this part

If the applicant is a Resident Alien who is legally married to an individual who is a domiciliary of the state of Louisiana and is seeking resident student status by virtue of his or her spouse's employment, he or she must also submit the documentation required in Section A of this part and present his or her permanent resident alien (**green**) card from the United States Immigration Service to the office of the campus' certifying officer.

### ***Louisiana Resident by Virtue of Employment within the State***

A person is a minor who is less than 24 years of age and dependent upon his/her parent(s) and whose parent(s) has/ have been residing in Louisiana and working full-time for the continuous 12-month period (the calendar year) or longer immediately preceding the date of application. He or she must submit the following to the office of the certifying officer on or

before the deadline indicated herein:

- Copy of Louisiana tax form of parent(s)
- Copy of 1040 federal tax form of parent(s)
- Copy of W-2 form of parent(s)
- Copy of applicant's birth certificate or copy of court papers verifying adoption
- Certified copy of employment verification form for parent(s)
- Any other documentation requested by the campus' certifying officer or his/her designee

A person who has been residing in Louisiana and working fulltime (40-hours a week) for a full calendar year (a continuous 12-month period) prior to the submission of his/her application, and who enrolled in a maximum of six credit hours at any post-secondary institution during the 12-month period immediately preceding the application deadline for the semester for which he/she is requesting resident designation is eligible to apply for resident status. An applicant for resident status must submit the following to the office of the Director of Graduate Admissions on or before the deadline indicated herein:

- Copy of Louisiana tax form for the applicant/ applicant's spouse
- Copy of 1040 federal tax form for the applicant/ applicant's spouse
- Copy of W-2 form(s) for the applicant/applicant's spouse; certified copy of employment-verification form for applicant
- Any other documentation requested by the campus' certifying officer or his designee

### ***Military personnel stationed in Louisiana and their dependents***

In accordance with Louisiana Revised Statute 17.2137, an active duty or honorably discharged member of any branch of the United States Armed Forces, who was permanently stationed in Louisiana, their spouse or dependents shall qualify for resident status, if they can meet one of the following criteria:

A member of the armed forces of the United States who is permanently stationed in Louisiana on active duty or his/her child or spouse shall be entitled to resident classification for tuition purposes at Southern University without regard to length of time of residency in the state.

A child or spouse of a member of the armed forces of the United States who has been assigned to duty elsewhere immediately following permanent service on active duty while stationed in Louisiana, shall be entitled to resident classification for tuition purposes at Southern University for as long as the child or spouse continuously resides in Louisiana after the duty assignment in the state of the military parent or spouse ends

Any member of the military, as well as his/her spouse and dependents, who are permanently stationed in Louisiana as a member of any branch of the United States Armed

Forces, and who enrolls as a student at Southern University, shall be classified as a resident for tuition purposes and shall qualify for resident tuition fees at Southern University, provided that the individual(s) has/have been continuously residing in

Louisiana after being honorably discharged

An applicant seeking classification under any provision in this part shall submit the following to the campus' certifying office on or before the deadline indicated for the period he/ she will enroll:

- Copy of the dependent child's birth certificate or court approved adoption papers
- Copy of marriage certificate
- Copy of military personnel's orders reflecting his/her permanent assignment to duty in Louisiana
- Copy of official orders reassigning the military parent or spouse from permanent duty in Louisiana to another duty station
- Any other documentation requested by the campus certifying officer or his/her designee

Consider a student a resident if the deceased parent qualified as a resident of Louisiana at the time of his/her death. An applicant who is 24 years of age, or who has resided and has been employed full time in another state for two years or longer, cannot qualify as a resident under this provision.

The spouse or unmarried dependent of a full-time University employee is eligible for a waiver of the nonresident fees for the first year and will be granted resident status thereafter.

The burden of providing entitlement to the benefits in this section shall be the sole responsibility of the student. Such proof must be received on or before the deadline indicated herein or as set by the certifying office on a case-by-case basis.

#### **Certification Guidelines for Non-Resident Fee Exemptions**

A non-resident student, for tuition purposes, is a student who is not eligible for classification as a resident student under these regulations.

To be eligible for an exemption from payment of any portion of the non-resident fee, an applicant must meet the criteria for at least one of the following categories:

#### **Criteria for Determining Eligibility for Non-Resident Fee Exemption**

The following criteria will determine the eligibility for non-resident fee exemptions. Persons applying for an exemption under this part must submit the documents for the applicable eligibility category to the campus' certifying officer prior to the beginning of the semester in which he/she intends to enroll. Eligibility for exemptions established following the beginning of the semester shall be applicable for the next semester.

#### **Non-Resident Athletic Scholarship Recipient Exemption**

A student in the Southern University System who is granted an athletic scholarship, and who is not a resident of this state, shall pay the same tuition or fees as a student who is a resident of the state of Louisiana. (See Louisiana Revised Statutes, R.R. 17:1791).

#### **Non-Resident Participant in the National Student Exchange Program**

At Southern University institutions that participate in the National Student Exchange (NSE) program the following provision shall be applicable. An exchange student from a participating out-of-state university who enrolls at a Southern University System NSE institution and who pays in-state tuition at his/her home campus and opts to pay his/her fees at Southern University's NSE institution will be exempt from the payment of nonresident fees for a maximum of two consecutive semesters. Exemption from payment of the nonresident fee for a longer period requires the approval of all appropriate parties to the NSE program agreement and Southern University.

#### **Graduate Students**

##### *Graduate Assistant Exemption*

A nonresident graduate student who is selected to serve as a graduate assistant at Southern University or receive a tuition scholarship from the University may be eligible for a full or partial exemption of his/her nonresident fees. The dean of the Graduate School or his designee must certify eligibility for exemption.

#### **The following must be submitted by the student:**

A letter from the individual's department or college to the dean of the Graduate School, verifying that the student has been awarded a graduate assistantship or tuition scholarship and the source of funds for such assistantship. Any other documentation requested by the dean of the Graduate School or the campus' certifying officer or their designees.

#### **Appeal of Denial of Resident or Exemption Certification**

If an applicant wishes to appeal a decision of the campus' certifying officer who denied the applicant resident or exemption certification, he/she must submit his/her written appeal to the Office of Academic Affairs no later than 14 calendar days after notice of the decision is mailed or hand delivered to the student. The appeal must state the ground for the appeal and provide copies of any documentation which the appellant desires to have considered during the appellate review. The failure to lodge an appeal in a timely fashion shall constitute a waiver of all claims of eligibility for certification for the applicable term.

#### **INCORRECT CLASSIFICATION**

Any student who is incorrectly classified as a resident student is subject to reclassification and the assessment and payment of all nonresident fees that have not been paid during the period of incorrect classification. If the incorrect classification results from false information provided or facts concealed by the student, the student is also subject to being disciplined by the University.

#### **APPLICATION DEADLINES**

A person seeking certification as a resident under any provision in this section shall submit his/her application and all required documentation to the office or person designated on or before the following dates:

**May 1** for resident and exemption certification for admission in the Fall Semester

**October 1** for resident and exemption certification for admission in the Spring Semester

**April 1** for resident and exemption certification for the Summer Session

## MISCELLANEOUS PROVISIONS

Students who register for zero to three credit hours are exempted from paying nonresident fees.

## CERTIFICATION PROCEDURES

The certification of a student for resident status at any campus in the Southern University System shall only be determined by the officer officially designated by the Chancellor to make such determinations for that Southern University System campus. Certifications shall be in accordance with these provisions. The information provided in the student's applications for admission and certification, and other related documents that are used to certify a student's eligibility under these provisions shall be made a part of and maintained in the student's certification files.

NOTE: CERTIFICATIONS COMPLETED AFTER THE PAYMENT OF FEES AND/OR AFTER THE BEGINNING OF THE SEMESTER WILL BE APPLICABLE FOR THE NEXT ENROLLMENT PERIOD. NONRESIDENT F E E S PAID PRIOR TO CERTIFICATION OF RESIDENT OR EXEMPTION STATUS WILL NOT BE REIMBURSED.

## ON-CAMPUS HOUSING

Southern University does not have separate housing specifically designated for graduate students. For single graduate students, limited accommodations may be available in several residence halls on campus. However, there is usually a waiting list because of high demand. There are however, several privately owned apartments in close proximity to the campus as well as in the city of Baton Rouge.

In order to reserve campus housing, an application should be submitted to:

**Southern University Residential Housing Department,  
P.O. Box 9460,  
Baton Rouge, LA 70813-2036.**

### ***Application Fee***

Each application for admission to the Graduate School must be accompanied by an application fee of \$25 in the form of a money order or cashier's check made payable to Southern University. Application fees are nonrefundable. Further instructions will be found in the Admissions section of this catalog.

An additional nonrefundable late application fee may be assessed for all applications received by the Graduate School after the application deadline. The late application fee also applies to applications for readmission submitted after the above dates. The University is not responsible for cash sent by mail.

International applicants should consult the section on "Admission of International Students" for additional information.

### ***Assessment of Fees***

Fees are assessed on the basis of classification as resident or nonresident. Eligibility to be classified as a resident of

Louisiana is determined by the Graduate School, in accordance with University regulations, and is based on evidence provided on the application form and related documents. Regulations relate primarily to establishment of a domicile in the state of Louisiana.

Physical appearance within the state solely for educational purposes, without substantial evidence of intent to remain in Louisiana, will not be sufficient for resident classification, regardless of the length of time within the state. Resident classifications and all fees are audited and adjusted, if necessary, after each registration. Appropriate refunds are made or charges assessed.

An international student on an F-1 visa is classified as a nonresident. Students holding other visas should contact the Graduate School for additional information.

The fee structure for graduate-level courses is subject to adjustments approved by the Southern University Board of Supervisors. Fee structures in effect at the time of registration will be available on line at [www.subr.edu/gradschool](http://www.subr.edu/gradschool).

## FINANCIAL AID

### FINANCIAL AID GUIDELINES

Financial assistance is available to graduate students from a large number of sources. These include fellowships, graduate teaching and research assistantships, scholarships, internships, work-study, and loans. The awards are granted through the Graduate School and through various departments and divisions on campus.

Numerous teaching, research, and service assistantships, as well as doctoral fellowships, are awarded each year. These awards are available to only students pursuing either a master's or doctoral degree. Unless otherwise specified, applications for these awards should be made to the appropriate department chair or campus divisional office as early as possible, but no later than two weeks after the admissions application deadline for the applicable semester/term. Assistantships, scholarships, and fellowships will be awarded on a rolling basis as applications are received and accepted.

Teaching, research, and service assistantships are awarded on a semester by semester basis in an academic year. Applications and supporting documents should be submitted to the applicant's department in order to be considered. Students who are selected by their chosen academic departments and awarded assistantships will be given assignments in either research, teaching, library or staff service. The criteria for these awards are the individual's academic record and recommendation of the department chairperson in the student's chosen field of study.

The Southern Association of Colleges and Schools (SACS) Criteria for Accreditation mandates that the Graduate School develop policies governing the appointment and evaluation of graduate assistants (GAs) and monitor their implementation by employing units. These policies include setting minimum academic qualifications for holding a GA appointment, establishing appointment and renewal procedures, and setting average workloads, and reviewing stipend levels and ranges. Employing units enter a binding contract when the offer of a graduate assistant ship is tendered. It is imperative that unit administrators adhere to Graduate School guidelines and procedures affecting graduate assistantships which include the following:

**Qualifications/Eligibility for Assistantships,**

## Fellowships and Scholarships

Only graduate students with acceptable academic records may be appointed to graduate assistantships or awarded fellowships. Before an appointment can be considered in effect, a student must be admitted to the Graduate School and be registered as a full-time graduate student. Full-time constitutes a minimum of nine semester hours in the fall or spring semester (a minimum of six hours for graduate credit) or a minimum of six semester hours in the Maymester and summer sessions (a minimum of three hours for graduate credit). Students admitted on conditional or provisional status may be appointed as GAs only when they have been granted regular admission status.

However, students enrolling in graduate school for the first time, who have been admitted into the Graduate School on provisional or conditional admission status, may be considered for and granted assistantships by a department or division for the initial semester (first semester or first term in graduate school) only, using funding from other sources (non-Graduate School funds). All students enrolling with provisional or conditional status who are awarded financial assistance by their departments or divisions, must carry a full-time load and achieve a cumulative GPA of 3.0 in the first semester of enrolling and maintain a GPA of 3.0 in order to be considered for assistance during subsequent enrollment periods. The approved rules and qualification criteria established in the awarding unit and approved by the Graduate School will govern such awards. Information and applications for financial assistance awarded through a department or division may be obtained only from the various departments or divisions.

Students who fail to maintain a full-time course load in any given semester or term will automatically lose their assistantships. Students who receive grades of "I" (incomplete) or N/C (noncredit) in graduate courses counted toward his/her full-time status will automatically forfeit the graduate assistant for the next semester. Department chairs are expected to inform graduate assistants of this policy, monitor the course load of graduate assistants and report any violations of this policy to the Graduate School. Assistantships will be automatically withdrawn from departments and students if the Graduate School determines that GAs who do not maintain a full course load have not been identified and reported. Departments from whom assistantships are withdrawn under these circumstances will be given low priority in assignment of assistantships in subsequent semesters. Students who violate the full-time course load requirement will be disqualified from receiving assistantships in subsequent semesters/terms.

International students must hold and provide evidence of a current and valid Visa in order to be eligible for assistantships, fellowships, or scholarships. International students on assistantship whose native language is not English must meet all current language requirements for international students. GAs assigned to instructional duties (teachers of record) must have earned at least 18 hours of graduate credit in their teaching discipline prior to the appointment. Furthermore, teaching assistants must be directly supervised by an experienced faculty member in their teaching discipline, receive regular in-service training, and be regularly evaluated.

The minimum graduate assistantship award will be no less than one-half of the amounts awarded by the Graduate School at the masters or doctoral assistantship level per semester. Appointments for a single semester, fall or spring, must also be at a minimum of 25% efforts. The calculated minimum

graduate assistantship awards will be reviewed periodically.

## Categories of Assistantships

### GRADUATE TEACHING ASSISTANT (GTA)

Graduate teaching assistants are assigned to a graduate faculty member in his or her particular area. Assistants are responsible for preparing lesson plans, teaching from specific course outlines, keeping student records, grading, and being available for outside classroom tutoring of students in the particular subject matter. Graduate assistants will be closely supervised and evaluated by the faculty member. Graduate teaching assistants who have primary responsibility for teaching a course for credit and/or for assigning final grades for such courses, and who do not possess a terminal degree in their respective disciplines, must have earned at least 18 graduate semester hours in their teaching discipline and a master's degree; be under the direct supervision of a faculty member experienced in the teaching discipline; receive regular in-service training; and be evaluated regularly.

### GRADUATE RESEARCH ASSISTANT (GRA)

Graduate Research Assistants usually work under the supervision of a principal investigator on a funded research project. Assistants are responsible for performing laboratory research techniques, sample collection, and the supervision of undergraduate research students. Stipends are generally paid through a research grant. Graduate assistants will be closely supervised and evaluated by the principal investigator.

### GRADUATE ADMINISTRATIVE ASSISTANT (GAA)

Graduate Administrative Assistants are usually assigned to work in the Graduate School or other University business offices and the Library. Assistants are responsible for performing clerical duties such as word processing, filing, telephone answering and others as specified by their immediate supervisors. Assistants are closely supervised and evaluated by their immediate supervisors.

## AWARDS

Contingent on availability of funds, all graduate assistantships/fellowship are awarded on a semester basis, except in special cases where students are expected to work for more than nine months. In those special cases, such students must be compensated for the additional months proportionately

**The maximum time limit (academic year and summer) for doctoral assistantships and fellowships is four (4) academic years.** Doctoral assistantship and fellowship amounts may possibly vary in certain disciplines depending on the qualifications of the student, complexity of assignments, etc. In such cases, justification should be provided. Recipients must pay in-state tuition and fees out of the above amounts.

**The maximum time limit (academic year and summer) for assistantships at the master's level is two (2) academic years.**

In exceptional cases, graduate assistants can be paid more than the above stipulated amount, provided that justification can be provided based on reasons such as the qualifications of a student and the complexity of the assignment. Students are expected to pay in-state tuition and fees out of assistantship amount.



**For Tuition Scholarships, full tuition waiver for two (2) academic years for master's students and four (4) academic years for doctoral students.**

Support in the form of regular graduate assistantships/fellowships may be provided, upon petition, for students who are making satisfactory progress toward a graduate degree but whose respective programs extend beyond two academic years or doctoral programs extend beyond four academic years.

## **Nonresident Fees**

Students who are recipients of assistantships, fellowships, and scholarships from the Graduate School, or a department/division of the University are usually exempted from paying out-of-state fees. Students who are recipients of such awards from departments/divisions of Southern University (other than the Graduate School) must submit a request for out-of-state fee waiver through their department chair to the Graduate School. They must be submitted by the published University deadlines (April 1, for the Summer term; July 1 for the Fall semester; and October 1 for the Spring semester). A full-signed Electronic Personnel Action Form (ePAF) must accompany the request with the appropriate budget number for the award.

## **WORK ASSIGNMENTS/REQUIREMENTS**

All students are to report promptly to the Personnel Office for clearance and then to the contact person indicated on the award letter. Students are permitted to work a maximum of 20 hours per week during the regular university period of classes and the weeks of registration and final examination. All workloads must conform to the Minimum Wage Law. A work schedule from the department chairperson is to be submitted to the dean of the Graduate School. A payroll sheet is prepared each month by the Graduate School and each student is required to sign the payroll each time he or she reports for work.

## **EVALUATION/SUPERVISION**

Employing units are responsible for providing each GA with an annual written evaluation. This evaluation must be reviewed by the GA and one copy is to be placed in the student's departmental file. Evaluation must consist of a completed evaluation form and a graduate student performance assistant form.

## **DURATION (TERM LIMITS)**

Assistantships for master's degree students will be limited to a maximum duration of two years and assistantships/fellowships for doctoral degree students will be limited to a maximum duration of four years. Department chairs are expected to monitor and enforce these limits. Department chairs who select recommend, or award assistantships, fellowships to students who are in violation of this policy will automatically lose those assistantships/fellowships.

## **WITHDRAWAL OF ASSISTANTSHIPS, FELLOWSHIPS, OR SCHOLARSHIPS**

A graduate assistantship, fellowship or scholarship will be withdrawn from a student at any time, without any warning or notice, if any of the following occurs:

- Student fails to maintain a GPA of 3.0.
- Student fails to maintain a full-time course load (nine semester hours in the Fall and Spring semesters, and six

semester hours if enrolled in the Maymester and/or Summer terms.

- A student who violates this policy will be disqualified from awards in subsequent semesters
- Student does not perform work assignments satisfactorily
- Student fails to make satisfactory academic progress toward their chosen graduate degree

## **FELLOWSHIPS AND TUITION SCHOLARSHIPS**

The Graduate School and various academic departments offer a number of fellowships and scholarships for exceptional students. All such assistance is awarded on the basis of the individual's academic achievements. At the master's degree level, preference is usually given to students who are enrolled in research or thesis programs. Academic departments select the recipients of their awards.

## **BOARD OF REGENTS' GRADUATE FELLOWSHIP PROGRAM**

The Louisiana Educational Quality Support Fund provides Board of Regents' Graduate Fellowships for exceptionally qualified master's and doctoral students. Academic departments eligible for these awards vary from year to year. Most major areas—including the humanities, social sciences, basic sciences, education, agriculture, and engineering—are included annually.

Interested students should submit scores on the verbal and quantitative portions of the Graduate Record Examination, official transcripts of all previous college-level work, a one-page narrative of educational goals, and three letters of recommendation.

Applications must be submitted through the candidate's department.

## **TUITION SCHOLARSHIPS FOR PART-TIME STUDENTS**

Part-time graduate students who are granted full/regular admission status into a master's or doctoral program may be considered for tuition only scholarships by their respective academic departments, contingent upon the availability of funds and after all eligible full-time students have been considered. However, such tuition scholarships will be on a semester/term-to-semester/term basis and will be limited to the actual amount of tuition based on the actual number of credit hours enrolled in by a recipient each semester/term and in the following order of priority:

1. Full-time students (students enrolled in nine or more semester hours)
2. Students enrolled in eight semester hours
3. Students enrolled in seven semester hours
4. Students enrolled in six semester hours

Recipients of part-time tuition scholarships who drop or withdraw from classes after such awards will not receive tuition refunds or credit from the University under any circumstances.

## **Financial Aid-Part-time Students**

Part-time students who are enrolled in less than semester hours are not eligible for tuition scholarships.

To be eligible for a tuition-only scholarship a part-time student must meet the following minimum requirements”

1. Must have been admitted into a graduate degree program
2. Must have regular admission status. Students admitted on a conditional or provisional basis are ineligible
3. Must have a cumulative GPA of 3.0

Students with non-degree, non-matriculating, or certification status are ineligible for tuition scholarships.

### **INTERNSHIPS AND WORK-STUDY**

Internships and work-study assignments are primarily handled at the department and college levels. Interested students should contact the chairperson of the department in which the plan to pursue their degrees. Work-study awards may also be available through the Graduate School.

### **LOANS**

The Office of Student Financial Aid administers work and loan programs to assist students with their expenses. All such funds are subject to policies and regulations authorized by the University's Financial Aid Office. Graduate students may qualify for federal aid offered through the Financial Aid office, including the Federal Direct Stafford/Ford Loans, and Federal Perkins Loans. Awards made by the Financial Aid office to graduate students are based upon demonstrated financial need, satisfactory academic records and progress, and enrollment status. These programs offer long-term, low-interest loans that must be repaid when the borrower graduates, withdraws, or drops to less than half-time enrollment. In general, students may borrow up to the cost of attendance minus any other financial aid per academic year at competitive interest rates which may vary annually. Some loans are based on financial need; others are not. The actual amount of each loan is based on financial need and/or program limits. Students should not wait until they have been admitted to apply for aid. Although they may apply for Federal Direct Stafford/Ford Loans throughout the year, they must observe the deadlines set each semester for applying for loans for the following semester and should always apply as early as possible. To apply, students should pick up a free application form for federal student aid from the Office of Student Financial Aid information concerning university administered financial aid programs, the student should contact the Office of Student Financial Aid:

**The Office of Student Financial Aid  
Southern University and  
A&M College P.O. Box 9961  
Southern Branch Post Office  
Baton Rouge, LA 70813**



# URBAN *and* FORESTRY NATURAL RESOURCES



**College of Agricultural, Family and  
Consumer Sciences**  
**Master of Science in Urban Forestry**

## COLLEGE OF AGRICULTURAL, FAMILY AND CONSUMER SCIENCES

Interim Chancellor-Dean Dr. C. Ruben Walker

### Department of Urban Forestry

### Master of Science in Urban Forestry

*Interim Program Director: Dr. Qi, Yadong*

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### **Introduction**

The Urban Forestry Master of Science Graduate Program was established in the fall of 1998. The mission of the graduate program is to provide graduate students with a curriculum that offers sound academic training and experiential learning activities for professional career positions in governmental agencies, research organizations, and private firms. The program utilizes an interdisciplinary, total quality management approach to train students so that they can ultimately address critical issues and concerns in the science and management of urban forestry and natural resources. Each student will follow a prescribed program of course work and conduct a thesis research or capstone project tailored toward emerging issues or problems in urban forestry.

The overall objectives of the program in urban forestry are:

- ✓ To develop student's ability to synthesize relevant knowledge and skills in urban forestry and related disciplines for sound urban forestry practices.
- ✓ To extend advanced training in urban forestry to high school teachers for the advancement of the art and science of urban forestry and natural resources.
- ✓ To provide the latest technology and training to tree care professionals in order to preserve and protect the urban environment.
- ✓ To academically prepare students for study at the doctoral level at various universities in the nation.
- ✓ To initiate and sustain collaborative efforts with various governmental, public and private and organizations to address issues and concerns in urban forestry and to promote urban forest health and natural resource conservation.
- ✓ To conduct research aimed at addressing natural resource issues in urban environment.

### **Mission of the Department of Urban Forestry and Natural Resources**

The mission of the Department of Urban Forestry and Natural Resources is to advance our 1890 land-grant university's mission by providing high quality education and learning experiences to diverse undergraduate and graduate students, professional urban foresters, and the general public, and generating and applying new knowledge concerning the management of urban and community forestry and natural resources through Education, Research, and Service.

The Department is recognized at the state and national levels as a leader in the education of highly-qualified professional urban foresters. The central theme of our instruction is that urban forests are essential to society, and their scientific management is necessary to ensure a sustainable flow of commodity and non-commodity benefits from urban forest ecosystems.

The faculty is composed of a body of nationally and internationally recognized professional educators and scientists in forestry supported by other multidisciplinary professional scientists uniquely qualified to integrate knowledge from the natural, physical, and social sciences. All the basic sciences are holistically applied to the diagnosis of urban forest ecosystem problems and the prescription of management to assure the continued flow of products and other benefits from forest ecosystems for citizens of the State of Louisiana and the nation.

The Department achieves its mission through the provision of classroom instruction, outreach activities, and the production and dissemination of research results. Most aspects of the profession are covered in the undergraduate and graduate levels. The Department's



vigorous research program ensures that our students are on the cutting edge of forest science, keeps our faculty current within their various specialties, and assures that Louisiana Urban Forest residents and stakeholders and beyond receive the most current scientific information on urban forest management, urban-rural interface ecosystems, urban forestry and arboricultural industries, and attendant social, environmental, and economic issues.

Our responsibilities extend beyond the campus to the delivery of information to the various publics within the state and nation and parts of the world through outreach activities such as adult education, group advisory programs, applied research and demonstration projects, scientific forums, and other modes of continuing education. Furthermore, our faculty plays various major roles in professional and scientific societies and associations at the state, national, and international levels.

We envision a future in which growing population leads to fragmented forests and increased problems associated with the agricultural and urban-forest interface, in which the quality and quantity of water resources become increasingly important, and in which rising incomes place pressure on the forests to provide an increasingly broad array of non-traditional forest benefits, in addition to considerable increases in the demand for ecosystem services.

Accordingly, our graduates must possess a professional ethic that recognizes urban forestry objectives ranging from single use to multiple use and the host of demands placed on urban forests.

Progress towards these goals is constantly measured using indicators such as enrollment, employment of graduates, internal and external program evaluations and accreditation reviews, research and scientific stature, and the quality and performance of our graduates in their professional careers.

### Strategic Goals

Goal 1. Strengthen our commitment to producing high-quality urban forestry graduates responsive to the needs of employers and broad societal needs.

Goal 2. Enhance the Program as the center for urban forestry-related ecosystem science education in the university.

Goal 3. Strengthen our commitment to graduate education by producing high-quality Masters of Science and Doctors of Philosophy in Urban Forestry who will make significant contributions to forest science and the urban forestry and arboriculture profession.

Goal 4. Strengthen our commitment to a strong, needs-based research program for urban forest science and sustainable urban forest ecosystem.

Goal 5. Strengthen our commitment to a dynamic and comprehensive outreach/extension program that successfully meets the needs of the citizenry and enhances the department's reputation and credibility throughout the State of Louisiana, the region, the nation, and beyond.

Goal 6. Strengthen the staffing, support, facilities, and administrative systems that will increase the efficiency and effectiveness of our department's operations.

### GRADUATE DEGREE OFFERED

#### M. S. Master of Science in Urban Forestry

(Thesis and Non-Thesis options)

### ADMISSION REQUIREMENTS

In addition to the general requirements of the Graduate School, to be considered for admission to the M. S. degree program in urban forestry, prospective students must meet the following criteria:

A baccalaureate degree from any accredited four-year institution in urban forestry, forestry, renewable and natural resources, plant and soil sciences, biology, chemistry, natural and environmental sciences. Applicants with baccalaureate degrees in other disciplines may be admitted with conditions.

Must have a minimum overall grade point average (GPA) of 2.7 on a 4.0 scale for all undergraduate work.

Must take the Graduate Record Examination (GRE). A minimal score of 1250 calculated from the GPA multiplied by 200 and added to the GRE combined verbal and quantitative scores.

Must submit a curriculum vitae/resume.

Must submit a concise essay on research background and career goals.

Must submit three written letters of recommendation, two of which must be from advisors in student major field.

The student must remove conditional status by earning at least a B (3.0) average in the first nine hours of graduate courses; failure to achieve this average will result in withdrawal from the program.

Students found to be deficient in urban forestry or related fields must take 9 to 12 hours of remedial courses from the following listed urban forestry courses plus any other urban forestry undergraduate core courses as deemed necessary and recommended by the major advisor and graduate committee.

Intro to Urban Forestry (UFOR 151)  
Urban Dendrology (UFOR 278)  
Urban Soil and Environment (UFOR 251)  
Urban Forest Ecology (UFOR 391)  
Urban Forestry Management (UFOR 455)  
Tree Physiology (UFOR 438)

### DEGREE REQUIREMENT

#### Master of Science in Urban Forestry

In addition to the general requirements of the Graduate School, under the thesis option, a minimum of 30 semester credit hours (a minimum of 24 credit hours of graduate course work and a minimum of 6 credits of thesis) are required plus a completed thesis approved by the graduate committee. Under the non-thesis option, a minimum of 36 semester credit hours (a minimum of 30 credit hours of graduate course work and a minimum of 6 credits for a capstone project and supervised research) are required plus a completed capstone project report approved by the graduate committee and passing of the final comprehensive exam for the non-thesis option.

- Earn a minimum cumulative Grade Point Average of 3.0 on all graduate course work, and all course work applied specifically to the degree.
- Only two "C" grades are permissible towards a degree program and NO GRADE OF "D" COUNTS TOWARDS A DEGREE PROGRAM.
- The "C" grade must not be in the required courses.

### PLAN OF STUDY

**Masters of Science in Urban Forestry****Number of Credit Hours - Thesis Option Graduation Requirements****Core Courses:**

UFOR 514	Experimental Statistics and Design.....	3 credits
UFOR 523	Tree Growth and Development.....	3 credits
UFOR 532	Nutrition of Urban Trees.....	3 credits
UFOR 535	Global Change and Environ. Consequences...	3 credits
UFOR 537	Agricultural Biosecurity .....	3 credits
UFOR 540	Urban Forest Ecophysiology.....	3 credits
UFOR 553	Advanced Urban Forest Management .....	3 credits
UFOR 562	Applications of Integrated GIS/GPS in Urban Forestry.....	3 credits
UFOR 600	Thesis Research.....	6 credits

Thesis Defense and Thesis

**Total 30 credits****Number of Credit Hours - Non-Thesis Option Graduation Requirements****Core Courses:**

UFOR 514	Experimental Statistics and Design.....	3 credits
UFOR 523	Tree Growth and Development.....	3 credits
UFOR 532	Nutrition of Urban Trees.....	3 credits
UFOR 535	Global Change and Environ. Consequences...	3 credits
UFOR 537	Agricultural Biosecurity .....	3 credits
UFOR 540	Urban Forest Ecophysiology.....	3 credits
UFOR 553	Advanced Urban Forest Management .....	3 credits
UFOR 562	Applications of Integrated GIS/GPS in UFOR...	3 credits
Area of Emphasis UFOR Electives.....		6 credits
UFOR 598	Capstone Project.....	3 credits
UFOR 599	Supervised Research.....	3 credits
Capstone Project Report and Final Comprehensive Exam		

**Total 36 credits****Electives**

UFOR 500	Environmental Horticulture.....	3 credits
UFOR 501	Research Problem in Urban Forestry .....	3 credits
UFOR 502	Special Topics in Urban Forestry.....	3 credits
UFOR 503	Urban Tree Law .....	3 credits
UFOR 505	Plant Tissue Culture .....	3 credits
UFOR 518	Agro-Forestry and Sustainable Systems.....	3 credits
UFOR 520	Ecosystem Analysis.....	3 credits
UFOR 528	Plant-Air Pollution .....	3 credits
UFOR 542	Urban Soil and Water Conservation .....	3 credits
UFOR 545	Environmental Soil Chemistry & Properties....	3 credits
UFOR 555	Restoration Ecology .....	3 credits
UFOR 559	Methods in Environmental Impact Assessment	3 credits
UFOR 560	Urban Forest Economics .....	3 credits

UFOR 561 Tree Biomechanics..... 3 credits

UFOR 570 Urban Water Resource Management ..... 3 credits

**Time Limitations (Statute of Limitations for Master Degree)**

At the time of graduation, the student must NOT have any courses applied toward master degree which exceed the statute of limitations (7 years for master degree).

**COURSE DESCRIPTIONS**

**UFOR 500. ENVIRONMENTAL HORTICULTURE (3 credit hours: 2 hrs lecture, 2 hrs lab).** Scientific and practical approaches of horticulture in urban environments.

**UFOR 501. RESEARCH PROBLEMS IN URBAN FORESTRY (3 credit hours).** Individual projects and group discussions concerning current research issues in urban forestry. Students will review relevant literature and develop research prospectus on selected topics of individual interest.

**UFOR 502. SPECIAL TOPICS IN URBAN FORESTRY (3 credit hours).** Applications of ecological, social, economic theories to problems of managing urban forest ecosystems. Students will examine topics of individual interest related to the planning and management of urban forests uses and benefits.

**UFOR 503. URBAN TREE LAW (3 credit hours: 3 hrs lecture).** General features of the constitutional, statutory and administrative laws, institutions and processes which establish or limit the powers of public managers. Development of practical student competencies in legal reasoning and research on trees in urban areas.

**UFOR 505. PLANT TISSUE CULTURE (4 credit hours: 2 hrs lecture, 2 hrs lab).** Theoretical and practical aspects of isolation culture of higher plant cells, tissues and organs.

**UFOR 514. EXPERIMENTAL STATISTICS AND DESIGN. (3 credit hours: 2 hrs lecture, 2 hrs lab).** An overview of the conceptual and methodological bases of urban forestry research design, data analysis, and interpretation. Case studies and individual research projects critiqued.

**UFOR 518. AGRO-FORESTRY AND SUSTAINABLE SYSTEMS. (3 credit hours: 3 hours lecture).** Principles and techniques of agro-forestry and sustainable systems. Special emphasis will be placed on establishment, cultural and management practices.

**UFOR 520. ECOSYSTEM ANALYSIS (3 credit hours: 2 hrs lecture, 2 hrs lab).** Analysis of ecological dynamics of various ecosystems including urban, terrestrial and aquatic ecosystems. Analysis includes physical, chemical and biological properties, energy balance, biogeochemical cycles and their interrelationships.

**UFOR 523. TREE GROWTH AND DEVELOPMENT (3 credit hours: 2 hrs lecture, 2 hrs lab).** The study of tree constituents, their occurrence, transformation and metabolism and their changes influenced by the environments. Major emphasis will be placed on effects of urban environmental factors.

**UFOR 528. PLANT-AIR POLLUTION (3 credit hours: 2 hrs lecture, 2 hrs lab).** Study of the interactions between plants and major air pollutants such as O<sub>3</sub>, SO<sub>2</sub>, NO<sub>2</sub>, and particulate pollutants. This course addresses the role of urban vegetation in removing gaseous pollutants. Physiological, morphological, and anatomical responses of plants are discussed. Laboratory works involve measurement of gaseous fluxes, quantification of pollutant removal by individual species of plants and more. Specific projects are designed for students to provide experiential learning and research opportunities.



**UFOR 532. NUTRITION OF URBAN TREES (3 credit hours: 3 hrs lecture).** Nutrient requirements of urban plants and the functions of these nutrient elements in their adaptation under urban stressful environment.

**UFOR 535. GLOBAL CHANGE AND ENVIRONMENTAL CONSEQUENCES (3 credit hours: 2 hours lecture, 2 hrs lab).** The concepts and concerns regarding global effects of a continued increase in atmospheric greenhouse gases and the consequences on earth systems as well as urban forestry ecosystems.

**UFOR 537. AGRICULTURAL BIOSECURITY (3 credit hrs).** This course will cover the principles and practices for the identification, containment, and control of non-native organisms that are threatening agriculture and the environment in the USA. The concepts of invasion ecology including the steps during an invasion will provide an ecological background on the topic. Biosecurity related to trade and border control, phytosanitary treatments, and surveillance methods will be discussed. Pest risk analyses will be used as predictive methods to categorize risky species. Several case studies of invasive insects, plants, and pathogens related to plant biosecurity will be presented.

**UFOR 540. URBAN FOREST ECOPHYSIOLOGY (3 credit hrs: 2 hrs lecture, 2 hrs Lab).** Evaluation of the effects of various environmental factors on the whole plant physiological processes in urban environments. Subjects including the physiological background, causes and consequences of ecological process, especially those related to the atmosphere and climatic changes in the past, present, and future.

**UFOR 542. URBAN SOIL AND WATER CONSERVATION (3 credit hours: 2 hrs lecture, 2 hrs Lab).** Urban soil and water conservation deals with management of soil and water degradation processes (e.g. soil erosion), soil loss prediction models and sustainable/conservation methods in the urban and sub-urban areas. Soil and water are the most critical natural resources that affect sustainability of agricultural, forest, recreational and disturbed urban soil ecosystems. These resources have great impact in the mitigation to climate change and on the quality of life in the urban environment.

**UFOR 545. ENVIRONMENTAL SOIL CHEMISTRY AND PROPERTIES (3 credit hours: 2 hrs lecture, 2 hrs lab).** Soil chemical reactions on plant growth, environmental aspects of soil chemical reactions, fate of pollutants in the soil and remediation of contaminated soils.

**UFOR 553. ADVANCED URBAN AND COMMUNITY FOREST MANAGEMENT (3 credit hours: 3 hrs lecture).** Application of systems and principles of management of urban ecosystems; issues and methodology for integrating biological, social, legal, and economic aspects of ecosystem studies.

**UFOR 555. RESTORATION ECOLOGY (3 credit hours: 2 hrs lecture, 2 hrs lab).** Application of ecological knowledge in repairing and restoring damaged ecosystems. Major emphasis will be

placed on urban ecosystems.

**UFOR 559. METHODS IN ENVIRONMENTAL IMPACT ASSESSMENT (3 credit hours: 2 hrs lecture, 2 hrs lab).** Principles of environmental analysis, preparation of environmental impact statement, sampling of aquatic and terrestrial plants and animals and ecological issues in urban ecosystems in the South.

**UFOR 560. URBAN FOREST ECONOMICS (3 credit hours: 3 hour lecture).** Principles and methods of urban economics. Analysis of the role of urban forests on investment, commercial, industrial, and business opportunities in urban areas. (To be jointly offered by Agricultural Economics and Urban Forestry faculty.)

**UFOR 561. TREE BIOMECHANICS (3 credit hours: 2 hrs lecture, 2 hrs lab).** Principles of tree stress physiology. Major emphasis will be placed on factors attributing to the structural failure of the tree resulting from environmental manifestations. Tree failure analysis and other diagnostic measures with reference to tree forms will be covered.

**UFOR 562. APPLICATION OF INTEGRATED GIS/GPS IN URBAN FORESTRY (3 credit hours: 1 hour lecture, 4 hrs lab).** A survey of current research and issues in GIS, GPS and related fields. Analysis of the practical applications of integrated GIS/GPS. Practice in the use of GIS/GPS systems in the urban forest environment.

**UFOR 570. URBAN WATER RESOURCE MANAGEMENT (4 credit hours: 2 hrs lecture, 2 hrs lab).** Qualitative understanding of hydrological processes in the urban areas and methods for quantifying hydrologic parameters and processes associated with these environmental systems. (Prerequisite: UFOR 271 or consent of the instructor.)

**UFOR 598. CAPSTONE PROJECT (3 credit hours: Individual time. Pass/Fail grade).** A special project of the student's interest in urban forestry and related areas to be pursued as a partial requirement toward the M.S. degree by non-thesis majors.

**UFOR 599. SUPERVISED RESEARCH (3-12 credit hours: Pass/Fail grade).** Research, under the guidance of the graduate faculty member, for Master's students before registration of thesis proposal and/or registration for Master's thesis. Designed for students who have been accepted into the master's degree program and have satisfied the basic skill and knowledge requirements in urban forestry. Not open to students who have not been admitted into and/or enrolled in the graduate degree program.

**UFOR 600. THESIS RESEARCH (1-9 credit hours: Pass/Fail grade).** Research for and writing of Master's thesis.

# URBAN *and* FORESTRY NATURAL RESOURCES



**College of Agricultural, Family and  
Consumer Sciences**  
**Doctor of Philosophy in Urban Forestry**

## College of Agricultural, Family and Consumer Sciences

Interim Chancellor-Dean Dr. C. Ruben Walker

### Department of Urban Forestry

### Doctor of Philosophy in Urban Forestry (Phd/UFOR)

*Interim Program Director: Dr. Qi, Yadong*

Department of Urban Forestry and Natural Resources  
Fisher Hall Room 102

College of Agricultural, Family and Consumer Science  
Southern University and A&M College

Baton Rouge, LA 70813

Phone: (225) 771-3535 or 3427

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E-mail:Yadong\_Qi@subr.edu

### FACULTY

#### **Professor:**

**Abdollahi, Kamran K.**

Ph.D., Forestry/Ecophysiology  
S. F. Austin State University

**Ghebreiyesus, Yemane**

Ph.D., Soil Sciences  
University of Missouri

**Ning, Zhu H.**

Ph.D., Forestry/Tree Physiology & Anatomy  
S.F. Austin State University

**Qi, Yadong**

Ph.D., Forestry/Ecology & Silviculture  
S.F. Austin State University

#### **Associate Professor:**

**Twumasi, Yaw**

Ph.D., Plant & Soil Science/GIS & Remote Sensing  
Alabama A&M University

#### **Assistant Professor:**

**Chappell, Christopher**

Ph.D., Urban Forestry/Management  
Southern University and A&M College

**Ferchaud, Vanessa**

Ph.D., Urban Forestry/Ecology & Tree Biology  
Southern University and A&M College

**Manrique, Veronica**

Ph.D., Entomology/Invasive Species & Biological Control  
University of Florida

### Introduction

The Urban Forestry PhD Graduate Program was established in the fall of 2004. The available areas of concentration include Urban Forest Science (Eco- physiology, Tree Physiology/Anatomy, Urban Forest Health and Risk Assessment, Urban Forest Ecology, Urban Forest Soil, Urban Forest & Climate Change, Biotechnology and Nanotechnology, Urban Forest Sustainability and Bioenergy, and Urban Forest Management (Arboriculture, Urban Forest Management, Water Resource Management/GIS). The nature of the program is essentially defined by an advanced training in the theory and practice of urban forestry and the conduct of research in issues and concerns in urban forestry and urban natural resources. The objectives of the proposed degree program are: a) to offer the targeted students opportunities to acquire a broad-based knowledge of several areas in urban forestry and natural resources that impact the State of Louisiana and the nation, and b) to enable the graduates of the program to be highly marketable and competitive in the field. The overall goal of the program is to produce high caliber scientists in urban forestry and natural resources. The program will uniquely address the increasing concerns on (a) the decline of the quality and quantity of our urban and community forests and natural resources, (b) the preservation, restoration and enhancement of environmental quality, and (c) the long-term effects on the urban infrastructure. In addition, the program will train future professionals in urban forestry to effect planning, management, and policy of urban societies and to provide a healthier urban environment to live in.

The uniqueness of the program will address urban forestry problems and emerging issues in urban forestry and natural resources. The Ph.D. training program will effectively prepare students for a variety of job opportunities in State and Federal agencies, industries, and academia.

### Special Requirements:

In addition to the general requirements specified by the Southern University Graduate School, the Urban Forestry Ph.D. Program has the following special requirements:

#### 1. Admission requirements:

A master's degree in urban forestry, forestry, renewable and natural resources, plant and soil sciences, biology, chemistry, natural and environmental sciences, and other related areas are required for all applicants.

Must have a minimum overall grade point average (G.P.A.) of 3.0 on a 4.0 scale for all master level graduate work completed.

Must take the Graduate Record Examination (GRE). A minimal score of 1370 calculated from the GPA multiplied by 200 and added to the GRE combined verbal and quantitative scores (based on the prior scales of verbal 800/quantitative 800).

Must submit a Curriculum vitae/Resume

Must submit a concise essay on research background and career goals.

Three written letters of recommendation, two of which must be from advisors in student major field.

Applicants with master degrees in other disciplines may be admitted with conditions. The student must remove conditional status by earning at least a B (3.0) average in the first nine hours of graduate courses; failure to achieve this average will result in withdrawal from the program.



Students without the backgrounds mentioned above are required to take 9 to 12 hours of remedial courses from the following listed urban forestry courses plus any other urban forestry core courses as deemed necessary by the major professor and graduate committee.

Intro to Urban Forestry (UFOR 151)

Soil and Environment (UFOR 251)

Dendrology (UFOR278)

Urban Forest Ecology (UFOR 391)

Urban Forestry Management (UFOR 400)

Tree Physiology (UFOR 438)

## 2. Period of Continuous (Concentrated Study) Registration:

A student enrolled in the doctoral program must complete a minimum of a full year of residency as a full-time student on the Baton Rouge campus of Southern University. A student may satisfy the residency requirement by continuous enrollment for a total of 18 semester credit hours, during one academic year (including enrollment in the "Maymester" intersession (if available) and summer sessions).

**3. Plan of Study:** A plan of study will be developed for every student indicating the set of courses to be taken, credits to be obtained, and dissertation to be completed. An individual student's plan of study may vary with the selected option, with the academic level of the student at the time of admission, and the quality of the previous program completed. A student holding a master's degree in a natural resource discipline, or holding a master's equivalent, will follow the standard curriculum described above. This assumes that the master's degree already held is current and sufficiently comprehensive; if not, some additional courses may be required. Several elective courses are available to the students while they are taking the required core courses. These are discipline specific graduate courses which fit within a given option. In addition to the common core courses, detailed course requirements based on the candidate's academic background, professional experience and career goals, will be specified in the plan of study.

**4. Research Proficiency:** Students will develop research proficiency in courses such as advanced statistics and experimental design, quantitative research methods, and advances in research methods in urban forestry, and dissertation research. Research topics for individual students will be selected based on the candidate's academic background, professional experience and career goals. It should be noted that the research requirements are essential for this program. It is expected that the dissertation research will lead to publications in refereed journals. Research and subsequent publications are central to the positive impact that this program and its graduates are to have on the University educational mission in particular and the American educational enterprise in general.

**5. General Qualifying Examination:** A qualifying examination is required of all candidates for the degree of Doctor of Philosophy. It consists of written and oral testing by the student supervisory committee in the student's major and minor fields. The student must complete a minimum of 80% of the required course work for their approved Plan of Study before submitting a request to schedule the qualifying exam.

The Department has developed a specific guideline for conducting the written and oral portions of the qualifying exam. It is the student's responsibility to obtain the guideline from the Department and to follow it under the guidance of the supervisor committee.

The primary purpose of the qualifying exam is to assess the students

understanding of the broad body of knowledge of urban forestry and natural resources. The exam also affords the advisory committee an opportunity to review the students proposed research and understanding of research methods and literatures in the chosen field. If this examination reveals deficiencies in any areas, the advisory committee may recommend remedial work, re-examination, or discontinuation of doctoral study. The student must be registered in school in the term in which the qualifying examination is given.

The examination, prepared and evaluated by the full supervisory committee of the major and minor departments (if a minor is chosen), should have both a written and oral component covering the major subjects (and minor subjects where applicable). At least five faculty members, including the supervisory committee, must be present with the student at the oral portion. If a student fails the qualifying examination, the Graduate School must be notified immediately. The supervisory committee has the responsibility at this time of deciding whether the student is qualified to continue work toward a Ph.D. degree. A re-examination may be requested, but it must be recommended by the supervisory committee and approved by the dean of the Graduate School. At least one semester of additional preparation is considered essential before re-examination. A student may request a maximum of two reexaminations.

Successful completion of the general examination is required before a student becomes a candidate for the degree. After candidacy has been achieved a student has five calendar years to complete all requirements for the doctoral degree. After the examination, the major advisor shall communicate the results to the candidate as soon as a final decision can be made and immediately send the official report on the examination bearing the signature of each member of the supervisory committee to the Graduate School. There must be a minimum of two semesters between the oral portion of the qualifying examination and the date of the degree.

**6. Admission to Candidacy:** A graduate student does not become a candidate for the Ph.D. degree until granted formal admission to candidacy. Such admission requires the approval of the student's supervisory committee, the department chairperson, the college dean, and the dean of the Graduate School. The approval must be based on (1) the academic record of the student, (2) the opinion of the supervisory committee concerning overall fitness for candidacy, (3) an approved dissertation topic, and (4) passing a qualifying examination as described above. Application for admission to candidacy should be made as soon as the qualifying examination has been passed and the student's supervisory committee has approved a dissertation topic. A student may register for Research for Dissertation in the term when he or she is admitted to candidacy for a doctoral degree.

**7. Supervisory Committee:** Supervisory committees are nominated by the department chairperson and appointed by the dean of the Graduate School.

The supervisory committee for a candidate for the doctoral degree shall consist of no fewer than four members selected from the Graduate Faculty. At least two members, including the chairperson, will be from the department recommending the degree, and at least one member will be drawn from a different educational discipline.

The committee should be appointed as soon as possible after the student has begun doctoral work and in general no later than the end of the second semester of equivalent full-time study. The dean of the Graduate School is an ex-officio member of all supervisory committees.

Duties of the supervisory committee are as follows:

✓ To inform the student of all regulations governing the degree



sought. It should be noted, however, that this does not absolve the student from the responsibility of informing himself/herself concerning these regulations.

- ✓ To meet immediately after appointment to review the qualifications of the student and to discuss and approve a program of study.
- ✓ To meet to discuss and approve the proposed dissertation project and the plans for carrying it out.
- ✓ To give the student a yearly letter of evaluation in addition to the Southern University grades awarded for the research.
- ✓ The chair should write this letter after consultation with the supervisory committee.
- ✓ To conduct the qualifying examination or, in those cases where the examination is administered by the department, to take part in it. In either event, no fewer than five faculty members shall be present with the student for the oral portion of the examination. This examination must be given on campus.
- ✓ To meet when the work on the dissertation is at least one half completed to review procedures, progress, and expected results and to make suggestions for completion
- ✓ To meet on campus when the dissertation is completed and conduct the final oral examination (defense) to assure that the dissertation is a piece of original research and a contribution to knowledge.

No fewer than five faculty members, including all members of the supervisory committee shall be present with the candidate for this examination. However, only members of the official supervisory committee may sign the dissertation and they must approve the dissertation unanimously.

The Graduate School desires each supervisory committee to function as a University committee, as contrasted with a departmental committee, in order to bring University-wide standards to bear upon the various doctoral degrees.

A co-chairperson may be appointed to serve on a student committee and to serve as a chair in the absence of the chair person.

**8. Dissertation Proposal and Dissertation:** Every candidate for a doctoral degree is required to prepare and present a dissertation that shows independent investigation and is acceptable in form and content to the supervisory committee and to the Graduate School. The dissertation must be written in English.

Before preparation of the dissertation is well underway, the candidate must develop a dissertation proposal and file the request for proposal defense using the appropriate form from the Graduate School. The student must defend the proposal in front of the supervisor committee.

When the dissertation proposal has been completed and signed by the student, the members of the supervisory committee must approve it. The proposal then is submitted to the head of the department or program to which the student was admitted who then submits it to the Graduate School for approval.

The candidate shall file a dissertation proposal of the proposed research, using the special form obtained from the Graduate School and follow the guidelines. Failure to file the proposal early may result in wasted effort on a dissertation if changes are required in the project.

If human or animal subjects are involved in the proposed research, the major advisor certifies by signing the dissertation proposal form

that all required institutional (and external approvals where appropriate), have already been obtained and that documentary evidence of these approvals can be produced by the major advisor upon request.

The dissertation proposal must be approved by the doctoral supervisory committee at least one semester prior to the dissertation defense.

**9. Dissertation Defense:** Final dissertation defense must be in accordance with the rules and regulation of the Graduate School of Southern University and A&M College, Baton Rouge, LA.

Permission for holding the dissertation defense will be granted by the dean of the Graduate School upon recommendation of the student's advisor and doctoral committee.

Announcement of the defense will be made in the appropriate university news media and communicated to appropriate members of the university community through the Office of Graduate Studies.

The oral defense is open to the public; the university community and all interested individuals are encouraged to attend.

The defense is chaired by the Dissertation Committee Chair who, acting as moderator, rules on questions of procedure and protocol that may arise during the defense. The overall goal is the public presentation and defense of the study.

The defense shall be oral and under the jurisdiction of the advisory committee. It shall deal mainly with the subject matter of the dissertation. The defense shall be held within the time period designated by the Graduate School.

An invitation to participate in the examination is issued by the advisory committee, although members of the faculty may attend. Five or more faculty members, including all members of the candidate's advisory committee, shall participate in the final examination unless written approval for a lesser number has been secured in advance from the dean of the Graduate School.

It is required that notification of the time and place of the examination be sent to the Graduate School no later than seven days prior to the examination.

The decision as to whether a student is successful or fails the defense rests solely with the supervising committee. Satisfactory performance on the examination and adherence to all Graduate School regulations outlined above complete the requirements for the degree.

The Graduate School may return work deemed poor quality. Immediately following the examination, the major advisor shall communicate the results to the student and send the official report on the examination to the Graduate School. While the Graduate School sets minimum requirements, it is important for students to realize that work toward this degree is not merely a matter of accumulating course credits or of satisfying other requirements.

The degree will be conferred only after the supervisory committee and the Graduate Faculty are convinced that the student has developed independence of judgment and mature scholarship in the chosen field.

An individual may not earn more than one Ph.D. degree in a single field of study at this institution.

**10. Time Limitations** (Statute of Limitations for Doctoral Degree): Requirements of all work for a doctoral degree must be completed within five calendar years after the qualifying examination, or this examination must be repeated. However, all doctoral work must be completed and the degree must be earned in no more than eight calendar years from the initial date of enrollment (registration) in a doctoral program, regardless of

the time of completion of the qualifying examination. At the time of graduation, the student must NOT have any courses applied toward the doctoral degree which exceed the statute of limitations (8 years for doctoral degree)

### Curriculum for the Ph.D. in Urban Forestry Degree Program

In addition to the general requirements of the Graduate School, the Ph.D. Degree in Urban Forestry requires at least three academic years of graduate study beyond the M.S. degree. A student must complete 66 credit hours of graduate work for credits, of which a minimum of 30 hours must be in required technical courses and seminar work in the Urban Forestry Program at Southern University and A&M College, 6 hours of electives, 24 hours of dissertation research and 6 hours of advanced research.

- Earn a minimum cumulative Grade Point Average of 3.0 on all graduate course work, and all course work applied specifically to the degree.
- Only two "C" grades are permissible towards a degree program and NO GRADE OF "D" COUNTS TOWARDS A DEGREE PROGRAM.
- The "C" grade must not be in the required courses.

**Table 1. Urban Forestry Ph.D. Curriculum/Full-Time Plan of Study**

#### Fall, Year1 Credits

UFOR 701 Urban Forestry and Arboricultural Research..... 3

UFOR 702 Advanced Statistics and Experimental Design..... 3

UFOR 704 Remote Sensing and Environmental Model Simulations in Urban Forestry..... 3

#### Spring, Year 1 Credits

UFOR 705 Seminar ..... 3

UFOR 706 Applied Urban Forest Ecology..... 3

UFOR 707 Urban Tree Stress Physiology..... 3

#### Summer, Year 1 Credits

UFOR 799 Advanced Research..... 6

#### Fall, Year 2 Credits

UFOR 708 Planning and Management of Urban Green Spaces 3

UFOR 712 Urban Plant Entomology..... 3

UFOR 722 Proposal Development and Grant Writing ..... 3

#### Spring, Year 2 Credits

UFOR 723 Urban Soil and Urban Trees ..... 3

UFOR Technical Electives ..... 6

#### Qualifying Exam (Written and Oral)

#### Admission to Candidacy

#### Summer, Year 2 Credits

UFOR 800 Dissertation Research ..... 6

#### Proposal Defense

#### Fall, Year3 Credits

UFOR 800 Dissertation Research..... 9

#### Spring, Year3

#### Credits

UFOR 800 Dissertation Research..... 9

#### Dissertation Defense and Dissertation

Technical electives toward the degree study must be selected from courses listed in the electives:

#### Technical electives:

UFOR 703 Louisiana Watershed Management Issues.....3

UFOR 709 Ecology of Urban Tree Roots..... 3

UFOR 710 Advanced Urban Ecosystem Studies .....3

UFOR 711 Ecology & Mgt of Soilborne Plant Pathogens... 3

UFOR 713 Urban Phyto-remediation..... 3

UFOR 717 Biogeochemistry..... 3

UFOR 718 Sustainable Urban-Wildland Interface..... 3

UFOR 719 Microscopy as a Research Tool..... 3

UFOR 720 Special Problems ..... 3

UFOR 721 Bioenergy & Natural Resources ..... 3

UFOR 735 Urban Soil Fertility and Fertility Mgmt..... 3

UFOR 738 Urban Plant Pathology ..... 3

#### COURSE DESCRIPTIONS

**UFOR 701. Urban Forestry and Arboricultural Research (3 credit hours).** An extensive research in urban forestry and arboriculture. Provides an understanding of the advanced arboricultural research within the context of urban forest ecosystem preservation and restoration. Particular emphasis is placed upon the areas of municipal arboriculture, commercial arboriculture and consulting arboriculture. Each area is explored in terms of advanced techniques utilized in research and development. The course follows the International Society of Arboriculture's (ISA) current research agenda.

**UFOR 702. Advanced Statistics and Experimental Design (3 credit hours).** A thorough and practical course in design and analysis of experiments for experimental workers and applied statisticians. SAS statistical software is used for analysis. Taken by graduate students from many fields. Previous knowledge of SAS not required but helpful. Knowledge of regression helpful. Topics include design fundamentals, completely randomized design; randomized complete blocks; latin square; multiclassification; factorial; nested factorial; incomplete block and fractional replications for 2n ; 3n ; 2m 3n, confounding; 12 lattice designs; general mixed factorials; split plot; analysis of variance in regression models; optimum design. Upon completion of this course, students will be able to explain the basic concepts underlying univariate statistical methods, to interpret the findings from quantitative research in urban forestry, and to conduct analyses of data sets using statistical methods. Students also will be able to use the statistics software programs to produce data analyses and statistical plots.

**UFOR 703. Louisiana Urban Watershed Management Issues (3 credit hours).** A qualitative understanding of watershed management in urban areas, advanced methods of quantifying hydrologic parameters and processes associated with these environmental systems.

**UFOR 704. Remote Sensing and Environmental Simulation in Urban Forestry (3 credit hours).** A qualitative understanding

of environmental remote sensing application urban areas, methodology and specific applications of model simulation of urban environmental systems.

**UFOR 705. Seminar (3 credit hours).** Coverage of various urban forestry research issues and trends and literature review and writing techniques for scientific publication in urban forestry. Emphasis is placed on strategies to effectively develop and disseminate scholarly research materials.

**UFOR 706. Applied Urban Forest Ecology (3 credit hours).** Application of ecological principles to urban forest analysis including modeling ecosystems, assessing ecological changes, measuring the urban forest effects on environment, exploiting biotic and abiotic variability, managing populations and pests, conserving communities, and establishing urban forest ecosystems.

**UFOR 707. Urban Tree Stress Physiology (3 credit hours).** Assessment of advance studies pertaining to the effects of environmental stresses on the whole tree ecological and physiological processes in urban environments. Subjects include the advanced ecological and physiological background, causes and consequences of environmental stresses, stress tolerance and mitigation.

**UFOR 708. Planning and Management of Urban Green Spaces (3 credit hours).** Addressing how to plan for, establish, and manage urban and community trees, forests, and other elements of nature in the urban ecosystem. Emphasis will be placed on addressing the management of tree populations and other green spaces. 3 credit hours.

**UFOR 709. Ecology of Urban Tree Roots (3 credit hours).** The study of root growth, form, and functions under environmental conditions. Subjects include root strategies used to meet essential functions of water and nutrient acquisition, and transport, storage and structural support under urban conditions.

**UFOR 710. Advanced Urban Ecosystem Studies (3 credit hours).** A qualitative understanding of Urban Forest Ecosystem Analysis, advanced methods of urban forest ecosystem assessment and technology and processes associated with the analysis. Fundamental concepts in understanding urban forest ecosystem assessment and quantifying ecological benefits and costs. This course is designed to train students in latest advances in urban forest ecosystem analysis and assessment. The students will be utilizing different urban forestry tools to accomplish many tasks leading to a complete urban forest ecosystem analysis. Special emphasis will be on the proper utilization of the i-Tree software for assessment purposes.

**UFOR 711. Ecology and Management of Soilborne Plant Pathogens (3 credit hours).** This advanced course will cover the ecology, disease diagnostic and management of plant pathogens affecting Louisiana environments. The ecological principles and concepts in integrated pest management will be discussed in relation to plant diseases. Students will learn about chemical and cultural practices, disease resistance, biological control, and legislation and regulations. Laboratory and field trips will provide hands-on activities during disease collection, diagnosis and management.

**UFOR 712. Urban Plant Entomology (3 credit hours).** This advanced course will cover the biology and ecology of insect pests of agriculture, urban and forest settings in Louisiana. The ecological principles and concepts in integrated pest management will be discussed in addition to management tactics including chemical, cultural, plant resistance, and biological control. Laboratory and field trips will provide hands-

on activities during insect collection, mounting and identification.

**UFOR 713. Urban Phyto-mediation (3 credit hours).** Comprehensive and up-to-date information on phytoremediation properties of vegetation, specifically urban forest trees and urban greening as an overall strategy to remediate damaged and contaminated urban sites. Remediation of urban ecosystems will be discussed using laboratory, field research sites and case studies.

**UFOR 717. Biogeochemistry (3 credit hours).** Biogeochemistry deals with nutrient cycles in biogeochemical, biochemical, and geochemical processes and their interactions. It investigates the nutrient dynamics and movements from individual living organisms to ecosystems to landscape. The class will provide students with ecosystem, regional and global perspectives on cycles of carbon, water, nitrogen, phosphorus, sulfur, and other elements, and the role of trees and forests in biogeochemistry and impacts of urbanization. The knowledge gained will help student develop systematic views in nature resource planning and management in urbanized society.

**UFOR 718. Sustainable Urban-Wildland Interface (3 credit hours).** This course provides an understanding of social and biological complexities of managing natural resources in urban-wildland interface, or wildland-urban interface (WUI). Particular emphasis is placed on realizing resource managers' potential roles in reducing risks to natural resources and human communities, while sustaining the benefits accruing to both as parts of functioning human ecosystems.

**UFOR 719. Microscopy as a Research Tool (3 credit hours).** Utilization of optical, digital and electron microscopy techniques in urban forestry and natural resource research.

**UFOR 720. Special Problems (3 credit hours).** Coverage of contemporary and emerging issues in the field of urban forestry and natural resources or specialized topics not represented in the main curriculum and often required to address in-depth issues to assist in research in urban forestry and natural resources.

**UFOR 721. Bioenergy and Urban Wood Waste (3 credit hours).** Fundamental concepts in understanding biofuel/bioenergy; renewable feedstocks, their production, availability and attributes for biofuel/bioenergy production; types of biomass-derived fuels and energy; urban wood-waste/urban forestry wood waste and municipal solid waste conversion to biofuel/bioenergy; thermochemical conversion of biomass to heat, power, and fuel; biochemical conversion of biomass to fuel; biodiesel production; environmental impacts of biofuel production; economics and life-cycle analysis of biofuel; value-added processing of biofuel residues; case studies on biofuel production.

**UFOR 722. Proposal Development & Grant Writing (3 credit hours).** The course is designed to offer students with an in-depth look at the principles in developing a proposal, to teach students how to write a proposal, to lead students in explore the funding opportunities, and to guide students in preparing a grant application.

**UFOR 723. Urban Soil & Urban Trees/Urban Soil Ecosystem/Fertility (3 credit hours).** This course will cover urban soil ecosystem with respect to its capabilities, limitations and sustainability to support urban vegetation. Emphasis will be placed on characterization and management of urban soils, assessment of fertility status and fertilizer application, storm water management including erosion prediction and control and soil water/air stress management (irrigation and drainage

systems) under various environmental conditions.

**UFOR 735. Urban Soil Fertility and Fertility Mgmt (3 credit hours).** This course will cover urban soil ecosystem with respect to soil chemical properties, nutrient assessment and fertilizer management to support urban trees and forests. Emphasis will be placed on assessment of fertility status and fertilizer application and management for environmentally sustainable urban land use. Soil Fertility is an applied science that deals with the sources and availability of essential nutrients for optimum plant growth.

**UFOR 738. Urban Plant Pathology (3 credit hours).** This course will cover the basic concepts and terminology in plant pathology, describe the major pathogen groups and abiotic factors causing plant diseases, and examines the ecological, physiological and genetic plant-pathogen interactions. Understanding the specific signs and symptoms caused by different plant diseases, in addition to disease cycles, proper diagnoses and management will provide students with important tools when confronted with real life problems in the field. Plant diseases of forest trees, ornamental and turfgrass will be discussed in depth using examples from Louisiana. The text books are not required but readings are recommended before each class.

**UFOR 799. Advanced Research (3 to 15 credit hours: Pass/Fail grade).** Urban forestry research at doctoral level, under the guidance of the doctoral supervisory committee chair, committee members, and course instructor.

**UFOR 800. Dissertation Research (3 to 9 credit hours: Pass/Fail grade).** Doctoral research and dissertation writing, under the guidance of the doctoral dissertation committee chair, committee members, and course instructor. The course is open to urban forestry PhD candidates only.





# College of Business MBA Program

## COLLEGE OF BUSINESS

**Dean: Dr. Donald R. Andrews**

### Master of Business Administration (MBA)

Website: [www.mba.subr.edu](http://www.mba.subr.edu)

**Director: Ashagre A. Yigletu, Professor**

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#### Faculty: Professors

**Andrews, Donald R., Professor**  
Ph.D., Economics  
Texas A&M University

**Ghebreyesus, Ghirmay S., Professor**  
Economics  
Ph.D., University of Strathclyde

**Jaros, Stephen J., Professor**  
Ph.D., Management  
University of South Florida

**Nwachukwu, Savior, Professor**  
Ph.D., Marketing  
University of Mississippi

**Ramaswamy, Mysore, Professor**  
Ph.D., Management Information Systems  
Louisiana State University

**No, Sung C., Professor**  
Ph.D., Economics  
Louisiana State University

**Mbarika, Victor, Professor**  
Ph.D., Management Information Systems  
Auburn University

**Kaliba, Aloyce, Professor**  
Ph.D., Economics  
Kansas University

#### Associate & Assistant Professors

**Kirk, George, Associate Professor**  
Ph.D., Marketing  
Texas Tech University

**Noguera, Jose Associate Professor**  
Ph.D., Management Information Systems  
Louisiana State University

**Thomas, Carlos, Associate Professor**  
Ph.D., Management Information Systems

Ph.D., Public Policy  
Louisiana State University  
Tennessee State University

**Omonuk, Ben Joseph, Associate Professor**  
Ph.D., Accounting  
Louisiana State University

**Kimberly K. Powell, Associate Professor**  
Ph.D., Urban Higher Education  
Jackson State University

**Dodor, Koffi, Assistant Professor**  
Ph.D., Accounting and Business  
Jackson State University

**Chigurupati, Vasantha, Assistant Professor**  
Ph.D. Finance  
University of Connecticut

**Rey, Melanie Powell, Assistant Professor**  
Ph.D., Special Education  
Southern University A & M College

**Jackson, Ronald, Adjunct Faculty**  
Ph.D., Human Resources Management

**Will Campbell, Adjunct Professor**  
MBA, Entrepreneurship

### Master of Business Administration (MBA)

Accredited by AACSB International, the College of Business at Southern University and A&M College, Baton Rouge is dedicated to the success of its students by providing a quality Master of Business Administration Program (MBA). The Program provides students with a broad knowledge by incorporating timely business topics into the curriculum that includes business communication and professional development, managerial accounting, managerial economics, financial management, quantitative analysis for business decision, management information systems, operations management, international business, marketing management, organizational behavior and leadership and business strategic decision making. Additionally, students are provided an opportunity to specialize in any of the seven field-based concentrations that include: entrepreneurship, human resources management, international business, supply chain management, accounting, finance and marketing. Foundation courses that are prerequisites to MBA courses are also offered to candidates without business education background. We are committed to preparing and graduating working professionals who have the ability to function as effective managers in organizations and also pursue entrepreneurial career opportunities. Our MBA graduates have the appropriate competencies to lead, plan and apply management knowledge and skills congruent with the needs of the rapidly changing national and global business environment.

#### Admission Requirements

**For admission to the Southern University MBA Program applicants must provide:**

- a. A Bachelor's degree from an accredited U.S. Institution or the equivalent from a foreign institution.
- b. Official Transcript showing all undergraduate and graduate work pursued, if any, including GPA.
- c. Cumulative minimum grade point average (GPA) of 2.5 or above on a scale of 4.00 for all undergraduate work and a 3.00 for a graduate work.
- d. Scores from the Test of English as a Foreign Language - TOEFL (for International Students from non-TOEFL exempt countries).
- e. A four-page double-spaced Career Objectives Essay on:
  - How will an MBA degree help you for your future career development and transformation?
  - What special attributes or life experiences do you have that may distinguish you from other MBA applicants.
  - What you intend to do or be after you complete the MBA program.
- f. Acceptable GMAT or GRE Scores not older than five (5) years.
- g. Current professional resume showing work and leadership experience.
- h. Three Letters of Recommendation.
- i. Completed Degree-seeking Application Form.

#### GMAT/GRE Waiver Policy:

As a general policy, all applicants must take the GMAT or GRE test and meet the required score. However, GMAT/GRE Exam waivers will be considered on a case-by-case reviews based on the following criteria:

- a. Hold a graduate degree (MS, JD, MD, Ph.D., or D.D.S.) from a U.S. accredited university or equivalent, OR
- b. Have 3.50 or above undergraduate GPA on a scale of 4.00 from a U.S. accredited university or equivalent and a minimum of three years professional and/or managerial work experience.
- c. Applicants who do not meet any of the above criteria are not eligible for a GMAT or GRE waiver.

#### Degree Requirement

The SU MBA program is comprised of 42 semester hours, including 11 core courses (33 credit hours) and 3 electives (9 semester hours). Typically, one course is the equivalent of three credit hours.

#### MBA Core Courses (33 Semester Hours)

MBAP 507	Business Communication and Professional Development	3
MBAP 511	Managerial Accounting	3
MBAP 512	Economics for Managers	3
MBAP 513	Quantitative Analysis for Decision Making	3
MBAP 514	Financial Management	3

MBAP 515	Management Information Systems	3
MBAP 516	Organizational Behavior and Leadership	3
MBAP 517	Operations Management	3
MBAP 518	International Business	3
MBAP 519	Marketing Management	3
MBAP 520	Business Strategic Decision Making	3

#### Concentrations and Electives

The elective curriculum of the SU MBA program is designed to provide students with an opportunity for depth, breadth, or both. Students choose from among 26 elective courses in seven subject areas to gain a more concentrated expertise in the industries, functions, and ideas that interest them most. A minimum of three electives (9 credit hours) comprise an area of concentration. However, students are allowed to take more electives in order to have multiple concentrations.

#### The SU MBA elective courses and concentrations – Only 9 Cr. Hrs.

Course Number	Course Title	Cr. Hrs.
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#### Concentration Entrepreneurship

MBAP 521	Small Business Accounting and Taxation	3
MBAP 522	Entrepreneurial Finance	3
MBAP 523	Entrepreneurship	3
MBAP 553	Strategic Sales Management	3

#### Human Resources Management

MBAP 526	Human Resource Management	3
MBAP 527	Employee Relations	3
MBAP 528	Staffing and Performance Management	3

#### International Business

MBAP 531	International Trade and Global Competition	3
MBAP 532	International Finance	3
MBAP 552	International Marketing	3

#### Supply Chain Management

MBAP 536	Logistics and Transportation Management	3
MBAP 537	Global Supply Chain Management	3
MBAP 538	Project Management	3
MBAP 539	Enterprise Resource Planning Systems	3

#### Accounting

MBAP 541	Financial Accounting	3
MBAP 542	Tax Planning and Research	3
MBAP 543	Advanced Auditing	3
MBAP 544	Special Topics in Accounting	3

#### Finance



MBAP 546	Investment and Portfolio Management	3
MBAP 547	Corporate Finance	3
MBAP 548	Financial Markets and Institutions	3
MBAP 532	International Finance	3

#### Marketing

MBAP 551	Brand Mgmt. & Product Development	3
MBAP 552	International Market	3
MBAP 553	Strategic Sales Management	3
MBAP 554	Marketing Research & Analytics	3

#### Free Electives

MBAP 595	Internship Experience	3
MBAP 596	Special Topic in Business	3

#### Program Length

The program completion time for the SU MBA, part-time MBA program designed for working professionals, is typically 20 to 24 months from the date of entry into the program. However, it varies from student to student depending on the individual's undergraduate major, course load per semester and other personal circumstances.

#### Class Length, times and Locations

All MBA courses meet once per week in the evening for 3 hours in T.T. Allain Hall and consist of a 15-week term during the fall and spring semesters. Generally, Summer classes meet twice per week for 3 hours and consist of eight-week term. Summer class alternative delivery schedules are offered as necessary.

#### Class Size

The SU MBA class sizes are small; they average 20 students and don't exceed 35, so students benefit from direct access to our faculty and close collaboration and interaction with classmates. The extensive professional experience of our students creates dynamic classroom discussions and promotes creative problem solving. Students tell us that the interaction and camaraderie with their classmates is one of the most valuable experiences in the SU MBA program.

#### Course Descriptions: Core Courses

**MBAP 507. Business Communication and Professional Development (3 Credit Hours).** Business professionals in this course study the principles MBAP, strategies, and techniques of effective written, oral, and digital business communication. Emphasis is placed on reviewing grammar and mechanics, as professionals create successful written messages including e-mails, memos, letters, reports, and résumés. Students learn productive techniques for business meetings, presentations, and interviews, as well as communicating professionally in an increasingly global, digital workplace. Furthermore, students will be exposed to professional workshops and executive speaker seminars focusing on the soft skills (i.e., "self-management skills" and "people skills") needed by business professionals in order to succeed in the global business environment

**MBAP 511. Managerial Accounting (3 Credit Hours).** This course in management accounting emphasis the broad process of business planning and control. The course is designed to assist managers and/or business owners in the three areas: plan operations, control activities, and make decisions.

**MBAP 512. Economics for Managers (3 Credit Hours).** This course is a combination of intermediate microeconomic theory, statistics and econometrics, and some business management. It emphasizes the use of micro-economic analysis as a practical tool for decision making in consumption, management and public policy. The economic behavior of individuals (consumers and producers) in various types of markets as well as market themselves will be studied with intensive use of graphs, computer/statistical application and algebraic equations

**MBAP 513 Quantitative Analysis for Decision Making (3 Credit Hours).** It is an MBA required course providing analytical skills and tools that help business managers interpret and disseminate business information for operational and business decisions. It will cover inter-discipline topics that are fundamentals in quantitative analysis of business decisions with applications being emphasized. Topics will include probability concepts, hypothesis testing, forecasting, and simple and multiple regression, linear programming models, project management, and simulation

**MBAP 514. Financial Management (3 Credit Hours).** The Course encompasses the analysis, design, implementation, and management of information systems. The course helps to control operations through transaction processing, and also support planning and decision-making activities in all functional areas of an organization. Successful information system professionals need excellent communication skills (verbal and written), technical expertise in computer hardware and software systems, knowledge of the application domain, and the ability to work well with people.

**MBAP 515 MANAGEMENT INFORMATION SYSTEMS (3 Credit Hours).** This course provides a comprehensive foundation to understand the role of information technology in the corporate world. The topics covered include information systems at different levels of management such as transaction processing systems, decision support systems, decision support systems and executive information systems.

**MBAP 516. Organizational Behavior and Leadership (3 Credit Hours).** This course is designed to provide masters-level business majors with an advanced understanding of the field of organization studies - i.e., organizational behavior and leadership. Emphasis is placed on the study of "classic" readings in these fields, so that the student can understand both the "state of the art" in theory, research, and practice, as well as gain insight into the historical development of ideas. Organizational behavior and leadership topics covered will include individual-level phenomena such as employee attitudes, motivation and behaviors, and meso-level phenomena including group and team dynamics.

**MBAP 517. Operations Management (3 Credit Hours).** This course examines contemporary issues in the area of production operations and supply chain management including integration of raw material procurement, inventory management, and finished goods delivery. The major topics covered are quality



management and control, capacity management, plant location, layout and design, production planning and scheduling, inventory management, service operations, and supply chain management strategies.

**MBAP 518. International Business (3 Credit Hours).** This course is designed to provide MBA students with an advanced overview of the fundamentals of international business management. The course focuses on providing the student with an introduction to important international management issues, including international trade policy, internal functions as they relate to international business activities, and the strategies of international business. Specifically, we look at management problems and practices of international businesses, including: organizational structure of multinational organizations, production and logistics, human resource management, marketing and financial management; cultural, political, legal, and other environmental constraints.

**MBAP 519. Marketing Management (3 Credit Hours).** Advanced study of marketing functions from the point of view of the marketing manager, with emphasis on formulation and implementation of marketing policies, including product, channels, promotions, and pricing strategies. Decision making in marketing is first and foremost a skill. Like most skills, it possesses tools and terminologies and is best learning through practice. The primary objective of this course is to develop the decision-making skills of students in marketing.

**MBAP 520. Business Strategic Decision Making (3 Credit Hours).** This is a capstone course for the graduate business curricula that involves the study of business policies and corporate strategy integrating the functions of all fields of business administration with emphasis on a top management viewpoint of the operations of the business enterprise. Prerequisite: **Prerequisite: Final semester and MBA Director's approval.**

#### Course Descriptions: Elective Courses (9 Semester Hours)

**MBAP 521 Small Business Accounting and Taxation (Credit 3).** This course is designed to give students the necessary expertise in small business accounting and taxation. The course will compare and contrast the accounting objectives in the Tax Code with generally accepted accounting principles (GAAP) in financial reporting. The course focuses on fundamental tax concepts, the mastery of which will enable students to incorporate tax factors into a small business investment decision.

**MBAP 522 Entrepreneurial Finance (3 Credit Hours).** This course examines the elements of entrepreneurial finance, focusing on the early stages of company development. It addresses key questions which challenge all entrepreneurs: How much money can and should be raised; when it should be raised and from whom; how to forecast and manage financial performance and cash-flow; and how to maximize the value in a growing entrepreneurial enterprise. The purpose of the class is to prepare students for these decisions, both as entrepreneurs and venture capitalists

**MBAP 523 Entrepreneurship (3 Credit Hours).** The course explores the complexities of creating and sustaining an entrepreneurial venture. It focusses on the impact of innovative

behavior and its implication to decision making. The primary goal of the course is on the behaviors involved in forming new enterprises: recognizing and evaluating opportunities; developing a network of support; building an organization; acquiring resources; identifying customers; estimating demand; selling, writing and presenting a business plan; and exploring the ethical issues entrepreneurs face. The course consists of case studies and discussion, in-class exercises, readings, guest speakers, and an outside project.

**MBAP 526 Human Resource Management (3 Credit Hours).** The course explores the various HR strategies developed for attracting, selecting and retaining key talent. The course provides students how the application of HR strategies can be affected by organizational structure, time sensitivity and available skill sets. In addition, students will learn about the most current methods for measuring employee performance using an HR Scorecard that focuses on specific talents and abilities, as well as effective interventional approaches for improving employee performance.

**MBAP 527 Employee Relations (3 Credit Hours).** The course provides a study of the laws relating to employment. Includes defining the employer-employee relationship; regulation of discriminatory practices in employment (Title VII, the 1964 Civil Rights Act, and other statutes); regulation of the employment environment; and testing and evaluation of employee job performance. In this course students are directed in an examination of laws and regulations that govern how employees or human resources interact with their employers. The most important regulatory agencies that oversee the rights of employees within the workplace will become an important topic of this course. The roles of the various legislative, judicial and administrative bodies will constitute a large part of this course. Course is required for MBA students seeking a concentration in human resources management.

**MBAP 528 STAFFING AND PERFORMANCE MANAGEMENT (3 Credit Hours).** This course examines contemporary issues in the management and integration of raw material procurement, inventory management, and finished goods delivery. The topics covered include planning and managing inventories, transportation, network design, and financial factors influencing supply chain decisions. Each area is analyzed in terms of organizational differences, operational processes, variations in information needs, and performance control mechanisms.

**MBAP 531 International Trade and Global Competitiveness (3 Credit Hours).** The Primary goal of this course is to provide students with a comprehensive, up-to date and clear exposition of globalization with the theories and tools of international economics: how free trade, free movement of factors of production and barriers to trade operate, and what their costs and benefits are. Other issues to be addressed include applications and recent policy developments in international trade relations.

**MBAP 532 International Finance (3 Credit Hours).** This course provides students with an advanced and in-depth understanding of financial management principles as they relate to the global capital markets. Focusing on the global financial and macroeconomic environment, topics such as foreign exchange markets, management of foreign exchange exposure,

international financial instruments, and cross-border investment are analyzed.

**MBAP 536 Logistics and Transportation Management (3 Credit Hours).** This course provides an understanding of the design and management of logistics and transportation operations in contemporary businesses. Particular emphasis is placed upon the areas of traffic management, carrier operations, carrier selection and contract negotiation, and warehousing. Each area is analyzed in terms of organizational differences, operational processes, variations in information needs, and performance control mechanisms.

**MBAP 537 Global Supply Chain Management (3 Credit Hours).** This course examines contemporary issues in the management and integration of raw material procurement, inventory management, and finished goods delivery. The topics covered include planning and managing inventories, transportation, network design, and financial factors influencing supply chain decisions. Each area is analyzed in terms of organizational differences, operational processes, variations in information needs, and performance control mechanisms.

**MBAP 538 Project Management (3 Credit Hours).** This course provides a good understanding of project management roles & environments, the project life cycle and various techniques of work planning, and control and evaluation to achieve project objectives. The tools currently available to project managers are discussed throughout this course.

**MBAP 539 Enterprise Resource Planning Systems (3 Credit Hours).** This course is designed to provide the students with a comprehensive understanding of Enterprise Resource Planning (ERP) systems, which are used to integrate an organization's operations and processes effectively and efficiently. Extensive hands-on experience with contemporary ERP software such as SAP R/3 is provided.

**MBAP 541 Financial Accounting ((3 Credit Hours).** This course is designed for MBA students who upon completion of study will not function as accountants but will apply financial literacy skills acquired to develop policies and make informed decisions that create value in the organization for the benefit of all stakeholders. The course covers a range of topics, which include: review of financial accounting principles and concepts; the accounting cycle, right from the journal, through ledgers, trial balance, adjustments, to preparation of financial statements in accordance with the generally accepted accounting principles (GAAP). Particular focus is given to analysis and interpretation of financial statements for policy development and decision making. The course also covers valuation and recording of assets, liabilities and equity securities.

**MBAP 542 Tax Planning and Research (3 Credit Hours).** This course provides a general introduction to taxation as it relates to business entities emphasizing methodology, research and planning. The course focus on the study of the overall tax structure of various business entities especially on Corporations, S-Corporations, Partnerships and other hybrid forms of business organizations.

**MBAP 543 Advanced Auditing ((3 Credit Hours).** This course is designed to provide a more in-depth study of auditing concepts, procedures and techniques. It prepares MBA students

for the responsibilities and challenges faced as an auditor in charge. The course format includes discussions on traditional audit topics as well as on emerging topics related to technology, environment, and quality controls monitoring. The course assumes baseline undergraduate knowledge of internal and external audit, although a course in either of the two will be a good prerequisite. In addition to classroom discussions, guest speakers that are subject matter experts from different practice areas may be invited to share their knowledge and experience on how auditors deal with practice issues in today's environment. This course is a graduate seminar, not a traditional lecture. Therefore, students will be expected to engage themselves fully as seminar participants.

**MBAP 544 Special Topics in Accounting (3 Credit Hours).** This course is designed to discuss important special topics in accounting not covered in other advanced accounting courses. The topics to discuss include: (1) accounting and corporate governance; (2) International Financial Reporting Standards (IFRS) and the differences between IFRS and the US GAAP; (3) forensic accounting and fraud examination, (4) oil and gas accounting, (5) banking and insurance industries accounting, and (6) healthcare industry accounting. It aims to prepare MBA students for challenges faced with special areas of accounting. The course format includes discussions, guest speaking, as well as presentations on the different special topics. The course assumes some baseline undergraduate accounting knowledge as prerequisite. In addition to classroom discussions and presentations, this class should be taught through guest speakers, who are subject matter experts in their different areas. This course is a graduate seminar, not a traditional lecture. Therefore, students will be expected to engage fully as seminar participants.

**MBAP 546 Investment and Portfolio Management (3 Credit Hours).** Characteristics of investments media, investment planning and programming, investment management, sources of information, security analysis, portfolio theory and other relevant topics. Computer software will be utilized.

**MBAP 547 Corporate Finance (Credit 3).** This course emphasizes corporate financial management. Covers financial analysis, working capital management, cost of capital, capital budgeting, valuation, and capital structure. Includes extensive use of financial models.

**MBAP 548 Financial Markets and Institutions ((3 Credit Hours).** The course focus on financial products and participants in modern financial markets. The products are financial assets whereas participants include investors, regulators, dealers, brokers and professional money managers. Major emphasis is placed on the reaction of participants in financial markets to 'economic' news and how the interaction of market participants through exchange affects the values of financial products traded in those markets. Study of the evolution of financial markets provides a historical perspective regarding problems which have been overcome in the past as well as potential problems which may arise in the future. The operations of the Federal Reserve and monetary policy are also examined. By studying financial markets, students gain an appreciation of the importance of our financial system and how its efficient operation relates to funds allocation, economic growth, and higher standards of living for the general public.

**MBAP 551 Brand Mgmt. & Product Development (3 Credit Hours).** This course is designed to familiarize MBA students with the tools and techniques associated with analyzing market opportunities and then focus on designing, testing, and introducing new products and services. The branding component of this course addresses planning and evaluating brand strategies, how to build and maintain brand equity, how marketing mix variables can affect brand equity over time, and important branding decisions faced by an organization, particularly the role of brands in strategy. This course is taught in seminar style with heavy emphasis on the case method.

**MBAP 551 Brand Mgmt. & Product Development (3 Credit Hours).** This course is designed to familiarize MBA students with the tools and techniques associated with analyzing market opportunities and then focus on designing, testing, and introducing new products and services. The branding component of this course addresses planning and evaluating brand strategies, how to build and maintain brand equity, how marketing mix variables can affect brand equity over time, and important branding decisions faced by an organization, particularly the role of brands in strategy. This course is taught in seminar style with heavy emphasis on the case method.

**MBAP 552 International Market (3 Credit Hours).** This course examines marketing practices in a global environment, which includes linking the various, economic, social, political, and legal dimensions of the world to the marketplace. Special emphasis is placed on the impact of cultural values and political systems on how business processes are conducted, how business transactions occur, and how to develop global marketing strategies. This course is taught in seminar style with heavy emphasis on the case method and the development of global entrepreneurs and intrapreneurs.

**MBAP 553 Strategic Sales Management (3 Credit Hours).** This course provides students with the knowledge and skills necessary to effectively analyze problems and make decisions related to sales force management and managing the overall customer relationship effort in an organization. Emphasis is placed on identifying the types of decisions necessary and evaluating different approaches for making decisions that lead to a more customer-centric business model. The course is designed to reflect current best practices in managing the sales initiative and customer relationships. Leadership, innovation, and technology are thematic topics. The course also includes professional development and incorporates oral, written, and analytical skills, which are critical in marketing and leadership in general.

**MBAP 554 Marketing Research & Analytics (3 Credit Hours).** This course aims to equip MBA students with the methodology and applications of multivariate data analysis. Traditionally, courses of this nature focus on mathematical/matrix techniques used to derive the outputs. This will not be a math course but rather a course geared around making use of established statistical techniques/software. As such this course will focus on application of various software packages, data requirements, appropriateness of techniques, and analysis of output, drawing inferences and developing managerial recommendations based on data analysis.

**MBAP 595 Internship Experience (3 Credit Hours).** The Internship/COOP Experience – MBA 595 is an experiential

learning component of the SU MBA Program that provides students a medium where materials learned in the classroom are applied in a tangible situation. Students work for a semester or two in medium or big size businesses, manufacturing companies, and governmental agencies or non-profit and/or service organizations in order to be exposed to real business problems and learn how to analyze, solve actual and current problems facing the organization. Prerequisite: MBA Director's approval.

**MBAP 596 Special Topic in Business ((3 Credit Hours).** Special Topics in Business explore an area of interest to the student that is current and builds upon an existing course in the functional areas of management, finance, marketing, accounting, or economics. Topics of offerings may include, but are not limited to: e-commerce, entrepreneurship, emerging markets, information systems, leadership, investments, project management, global finance, global competitiveness and international market. Prerequisite: MBA Director's approval.



## **Nelson Mandela College of Government and Social Sciences**



**“Education is the most powerful weapon which you can use to change the world.”**

–Nelson Mandela (1918-2013)





**Master of Science in Criminal Justice (MS/CRJU)**  
**Executive Master of Science in Criminal Justice**  
**(MS/EMCJ)-Online**

## NELSON MANDELA COLLEGE OF GOVERNMENT AND SOCIAL SCIENCES

Dean: Damien Ejigiri, Ph.D

### Master of Science in Criminal Justice (MS/CRJU)

### Executive Master of Science in Criminal Justice (MS/EMCJ)-Online

**Chair/Professor: Dr. Anadi, Allison**

419B Higgins Hall  
Baton Rouge, LA 70813  
Tel.: (225) 771 0033  
Fax: (225)771 0031

#### FACULTY

##### **ADDISON, STEPHONE J.D.**

Juris Doctorate  
M.A. Criminal Justice, Law  
Specialization: Law& Criminal Justice

##### **BEARD, ORSCINI Ph. D.**

Ph. D. Public Policy  
M.A. Criminal Justice  
Specialization- Law, Criminal Justice, Ethics

##### **KING, CRAIG HUNTER J.D.**

Juris Doctorate  
M.A. Criminal Justice  
Specialization: Constitutional law, Criminal Law, Domestic  
Violence and Abuse, Criminal and Civil investigation,  
Corrections, Homeland Security, Criminal& Civil Litigation,  
Courts and Procedure

#### ADJUNCT FACULTY

##### **JOHNSON, DON R. Ph. D.**

Ph. D. Criminal Justice  
Specialization: Judicial System

##### **WILLIAMS, CHRISTOPHER Ed. D.**

Ed. D. Educational Administration & Policing  
M.A. Criminal Justice  
Specialization: Educational Administration & Policing

##### **HART, JOHN (ABD)**

ABD Public Policy  
M.A. Criminal Justice  
Specialization: Case Prep, Crime Scene, Interview and  
Interrogation, Homeland Security, Policing, Law Enforcement,  
Police Administration, Probation, Public Administration

##### **TAYLOR-JOHNSON, PAM J.D.**

Juris Doctorate  
Specialization: Court Administration, Juvenile System

##### **ZANDERS LEANDER (ABD)**

ABD Criminal Justice  
M.A. Criminal Justice  
Specialization: Retail Security, corporate security

#### PROGRAM PURPOSE

The Criminal Justice Master's Program at SUBR offers a Master's degree in Criminal Justice. The Master's Degree is a two-year program designed to develop, enhance and advance professionals and scholars in the Criminal Justice field. The Program targets students interested in the criminal justice system who have a committed interest in enhancing their professional and management skills as well as in advancing their education.

The program is designed to serve the following students: Those who want to enter into the criminal justice professions.

Those employed in the criminal justice agency who wish to broaden their perspective as well as to advance in the system.

Those who would like to teach at the college level. Those who would like to continue their education in a doctoral program in criminal justice or related field. Those who wish to use the degree as further preparation to entering Law School.

#### PROGRAM OBJECTIVES

The Criminal Justice Master's Program is designed: (a) to provide students with advanced knowledge, research, and analytical skills that should contribute to their educational and professional development and (b) to provide the students the theoretical knowledge, professional, leadership, and management skills that should enable them to function effectively in the criminal justice agencies, such as the police, prisons, juvenile justice, probation, private security, etc.

#### PROGRAM REQUIREMENTS

Students must take the required core courses (18 hours), the concentration courses (12 hours) and elective courses (6 hours) or Thesis (6 hours). A total of thirty-six (36) credit hours of graduate work are required for graduation. Students who choose the Non-Thesis Option must also complete a Capstone Project.

#### REQUIREMENTS FOR ADMISSION

To be considered for admission into the Criminal Justice Master's Program, applicants must meet the following criteria:

1. Admission into Graduate School;
2. Baccalaureate degree from an accredited institution of higher learning;
3. Minimum G.P.A. of 2.70;
4. GRE score (within the last 5 years);
5. Three letters of recommendation from academic sources (professors, deans, etc.);
6. A typed double spaced personal essay not more than 1,000 words, and
7. A TOEFL score for international students.

#### MASTER OF SCIENCE DEGREE IN CRIMINAL JUSTICE

The Criminal Justice Master's Degree Program has two tracks; (a) The Thesis Option and (b) The Non-Thesis Option. Thesis option students are required to complete 18 hours core, 12 hours concentration and 6 hours thesis. Non-Thesis option

students are required to complete 18 hours core, 12 hours concentration, 6 hours of electives and a Capstone Project.

## PROGRAM CURRICULUM

### Core Courses (18 semester hours)

CRJU 510	Criminal Justice Systems.....	3 hours
CRJU 511	Criminal Justice Theory, Policy & Practice	3 hours
CRJU 512	Criminology.....	3 hours
CRJU 513	Legal & Ethical Issues in Criminal Justice	3 hours
PADM 511	Basic Statistics .....	3 hours
PADM 512	Research Methods (Applied Statistics).....	3 hours

### Concentration Options

*Students will choose one of the following concentrations:*

#### Criminal Investigation Concentration (12 semester hours)

CRJU 520	Advance Crime Scene Investigation.....	3 hours
CRJU 521	Advance Interviews & Interrogation .....	3 hours
CRJU 522	Crime Scene Analysis & Reconstruction...	3 hours
CRJU 523	Case Preparation & Testifying .....	3 hours

#### Law Enforcement Concentration (12 semester hours)

CRJU 530	Advance Police Administration .....	3 hours
CRJU 531	Community Policing.....	3 hours
CRJU 543	Human Resource Management in Corrections and Law Enforcement.....	3 hours
CRJU 533	Constitutional & Criminal Law.....	3 hours

#### Corrections Concentration (12 semester hours)

CRJU 540	Advance Seminar in Correction .....	3 hours
CRJU 541	Community-Based Corrections: Probation, Parole, etc. ....	3 hours
CRJU 542	Correctional Administration.....	3 hours
CRJU 543	Human Resource Management in Corrections and Law Enforcement.....	3 hours

#### Public Policy Concentration (12 semester hours)

PADM 515	Public Policy in Criminal Justice Organizations .....	3 hours
PADM 540	Methods of Public Policy Analysis.....	3 hours
PADM 541	Management Decision Models .....	3 hours
PADM 544	Program Evaluation .....	3 hours

CRJU 598	Capstone Project .....	0 hours
CRJU 600	Thesis .....	6 hours

### Electives (6 hours) or

### Thesis (6 hours)

## ONLINE EXECUTIVE MASTER IN CRIMINAL JUSTICE (EMCJ)

- 1 YEAR/ 36 CREDIT HOURS
- Offered online only

### Admissions Requirement

- Complete Admissions Application
- Official Transcript(s)
- Application Fee (Waived)
- GRE Score (Waived)\*
- 6 credit hours waived for Criminal Justice Agency-Academy Completion. (Certificate of completion is required)

\*Waivers are subject to Department discretion

### HOW TO APPLY

1. Visit [www.subr.edu](http://www.subr.edu) and click on the Apple Now tab.
2. Fill out Online Admissions Application
3. Send any additional required documents to:

### GRADUATE ADMISSIONS

Southern University and A&M College  
The Graduate School  
P.O. Box 9860  
Baton Rouge, La 70813

## EXECUTIVE MASTERS IN CRIMINAL JUSTICE (EMCJ)

### PLAN OF STUDY

#### Core Courses

EMCJ 510	Criminal Justice Systems .....	3 hours
EMCJ 511	C.J. Administration: Theory, Policy&Pract ...	3 hours
EMCJ 512	Criminology .....	3 hours
EMCJ 513	Legal & Ethical issues in Criminal Justice .....	3 hours
EMCJ 515	Research Methods in Criminal Justice .....	3 hours
EMCJ 542	Correctional Administration .....	3 hours
EMCJ 543	Human Resource Management .....	3 hours
EMCJ 530	Advanced Police Administration .....	3 hours
EMCJ 533	Constitutional and Criminal Law .....	3 hours
EMCJ 521	Advanced Interview and Interrogation .....	3 hours

#### Electives\*

_____	3 hours
_____	3 hours

\*Elective selection may vary

## GRADUATION REQUIREMENTS

The M.S. Degree in Criminal Justice is awarded upon completion of 36 hours of study as stipulated in the coursework plan. Students must maintain a 3.0 G.P.A. during their program participation. In addition, the students must meet the following criteria:

1. Admission to a regular status;
2. All deficiencies removed;
3. Have earned at least a 3.00 overall G.P.A. on courses applied toward the degree with no more than two C grades;
4. Have an approved program of study on file and completed all core, concentration and elective classes on their program of study;
5. Complete an approved/signed thesis or capstone project.

## GRADUATE ASSISTANTSHIPS

The Department offers graduate assistantships for eligible students who show outstanding potential. These working assistantships are competitively awarded typically for an academic year and is based on availability of funds.

## COURSE DESCRIPTIONS IN CRIMINAL JUSTICE CRJU

### 510. CRIMINAL JUSTICE SYSTEMS (3 credit hours).

This course is designed to provide a foundation and overview of the criminal justice system and processes. It will focus on critical decisions with emphasis on contemporary issues, trends and controversies that pertain to policing, sentencing, and corrections.

**Course Emphasis:** This course will examine the meaning of crime and criminal behavior, and the administration of justice. Emphasis is on police and police operations, prosecuting attorneys, defense attorneys, and judges. The pre-trial processes, the Court, trial and post-trial processes, sentencing, corrections and juvenile justice issues will also be examined.

**CRJU 511 C.J. ADMINISTRATION: THEORY, POLICY& PRACTICE (3 credit hours).** An advanced course in justice administration designed to provide an overview of the problems faced by managers of justice-related agencies, including the principles of police, courts, and corrections

**Course Emphasis:** This is an advance course in justice administration designed to examine all the administrative problems and factors that span the entire criminal justice system, primarily police, court, and correctional agencies. This is a course that emphasizes, among other things, organizing (for technological innovation), staffing

(personnel administration, the constitutional rights and responsibilities of employees) and budgeting (actually the broader area of financial administration).

**CRJU 512. CRIMINOLOGY (3 credit hours).** This course involves an advance study of the nature and score of delinquency and crime problems, surveys the available theoretical formulations concerning the causes of criminal behavior, and the policy implications for the Criminal Justice System. Students will also be exposed to the myths relating to crime and Criminal Justice. A special emphasis will be placed on the role of race, class, culture, and gender differences, as they relate to the Criminal Justice Systems response to crime in the community

**CRJU 513. LEGAL& ETHICAL ISSUES IN CRIMINAL JUSTICE (3 credit hours).** This course is designed to examine the basic legal, moral, and ethical issues in policing, prosecution, sentencing, and corrections. Students also will have the opportunity to examine the legal and ethical issues involved in criminal justice research.

**Course Emphasis:** This course aims to provide genuine understanding of course content, the development of key concepts and the ability of the students to think critically about the legal and ethical issues, problems, and concerns that face the criminal justice agencies-police, courts, corrections, and criminal justice researchers.

### CRJU 520. ADVANCE CRIME SCENE INVESTIGATION (3 credit hours).

The course will focus on the in-depth study of crime scene procedures including recognition, protection, documentation, and collection of physical evidence, scene documentation, scene search procedures, and reconstruction from evidence and scene patterns.

**Course Emphasis:** This is a didactic (Classroom lecture) and experiential (outdoors) course on the fundamental and advanced features of investigation, duties, and responsibilities of the detective, interviewing, interrogation, and information-gathering skills, crime scene analysis, collection, preservation, and testing of evidence, surveillance and undercover work, raid and sting operation, modus operandi, use of technology, types of evidence, and the science of criminalistics. Emphasis is placed on the interdisciplinary and forensic use of knowledge from the natural and social sciences, as applied to prevalent crimes such as homicide, burglary, arson, and sex offenses, but there is also some emphasis upon emerging forms of criminality such as computer crime and terrorism. There are a small number of lectures, and some instruction involves video, practical demonstrations, role-playing, laboratory experiments, and simulated crime scene analysis.



**CRJU 521. ADVANCED INTERVIEWS AND INTERROGATION (3 credit hours).** This course is designed to equip students with knowledge to expand their ability not only on how to extract accurate information from witnesses and victims, but also to discern the innocent from the guilty. This course will place emphasis on utilizing scientific methods, physical evidence and deductive reasoning to show how to accurately reconstruct a crime scene and determine the series of events surrounding the crime.

**Course Emphasis:** Emphasis will be on the classical and contemporary theories of definitions, correlates, and causes of crime, and the relationship of criminological theory to the Criminal Justice System policy. This course aims to further genuine understanding of the course content, the development of key concepts, and the ability to think critically about issues, problems, and concerns addressed by the theoretical explanation of crime and criminal behavior.

**CRJU 523. CASE PREPARATION AND TESTIFYING (3 credit hours).** This course is designed to develop a foundation in case preparation and courtroom testimony. Case preparation, court deposition, trial, rules, etc. will be reviewed.

**Course Emphasis:** This course will place emphasis on the functions of law enforcement officers as expert witness in court. Students will be presented with various sources of information and techniques in case preparation, demonstration of evidence, deposition, trial, guide to the law and the court and the challenges to the expert. Students will participate in hands on exercises designed to strengthen their knowledge and skills in case preparation and courtroom testimony.

**CRJU 530. ADVANCE POLICE ADMINISTRATION (3 credit hours).** This course examines basic management theories and procedures, and applies them to the administration of law enforcement agencies. It examines the functions of the police in the Criminal Justice System, the concepts and principles of police organizational structure, the basic law enforcement authority, and the concepts and principles of administration and management, with emphasis on the environment, change, conflict, strategy, and evolution.

**Course Emphasis:** The course is an in depth examination of modern police administration, management, and operations. While the focus is on current issues, the historical context of police culture is examined. Particular emphasis is placed on organization administration issues, police operations, police leadership, patrol operations and community policing, ethical issues in policing, auxiliary functions, human resources management, police training, proactive

policing, and the future of various police management issues. A special focus will be placed on ethical issues and on police drug enforcement.

The course is an examination of modern police human resource management. Particular emphasis is placed on human resource management theories, supervision of employees, employee motivation, professional development, and management of difficult employees. A special focus will also be placed on employee stress, wellness, and assistance programs.

**CRJU 533. CONSTITUTIONAL AND CRIMINAL LAW (3 credit hours).** This course is designed to examine the constitutional and criminal laws. It examines the functions of the courts in the interpretation and application of constitutional and criminal laws.

**Course Emphasis:** The course is an in-depth examination of the constitution and the guarantees secured to citizens. A special focus will be on citizens' civil rights and civil liberties. There will be a review of the constitutional amendments that impact the criminal justice system.

**CRJU 534. HOMELAND SECURITY (3 credit hours).** This course is designed to develop foundation and knowledge in homeland security. It will provide insight on the homeland security and emergency management.

**Course Emphasis:** This course will place emphasis on the major tactical strategies, planning and emergency management in homeland security. Students will be provided the opportunity to understand the history of terrorism, terrorist organizations and planned response to terrorism.

**CRJU 540. ADVANCED SEMINAR IN CORRECTIONS (3 credit hours).** This course will examine the purpose, theories, and practice of corrections. Topical issues will include: traditional and contemporary correctional practices, security operations, treatment issues, classification and assessment. In addition, issues that affect correctional administration and performance will be examined.

**Course Emphasis:** This course will emphasize correctional goals and objectives. The custody and treatment issues will be addressed, as well as the special issue like- aids in prison, special population, shock incarceration, after care program, and juvenile corrections.

**CRJU 541. COMMUNITY BASED CORRECTIONS (3 credit hours).** This course will examine the philosophy, concept, goals, and objectives of community-based corrections. Emphasis will be placed on probation, parole, halfway houses, house arrest and other community-based programs. An overview of treatment and

rehabilitative practices of community correction programs and the impact of technology on community corrections will also be examined.

**Course Emphasis:** This course will examine the types, goals, and functions of community-based corrections. Both diversion and pretrial release programs will be discussed. Other areas to be covered include probation, parole history, functions, supervision, programs and revocation. Economic sanctions such as fines, fees, restitution and community service also will be examined, in addition to theories of offender treatment and juvenile programs.

**CRJU 542. CORRECTIONAL ADMINISTRATION (3 credit hours).** This course is designed to develop a foundation in correctional administration and management. It will provide insight on management issues faced by correctional institutions.'

**Course Emphasis:** This course will place emphasis on the major organizational and management issues in corrections. Students will be provided the opportunity to understand the corrections organizational structure, the role of management, legal and administrative issues.

**CRJU 543. HUMAN RESOURCE MANAGEMENT IN CORRECTIONS AND LAW ENFORCEMENT (3 credit hours).** This course is designed to examine the basic human resource management theories and apply them to the administration of corrections institutions. It examines the functions of the correctional personnel in relation to employee hiring, training. Motivation, performance, appraisal, discipline, and labor relations

**Course Emphasis:** This course is an examination of corrections human resource



**Master of Public Administration (MPAD/PADM)  
Executive Master in Public Administration  
(PADM/EPDM)-Online**



## Nelson Mandela College of Government and Social Sciences

Dean: Damien Ejigiri, Ph.D.

### Public Policy Department

### Master of Public Administration (MPAD/PADM)

### Executive Master in Public Administration (PADM/EPDM)-Online

- Public Policy Analysis Health Care
- Administration Executive
- Generalist
- Finance
- Non-Profit Management

**Chair: Dr. Esedo, Kingsley E.**

Higgins Hall – Room 409  
Phone: (225) 771-6277  
E-Mail: kingsley\_esedo@subr.edu

### FACULTY

#### **Professors:**

**Esedo, Kingsley E.**  
Ph.D., Political Science  
Boston University

**Associate Professors:**  
*None*

#### **Assistant Professors:**

**Anadi, Sunday**  
Ph.D., Political Science  
University of Zurich  
Zurich, Switzerland

**Grover, Leslie T.**  
Ph.D., Policy Studies  
Clemson University

**Lukongo, Onyumba**  
Ph.D., Economics  
Mississippi State University

### Adjuncts

**Appeaning, Vladimir**  
Ph.D., Public Policy  
Southern University

**Greenslade, Vanessa**  
Ph.D., Public Policy  
Southern University

### Introduction

Southern University offers a program leading to the degree of Master of Public Administration (MPA) which is accredited by the National Association of Schools of Public Affairs and Administration.

### Mission Statement

The educational philosophy and mission of the Department of Public Administration is rooted in Southern University's environment and background. As a historically Black institution, Southern University is committed to offering educational opportunities to students who want to work tackle problems faced by your community, or can work towards solutions for global issues, such as HIV, poverty, and situations that plague underdeveloped nations. .otherwise may not be offered the opportunity to further their education. To this end, the Department's mission is tied to Southern University's commitment to enhance educational opportunities for graduate students in public management. The Department is guided by seven program objectives.

1. Provide knowledge about public management, primarily applied learning but also theoretical and conceptual understanding of the field;
2. Pursue research opportunities
3. Promote career opportunities and professional development;
4. Stress the development and enhancement of analytical skills; promote both qualitative and quantitative analysis;
5. Emphasize writing, oral, and organizational skills;
6. Promote community partnerships between community agencies and faculty and students; and
7. Enhance sensitivity to ethical issues and promote an atmosphere of the highest ethical standards.

### Internship Requirement

The internship provides the student with a work experience which gives him/her a realistic exposure to an organizational bureaucratic environment. This experience develops the student's awareness of the dynamics of the relationships among public employees, their clientele, and their administrative superiors. The Department encourages agencies to expose students to as many aspects of the workings and procedures of an agency as possible. Students are required to initiate internship placement with the Internship and Placement Director upon completion of eighteen (18) to twenty-four (24) credit hours of course work.

The successful completion on an internship requires an intern to work in an approved program for a minimum of twenty hours per week for fifteen weeks during the fall or spring semesters or a minimum of forty hours per week for eight weeks during the summer. This includes attending seminars conducted by the Internship and Placement Director. If appropriate, special Internship and Placement Director. A final grade will be



calculated by adding all of the points earned by the student, divided by the total possible points.

The Internship and Placement Director arranges with various agencies for internship opportunities, although a student may identify a position which must be approved by the Director. Occasionally, paid positions can be arranged. However, neither the Department nor the University is obligated to find a paid internship for any student. In addition, if a student turns down an internship offer made by the Department, it is the responsibility of that student to find an opening for himself/herself subject to the approval by the Director. Students shall be required to sign contracts with agencies providing internship opportunities.

## DEGREE REQUIREMENT

The requirements of the Department are detailed in the following sections: Admission Criteria, Program Guidelines, Degree Requirements, and Curriculum Related Requirements. This Departmental Handbook is provided to familiarize potential MPA students with these requirements. By virtue of his/ her status as a student in the MPA program, each student is expected to not only be familiar with these policies but comply with all requirements.

## ADMISSIONS REQUIREMENTS

All application for admission must be submitted and processed per the Graduate School's requirements and deadlines. To be considered for admission into the MPA program, applicants must meet the following criteria:

1. Be admitted to the Graduate School
2. Have a baccalaureate degree from an accredited institution of higher learning;
3. Have a minimum cumulative undergraduate grade point average of 2.70, preferably a 3.00
4. Have submitted a GRE score of 700. \* The department will take the sum total of the GRE's verbal and quantitative scores to determine an applicant's score; Note: Students must take the GRE before being admitted as a regular admission into the Department's MPA degree program
5. Submit three letters of recommendation from academic and professional sources;
6. Submit a TOEFL score of 525 for international students.
7. Statement of Purpose: Submit an essay on professional career objectives, which should include why the applicant has chosen Public Administration

## CURRICULUM RELATED REQUIREMENTS

Each student, based on the chosen area of concentration and under the guidance of a faculty advisor shall develop a program of study. The Department offers the following concentrations: generalist, public policy, health services administration, public finance and non-profit management.

All MPA students are required to complete the following: 27 hours of core classes; 12 hours of concentration classes; 3 hours of electives, depending upon the concentration selected; 6 hours of research or thesis, 3 hours of internship and 3 hours

of writing seminar. Though rare, exemptions may be given for writing seminar and internship at the discretion of the class instructors. Students may be required to show mastery of research writing for the writing seminar exemption and other information as required by the writing seminar instructor. Students may be required to show substantial public service experience for exemption from the internship as required by the internship director.

### Generalist Concentration (48-54 hour program)

Students in this option must complete 27 hours of core courses, 15 hours of elective (pertinent to public management); 6 hours of research or thesis; 3 hour of Writing Seminar (unless exempted); and 3 credit hours of internship (unless waived).

### Healthcare Administration Concentration (48-54 hour program)

Students in this option must complete 27 hours of core courses, 12 hours of healthcare administration courses, 3 hours of electives (that elective must be pertinent to health care administration); 6 hours of research or thesis, 3 hours of Writing Seminar (unless exempted); and 3 credit hours of internship (unless waived).

### Public Policy Analysis Concentration (48-54 hour program)

Students in this option must complete 27 hours of core courses, 12 hours of public policy courses; 3 hours of electives (that elective must be pertinent to public policy); 6 hours of research or thesis; 3 hours of Writing Seminar (unless exempted); and 3 credit hours of internship (unless waived).

### Finance Concentration (48-54 hour program)

Students in this option must complete 27 hours of core courses, 12 hours of finance courses; 3 hours of electives (the class must be pertinent to financial management); 6 hours of research or thesis; 3 hours of Writing Seminar (unless exempted); and 3 credit hours of internship (unless waived).

### Non-profit Management Concentration (48-54 hour program)

Students in this option must complete 27 hours of core courses, 12 hours of non-profit management courses; 3 hours of electives (the class must be pertinent to nonprofit management); 6 hours of research or thesis; 3 hours of Writing Seminar (unless exempted); and 3 credit hours of internship (unless waived).

### Core Classes:

PADM 503	Principles of Public Administration
PADM 508	Organizational Theory (or PADM 564 Org. & Sys. Man.)
PADM 511	Statistics (prerequisite: undergraduate statics)
PADM 512	Research Methods
PADM 531	Government Financial Management (Substitution: PADM 530)
PADM 543	Information Systems
PADM 556	Ethics and Public Policy
PADM 562	Human Resources Management

PADM 563 Microeconomics (prerequisite: undergraduate economics)

### *Second Tier*

PADM 522 Marketing and Strategic Planning

PADM 544 Program Evaluation

Seminar in Non-Profit Management

### **Elective Courses/Concentrations**

#### **Healthcare Administration Concentration Required Classes/Electives:**

PADM 520 Public Health Organizations & Programs (required)

PADM 521 Health Services Administration (required)

PADM 522 Marketing & Strategic Planning (required)

PADM 525 Healthcare Economics (elective)

PADM 526 Topics in Healthcare Management (elective)

PADM 527 Legal Issues in Healthcare (required)

#### **Other Required Classes:**

#### *Research or Thesis:*

Students have the option of completing a thesis or research project. Only six hours of research or thesis may be applied to the program of study and the six hours cannot be taken in the same semester. Prerequisites for thesis and research include the following:

1. PADM 502 Writing Seminar
2. PADM 511 Statistics
3. Completion of or enrollment in PADM 512 Research Methods

*Thesis* (PADM 600, 602, 603, 604, & 605): Each class is three hours credit. (Requirement: 6 hours total). A student must officially enroll in one of these sections for each semester a student works with his or her committee chairperson towards the thesis or research project.

*Research* (PADM 607-615): Each class is three hours credit. (Requirement: 3 hours total).

*Internship* (PADM 583): Each student must complete (unless waived) a paid or non-paid internship with a public agency for a total number of 300 hours. Prerequisites for internship include 18 hours of coursework, including PADM 502, PADM 503, PADM 511, and other classes as determined by the Internship and Placement Director. Additionally students are required to take Information Systems Management (PADM 543) or be proficient in information systems management. Students may apply for a waiver from the Internship requirement if their current or past work experience warrants an exemption. An exemption may be granted when a student satisfies the following criteria:

1. At least seven years of professional work experience.
2. Three years of verifiable entry level work experience that includes the following responsibilities or the equivalent: supervisory, policy-making, and/or managerial;
3. Completion of 27 credits or more with a 3.5 GPA

*Writing Seminar* (PADM 502): All students are required to take writing seminar unless exempted. Any student who is exempt from the writing seminar class who submits a poorly written thesis or research project shall be required to take PADM 502 and pass with a grade of B or higher before graduating. An exemption may be granted when a student satisfies the following criteria:

1. A 3.5 cumulative GPA
2. A verbal GRE score of 550 or above

#### **Public Policy Analysis Concentration Required Classes/Electives:**

PADM 515 Public Policy (required)

PADM 523 Management Decision Models (required)

PADM 540 Methods of Public Policy Analysis (required)

PADM 544 Program Evaluation (required)

PADM 564 Organization Systems Management (elective)

#### **Public Finance Concentration Required Classes/Electives:**

PADM 530 Public Finance

PADM 536 Public Budgeting

PADM 535 Public Financial Accounting and Auditing

PADM 538 Seminar in Public Finance

#### **Non-profit Management Concentration Required Classes/Electives:**

PADM 552 Grantsmanship and Fund Development (required)

PADM 554 Program Evaluation (required)

PADM 620 Management of Non-Profit Organizations (required)

PADM 622 Marketing and Strategic Planning (required)

Seminar in Non-Profit Management (elective)

### *First Tier*

PADM 552 Grantsmanship and Fund Development

PADM 620 The Management of Non-Profit Organizations

3. A score of 80 percent or above on a departmental writing examination
4. Approval of the Writing Seminar professor

### ONLINE EXECUTIVE MASTER IN PUBLIC ADMINISTRATION (EPDM)

- 1 Year/39 credit hours
- Offered online only

#### Admissions Requirements.

- Complete Admissions application
- Official Transcript(s)
- Application Fee (Waived)
- GRE Score (Waived)

#### How to Apply

1. Visit [www.subr.edu](http://www.subr.edu) and click on the Apply now tab
2. Fill out Online Admissions Application
3. Send any additional required documents to:

#### Graduate Admissions

Southern University and A&M College  
The Graduate School  
P.O. Box 9860  
Baton Rouge, LA 70813

### Executive Master is in Public Administration (EMPA).

#### Core Courses

EMPA 503 Public Administration	3hours
EMPA 508 Organizational Theory	3hours
EMPA 511 Basic Statistics	3hours
EMPA 512 Applied Research Methods	3hours
EMPA 530 Public Finance	3hours
EMPA 556 Ethics Public Policy	3hours
EMPA 562 Human Resource Management	3hours

#### Electives\*

EMPA 515 Public Policy	3hours
EMPA 540 Methods of Public Policy Analysis	3hours
EMPA 544 Program Evaluation	3hours
EMPA 557 Legislative Process, Management	3hours

EMPA 609 **Capstone Project** **3hours**  
\*Elective Selection May vary

#### COURSE DESCRIPTIONS

**PADM 498. Introduction to Research.** This course offers an introduction to the concepts of statistics and research.

**PADM 501. Public Administration Seminar.** This course introduces the student to the institutional, political, and

normative environment of public administrators in a democratic society. The focus may vary but reconciling bureaucratic government and democratic principles is a significant issue in discussing the environment of public administration.

**PADM 502. Writing Seminar.** This course addresses essentials for writing especially for research projects. It addresses several basic elements of serious writing: APA Style, APA citation; development of research topic; and creation of a literature review.

**PADM 503. Principles of Public Administration.** This course offers an introduction to the study of public administration. Students are introduced to basic concepts and foundational theories relating to bureaucratic analysis, organizational theory and behavior; functions of public management such as personnel administration, budget decision making, government regulations and administrative law.

**PADM 508. Organizational Theory.** This course addresses basic principles of the internal management of organizations with a focus on public organizations. Topics addressed include authority, communication, productivity, planning, morale, and change.

**PADM 511. Statistics.** This course covers important concepts of basic descriptive and inferential statistics, including both parametric and non-parametric statistics, hypothesis testing, binomial probability distribution, simple linear regression, and estimating population proportions.

**PADM 512. Research Methods.** This course covers advanced topics in applied research. Topics to be covered include the various steps in the creation of a research proposal, including development of a research question, a literature review, and an appropriate methodology.

**PADM 515. Public Policy.** This course introduces the process, issues, concepts, arenas, and participants involved in public policy making. Course topics include the following: processes (planning, decision-making, implementation, and evaluation), institutions, typologies, and outcomes. (First Tier)

**PADM 520. Public Health Organizations and Programs.** This course introduces the student to the preventative aspects of public health programs and practice. The philosophy and principles of public health organization and practice is presented, with particular emphasis on organization, mission, and function of both official and voluntary preventative health services at the international, national, state, and local levels. Included in the course are discussions of maternal and child health, infectious and chronic disease control, adult health, gerontology, mental health, health economics, public law, health education, accident and drug abuse control, public health nursing, and social welfare services.

**PADM 521. Health Services Administration.** This course examines organization and management in different healthcare organizations and service settings, including hospitals, ambulatory care services, and managed care organizations. Discussions emphasize determinants and managerial implications of changing inter-organizational relationships.

**PADM 522. Marketing and Strategic Planning.** This course explores marketing theory and research as applied to corporate strategic planning in the healthcare industry. Topics include patient market segmentation, medical staff marketing,

promotion and public relations, strategy development, long-range planning, corporate reorganization alternatives, multi-instructional systems, and closure and conversion. Using marketing and planning concepts and methods, students participate in developing a long-range plan.

**PADM 525. Healthcare Economics.** This course deals with the application of economics concepts, principles and procedures to the healthcare sector. The important topics covered include but are not limited to the following:

- Healthcare services and products markets
- Production and supply of healthcare services
- Markets for physician and hospital services
- Markets for physician and nursing manpower
- Market failures and governmental interventions
- Public policies in healthcare
- Medicaid, Medicare, and health insurance

**PADM 526. Current Topics in Healthcare Management.** Current topics in healthcare management are examined in a similar format.

Guest lecturers discuss important, timely issues that face healthcare managers in the current market.

**PADM 527. Legal Issues in Healthcare.** Regulatory and legal aspects affecting administration of hospitals and other healthcare organizations will be discussed as well as the Legal issues relevant to the administrator, decision-making and planning process.

**PADM 530. Public Finance.** This course covers basic concepts, principles, and procedures of public sector economics. Public expenditures and revenue are discussed with a focus on state and local government tax and non-tax revenue sources and expenditures, and variations in intergovernmental aid programs and state and local expenditure policies and practices.

**PADM 540. Methods of Public Policy Analysis.** This course covers various processes used by public policy analysts in understanding the nature of the problem to be analyzed, structuring the research strategy, gathering data and other information, formulating the answer to the problem, and writing the memo or report. Innovative techniques for accomplishing the above steps are covered including cost benefit analysis, problem definition techniques, and different types of commonly encountered policy analysis situations. (Case method is used in this course) (Second Tier).

**PADM 541. Management Decision Models.** This course deals with management decisions in the public sector. It discusses and applies mainly quantitative decision models to governmental decisions. The model covered include:

- Quantitative models of various types
- Optimization models
- Financing models
- Cost benefit and cost effectiveness model
- Deterministic and stochastic models
- Decision analysis models
- Linear programming
- Simulation and inventory models

**PADM 542. Urban and Regional Planning.** This course analyzes the theory, organizational mechanisms, techniques

and evolution of planned change within cities and urban districts, with particular emphasis on pressing housing issues facing our society.

**PADM 543. Information Systems for Public Managers.** This course analyzes computer software applications including word-processing, spreadsheet, database management, graphics, desktop publishing, and statistical analysis software.

**PADM 544. Program Evaluation.** Practical training in program evaluation is provided as students learn techniques in all phases of designing and implementing a program evaluation. Included in the training is the development of a model, conducting the study, analyzing the results, and writing the evaluation report. Students are expected to fully design an evaluation plan capable of implementation in a real life setting of public management. (First Tier)

**PADM 545. Housing and Community Development.** Problems in housing and community development, causal actors and consequences. Current patterns in federal, state, and local policy and programmatic responses. Real estate appraisal and mortgage lending.

**PADM 550. State and Local Government Policy and Management.** Major topics and issues regarding these two levels of government are covered.

**PADM 551. Management of Nonprofit Organizations.** This course is a survey course designed to introduce students and managers of nonprofit organizations to the essential tools for management. Specifically, the course will accomplish the following objectives: (1) provide an understanding of the development of policies and procedures including personnel, fiscal, and evaluation; (2) introduce the fundamental of grant writing and fundraising; (3) provide information on financial management, prevention of employee theft and fraud; and (4) educate students on the principles of marketing and public relations.

**PADM 553. Financial Management of Nonprofit Organizations.** This class provides an overview of the financial accountability and responsibility of managing a nonprofit organization. Course content includes legal issues in financial management including recording and reporting requirements, basic accounting and bookkeeping, internal control, audits, financial planning—budgets, financial statements and other financial reports of the organization, risk management, and the use of financial software for efficiency and effectiveness.

**PADM 557. Legislative Process, Management and Oversight.** This course covers several important issues regarding management and oversight by the legislative branch including performance evaluation, sunset laws, fiscal auditing, oversight hearings, role of legislative staff generally, relationship between legislative and executive branches, and the role of information in legislative decision making.

**PADM 560. Urban Economics.** This course applies economic concepts, principles, and procedures to urban sector policies, problems, and issues. Included in the course are the following topics:

- Theoretical analysis of urban structure
- Urban location models
- Urban economic problems
- Urban housing problems and policies



- Nature of urban areas
- Urbanization and economic growth in the United States
- Trends in sizes and structures urban areas

**PADM 562. Human Resource Management.** This course examines various principles and issues regarding public personnel. Included in this course is a discussion of effective techniques for hiring, motivating, training, compensating, and evaluating employees. Other topics covered include job discrimination, collective bargaining, and employee conflict resolution.

**PADM 563. Managerial Economics (Microeconomics).** This course acquaints students with the basic concepts, principles and procedures of both micro and macroeconomic relevant to public policy analysis; provides and understanding of relationships between consumers and producers in a contemporary economy; acquaint students with methods of analysis relevant to decision making in both public and private sectors of the economy.

**PADM 564. Organization and Systems Management.** This course develops system-based frameworks for analyzing and understanding policy and management in the public sector and applies systems theory to public management.

**PADM 572-579. Independent Research in Public Administration.** A student works with a professor on a topic that is mutually agreed upon by the student and the professor.

**PADM 581. Political Leadership and Public Policy.** This course defines leadership and identifies critical attributes that make for leadership. It also examines the role of public institution in promoting leadership. The examination covers various leadership styles.

**PADM 583. Internship.** The purpose of the internship is to provide students the opportunity to apply knowledge and skills acquired in the classroom to issues in an agency. Each student, unless exempted, must complete an internship with a public or quasi-public agency. Placement is arranged by or must be approved by the Departmental Internship and Placement Director.

**PADM 591. Urban Transportation Planning.** Introduction to urban transportation planning, data collection methods, policy analysis, mathematical models used to conduct analysis of transportation problems, and the decision making processing used in an institutional environment.

**PADM 600 (3 hours), 601 (3 hours), & 603 (3 hours). Thesis.** Students are expected to work closely with their faculty advisors towards completion of their thesis projects.

**PADM 607-615 (3 hours). Research Project.** Students are expected to work closely with their faculty advisors towards completion of their thesis projects.

**PADM 620. Public Health Organizations and Programs.** This course introduces the student to the preventative aspects of public health programs and practice. The philosophy and principles of public health organization and practice is presented, with particular emphasis on organization, mission, and function of both official and voluntary preventative health services at the international, national, state, and local levels. Included in the course are discussions of maternal and child

health, infectious and chronic disease control, adult health, gerontology, mental health, health economics, public law, health education, accident and drug abuse control, public health nursing, and social welfare services.

**PADM 621. Conflict Mediation, Alternative Dispute Resolution.** This course is about dispute resolution using the mediation process. Important concepts useful for analyzing conflicts, designing and implementing intervention strategies for dispute resolutions are presented.



## **Doctor of Philosophy in Public Policy (PhD/PPAM)**



# Nelson Mandela College of Government and Social Sciences

Dean: Dr. Damien Ejigiri

## Public Policy Department

### Doctor of Philosophy in Public Policy (PhD/PPAM)

**Chair: Dr. Esedo, Kingsley E.**

Higgins Hall–Room 409  
Phone: (225) 771-4219/6277  
E-Mail: kingsley\_esedo@subr.edu

#### FACULTY

##### *Professors:*

**Esedo, Kingsley E.**  
Ph.D., Political Science  
Boston University

**Lukongo, Ben O.**  
Ph.D., Economics  
Mississippi State University

##### **Adjuncts**

**Appeaning, Vladimir A.**  
Ph.D., Public Policy  
Southern University and A & M College

#### Introduction

The Ph.D. Program in Public Policy, located in the Nelson Mandela School of Public Policy and Urban Affairs, was established in 1996. The doctorate is research oriented, emphasizing the use of interdisciplinary research paradigms in analyzing public policies. This doctoral program is rigorously grounded in scientific theory and methodologies. Emphasizing service and employability, the program's aim is to produce graduates who can pursue productive careers in academe, government, or in the private and nonprofit sectors. The program especially seeks to enroll students of all races in connection with federal and state policies and agreements to further desegregate public universities.

Graduates will have developed an understanding of the context in which public policies are proposed, adopted, implemented and evaluated. Basic and advanced analytical techniques are especially appropriate in this context, and are indispensable for systematic inquiry into the relevant disciplines.

#### GRADUATE DEGREE OFFERED

Doctor of Philosophy (Ph.D.) in Public Policy

#### ADMISSION REQUIREMENTS

- An earned and relevant graduate or professional degree from an accredited university
- A graduate grade point average (GPA) of 3.4 on a 4.0 scale

- A Graduate Record Examination (GRE) score of 1000 or better (verbal + quantitative)
- A 500-1000 word essay on research interests and professional career objectives
- Three letters of recommendation
- Evidence of experience, accomplishments, and potential to overcome any deficiencies

Recommendation by the program admission committee in as much as the study of public policy can involve any number of academic disciplines, many master's degrees, especially in the natural sciences, can provide ideal foundations, as can a law degree. Applications to the Ph.D. Program in Public Policy will be accepted through April 15th for the fall semester and until November 15th for the spring semester.

#### GRADUATION REQUIREMENTS

The minimum coursework requirement is 39 credit hours, comprised of 13 courses of three credit hours each. Students also must register for at least 12 hours of dissertation credits. Ten of the 13 courses are designated as "core," including quantitative techniques, research methods, economics, and policy studies. Each student also must complete four courses or 12 hours on a specialized "concentration." More than one concentration may be pursued in the program, should the student be interested in multiple areas. The program currently offers concentrations in Global Policy, Health Policy, U.S. Foreign Policy, International Development, Public Finance, and Sustainable Futures. Students have available a wide array of courses from which to choose, and can also avail themselves of offerings at Louisiana State University through a consortium arrangement. Students who desire to pursue more than one area of concentration must secure approval from the program chair and their advisor before registering for courses outside of their declared concentration.

This outline of the minimum requirement may be expanded as the student prepares a study plan. Each student must develop, with advisors, an approved plan of study no later than the second semester in residence. To remain in good standing, each student's GPA must achieve a 3.0 or better in every course they attempt. After successfully completing the final semester of coursework, each student must pass a written and oral comprehensive examination. The exam is comprised of theory and research components. Students are only admitted to candidacy if they have earned at least a 3.0 in every course and pass the comprehensive exam. The Ph.D. comprehensive exam is given only twice a year in the Fall and Spring Semesters. Exam dates are announced well ahead of time to alert prospective candidates. Students who fail **ALL** or **ANY** portion of the exam will be granted a retake within the semester of the exam. A student who fails a retake will be granted a final retake the following semester. A student who fails the final retake will be expelled from the program. Candidates must complete and successfully defend a doctoral dissertation. Graduate School rules and guidelines apply in all instances.

A full-time student should expect to complete coursework within two academic years (four semesters). A committee of departmental graduate faculty will devise, evaluate, and score each student's comprehensive exam questions and answers. The candidate's dissertation committee will guide the preparation of a prospectus and the dissertation. The dissertation is likely to take one to two years for full-time students and a longer period for part-time students. Full-time and part-time students must maintain continuous registration throughout the program. More detailed rules and policies for all requirements are available in the Nelson Mandela School of Public Policy and Urban Affairs.

**ASSISTANTSHIPS, FELLOWSHIPS, SCHOLARSHIPS**

A limited number of assistantships are available for full-time students who must take at least three courses per semester and provide ten hours of research assistance each week to designated faculty members. The State Board of Regents may continue to provide a few well-funded fellowships for especially qualified applicants. Tuition scholarships also are available for some students. In no case will financial aid last longer than three academic years, unless so provided in Regents' Fellowships. All applicants planning on full-time study are considered for the assistantship and fellowship, and some of the scholarships are available for part-time students.

**POLICY AND GUIDELINES FOR ASSISTANTSHIP/SCHOLARSHIP**

Criteria and Guidelines for awarding assistantship/scholarship, tuition waivers in the Ph.D. Public Policy program

**Assistantships**

For students to be considered eligible for an assistantship the following conditions shall be met:

- Must be admitted in the Ph.D. Program under Regular Status. (Only)
- Computer and research skills count for extra points (no more than 10 points)
- Must be enrolled full-time i.e. nine or more credit hours a semester except during the summer
- Must maintain a minimum of 3.0 GPA
- Occasionally an assistantship may be awarded to an MPA student to facilitate research projects
- Based on cumulative scores, awards shall be determined by a committee beginning with the highest score until the money allocated is depleted
- An assistantship shall be revoked if a student's enrollment drops to less 9.0 credit hours during any semester
- Students with less than a 3.0 GPA shall not be eligible for further assistantship until the GPA requirement is met
- Students are encouraged to substitute or add when a course is dropped within the add and drop period
- Students shall be eligible for reconsideration one academic year from the date of suspension
- Independent courses cannot be used more than three times
- To qualify for summer assistantship whenever the budget permits, a student must register for six credit hours

*\*\*Because the Ph.D. Program is a desegregation program mandating diversity, special consideration shall be extended to the other race students in assistantships, tuition waivers, and tuition scholarship.*

**General Tuition-Waiver/Scholarship**

Students who enroll full-time but have no assistantship shall be considered for tuition scholarship subject to the following conditions including budget limitations:

- Must enroll full-time and carry full-time load (nine or more credit hours) to the end of the semester/term
- Students with full employment with reasonable incomes are ineligible for consideration even if enrolled full-time or part time. (Reasonable income determined by the committee) It is considered a violation to drop to less than nine credit hours during the semester while holding a tuition scholarship/waiver.
- The penalty for dropping to less than nine credits will be revocation of the award with eligibility for reconsideration two academic years from the date of the revocation.
- Part-time scholarships will be revoked if the beginning credits are not carried to the end of the semester/term.

**PLAN OF STUDY (Illustrative)****Field Courses****Theory**

PPOL 710	Microeconomics for Public Policy.....	3 credits
PPOL 712	Macroeconomics for Public Policy.....	3 credits
PPOL 714	Foundations of Public Policy.....	3 credits
PPOL 716	Political Philosophy and Public Policy.....	3 credits
PPOL 718	Political and Social Institutions.....	3 credits

**Methods**

PPOL 700	Quantitative Methods I .....	3 credits
PPOL 702	Quantitative Methods II.....	3 credits
PPOL 704	Research Methods.....	3 credits
PPOL 706	Program Evaluation and Design .....	3 credits
PPOL 708	Policy Models.....	3 credits
PPOL 720	Policy Analysis.....	3 credits

**Areas of Concentration****Environmental Policy**

PPOL 752	Natural Resources Management .....	3 credits
PPOL 756	Environmental Impact Assessment .....	3 credits

**Health Policy**

PPOL 730	Health Service Systems.....	3 credits
PPOL 734	Health Management .....	3 credits

**International Development**

PPOL 782	U.S. Foreign Policy .....	3 credits
PPOL 784	Political Economy .....	3 credits

**Public Finance**

PPOL 711	Public Finance .....	3 credits
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PPOL 713	Comparative Budgeting .....	3 credits
Sustainable Futures		
PPOL 625	Sustainable Development .....	3 credits
PPOL 780	Critical Development Theories .....	3 credits

Students should consult with their advisors and the program coordinator because actual course requirements may change from time to time. Students who have taken equivalent graduate courses elsewhere may be excused from taking the same course here, but this will not change the required total number of hours and University residency requirements. Such decisions are made when students develop study plans.

### Comprehensive Examination

PPOL 825	Doctoral Qualifying Examination .....	0 credits
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As in other cases, the School provides more detailed instruction for this examination.

Dissertation

PPOL 850	Dissertation Research .....	12 credits
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### General Information

#### Ph.D. Program in Public Policy

### COURSE OFFERINGS

#### Quantitative Tools

The nine hours of quantitative methods constitute the quantitative tool for developing minimal quantitative competency.

#### PPOL 700. QUANTITATIVE METHODS I. (Credit, 3 hours).

This is the first part of two semester coverage of the science and art building and using statistical models. The course covers regression models and related problems, application and computer programs, and time series models and polynomial regression, estimation, testing, and predictions. *(Prerequisites: PADM 511 OR PADM 512 and by instructor's permission.)*

#### PPOL 702. QUANTITATIVE METHODS II. (Credit, 3 hours).

This course is a continuation of Quantitative Methods I and covers identification and estimation in multi-equation models, Regression Diagnostics, Analysis of Variance, and special topics, multivariate distributions, sampling, likelihood methods, estimation and hypothesis testing and regression. *(Prerequisites: PPOL 700.)*

**PPOL 704. RESEARCH METHODS. (Credit, 3 hours).** This course examines the empirical methods of social research including epistemology, theory construction, and qualitative research. Emphasis will be placed on data collection techniques, methods for conducting survey research, and analysis of limited dependent variables, such as logit.

**PPOL 706. PROGRAM EVALUATION AND DESIGN. (Credit, 3 hours).** Students are introduced to evaluation research and impact analysis. Documentation, selection of performance indicators, input and output indicators of performance measurements, and a general overview of false measures. Emphasis is on audit performance techniques and modeling. An advanced reading and research seminar on the

formulation, design, and evaluation of programs and policies will be conducted. Methods of the policy analysis, such as decision theory will be presented.

**PPOL 708. POLICY MODELS. (Credit, 3 hours).** This course addresses program implementation, applying modeling techniques with built-in performance indicators. Program implementation and outcome assessments linked with process management, and quality assurance measures will be examined. Spatial analysis using Geographic Information Systems. Emphasis will be on modeling implementation.

#### PPOL 710. MICROECONOMICS FOR PUBLIC POLICY. (Credit, 3 hours).

This advanced graduate level course examines the most important concepts, principals, and procedures of microeconomics and its applicability and applications for public policy. Topics covered include; theories of demand, supply, production and cost; elasticities; markets structures and market failures; competitive and monopolistic markets; markets for resources, especially labor markets; unions; government regulations; microeconomic foundations of public policy, and applications microeconomic to public policy formation, implementation, and evaluation.

#### PPOL 712. MACROECONOMICS FOR PUBLIC POLICY. (Credit, 3 hours).

This advanced graduate level course examines the important concepts, principals, and procedures of macroeconomics and its applications and applicability for public policy. Topics covered include; private and public sectors of the economy; externalities and public choice; gross domestic product (GDP) and national income accounting; aggregate demand and aggregate supply; theories of inflation and unemployment; money, financial markets and the banking system; central banking; stabilization theories, and monetary, fiscal, and commercial policies; international trade and finance, and interdependence in a global economy; foreign aid, economic development; macroeconomic foundations and orientations of public policies. *(Prerequisites: PPOL 710 or by instructor's permission.)*

#### PPOL 714. FOUNDATIONS OF PUBLIC POLICY. (Credit, 3 hours).

An overview of the policy process with emphasis on the policy-making apparatus. An introduction to the major theories of public policy together with the historical intellectual development of the discipline.

#### PPOL 716. POLITICAL PHILOSOPHY AND PUBLIC POLICY. (Credit, 3 hours).

This course examines broad aspects of political philosophy of several countries at different times. Various philosophies which have guided various forms of government are reviewed. Special emphasis is placed on philosophy underpinning democratic and socialist governments. The policy making apparatus of each form of government is fully explored noting their strengths and weaknesses. *(Prerequisites: None)*

#### PPOL 718. SOCIAL & POLITICAL INSTITUTIONS IN PUBLIC POLICY MAKING. (Credit, 3 hours).

This course examines social institutions, political forces and factors that influence and shape the development of public policy in the United States. Theories and Paradigms that bear on Public Policy formulation in the United States and fully examined beginning with the evolution of Public Policy in the United States.

**PPOL 720. POLICY ANALYSIS. (Credit, 3 hours).** Advanced training in analytical policy research methods will contribute to the strength and significance of the student's doctoral research, and should enhance opportunities for the student upon graduation. The course will cover advanced design issues, methods for exploring data, and advanced statistical techniques. Public policy researchers must be able to understand, appreciate, and use diverse research methods in order to conduct ethical and accountable research. The employment of a variety of qualitative and quantitative methods, along with the use of computers

is now critical to the conduct of scientifically sound research. Therefore, this course integrates the foundations of advanced research methodology with the use of computers and appropriate statistical procedures in order to prepare students to meet the increasing demands for conducting policy-relevant research.

### Concentration ENVIRONMENTAL POLICY

**PPOL 752. NATURAL RESOURCES MANAGEMENT. (Credit, 3 hours).** This course examines different aspects of natural resources policy and management in the context of environmental protection and justice. Topics covered included: role of government in effective management of natural resources including energy; policy for management of exhaustive and non-exhaustive resources; land policy and management; forest management; policy and management for wet lands; coastal environment protection policies and management; management of wildlife and endangered species; international efforts at natural preservation; etc. All students must complete a substantial research paper of high quality. (*Prerequisites: Consent of instructor.*)

**PPOL 756. ENVIRONMENTAL IMPACT ASSESSMENT. (Credit, 3 hours).** This course is intended to offer the students the opportunity to explore the practical applications of the theory of environmental planning (i.e. Environmental Impact Assessment (EIA), Environmental Inventory, and/or any Major Actions Significantly Affecting the Quality of Human Environment). It offers students an up-to-date explanation and guide to how EIAs are carried out. It includes for each environmental component (e.g. air, water, flora, and fauna) a discussion of how a baseline survey is conducted. An examination of relevant regulations and standards with regard to how impact predictions are made will be carried out. There will be in-depth investigation of environmental impacts resulting from the establishment of project(s) in the parishes of Louisiana. The study of environmental impacts will include the possible impacts of proposed projects on the air, water, and land resources. Such projects will require filing an environmental impact statement according to the guidelines and criteria established by the State Council on the Environment. Two-thirds of the course will emphasize the applications aspect of the planning while one-third will be in a lecture/discussion format. (*Prerequisites: None.*)

### HEALTH POLICY

**PPOL 730. HEALTH SERVICE SYSTEMS. (Credit, 3 hours).** This course introduces the student to the principles, scientific methods, and major issues in health service systems. The philosophy and development of public health are presented, with particular emphasis on the current organization of health service at the international, national, state, and local levels. The two fundamental disciplines of public health, epidemiology and biostatistics, the common indicators of health and service system characteristics, and the major source of health and health-related data are reviewed, with emphasis on their application to health promotion, disease prevention, policy formulation, and advocacy. Finally, the course concludes with discussions of the major issues in health services including maternal and child health, infectious disease, environmental health, injury prevention, chronic disease, and substance use, with emphasis on identifying, analyzing, and solving critical health service system problems. (*Prerequisites: None*)

**PPOL 734. HEALTH MANAGEMENT. (Credit, 3 hours).** Effective health management is intrinsically linked to solving critical health system problems such as controlling cost, increasing access to health services, and improving quality of health services; therefore, health management is integral to maintaining and enhancing the health of communities. Course participants will learn organization and

management theory, concepts, and methods applicable to a wide variety of settings locally, nationally, and internationally, and will develop their ability to use concepts and methods to analyze and solve specific management problems. The first section of the course provides an overview of the health system, and discusses the importance of community-focused health services. The second section covers the conceptual and methodological foundation for health management: organizational theory, leadership, and building effective teams. The third section covers conceptual and methodological issues associated with key management functions: planning, implementation, evaluation, and sustainability. (*Prerequisites: PPOL 730*)

### INTERNATIONAL DEVELOPMENT

**PPOL 782. U.S. FOREIGN POLICY. (Credit, 3 hours).** The major issues of foreign policy, how foreign policy decisions are made and by whom, and what theories explain foreign policy decisions, especially United States Foreign Policy. Areas of study include: the national interest, globalization, decision models, and theory.

**PPOL 784. POLITICAL ECONOMY. (Credit, 3 hours).** This course is about interactions between politics and markets mostly under democratic capitalism. It emphasizes the classical, neoclassical, and positive viewpoints of market economies including social institutions, industrial organization, regulation, the political business cycle, globalization, and international political economy.

### PUBLIC FINANCE

**PPOL 711. PUBLIC FINANCE. (Credit, 3 hours).** This course covers selected special or topical issues and problems of public financing including alternative revenue sources, revenue sharing, taxing of individuals and corporation, flat tax, public expenditures, and modern practices of expenditure managements. Other topics of interest to participants will also be addressed. (*Prerequisites: PADM 530 or by instructor's permission.*)

**PPOL 713. COMPARATIVE BUDGETING. (Credit, 3 hours).** This course includes the theoretical debates applicable to budgeting in democratic systems. A comparative evaluation of budgeting in rich and developing countries will be emphasized. Generally, budgeting is designed to serve broad decision-making needs, facilitate fiscal planning, ensure accountability and protect governments against fiscal bottlenecks. In other words, budgeting helps ensure that resources are employed efficiently, used for the purpose for which they are allocated and that revenue and expenditure forecast are relatively accurate. (*Prerequisites: PADM 636.*)

### SUSTAINABLE FUTURES

**PPOL 625. SUSTAINABLE DEVELOPMENT. (Credit, 3 hours).** This course focuses on the aspects of development that economists, environmentalists, and conservationists think should be sustained when governments attempt to set policies for economic growth. An in-depth examination of the theory of sustainability and the scholarly debates over sustainability will be undertaken in class lectures and discussions from the standpoint of: concepts, connotations, meaning, conditions, and interpretation.

**PPOL 780. CRITICAL DEVELOPMENT THEORY. (Credit, 3 hours).** This course will examine the theories and issues surrounding development in the developing areas of the world. The course will deal with the multi-diminishing aspects of development issues. Several development paradigms will be discussed and examined with respect to their influence on the globalization that is occurring in the world. Technical, environmental, social, economic, and political dimensions of

development will be addressed. The course will explore the contributions of development crisis and post-independence policy failure to external dependency. *(Prerequisites: None.)*

### Other Elective Courses

**PPOL 604. MANAGEMENT INFORMATION SYSTEMS. (Credit, 3 hours).** Students participate in the design, operation, and use of management information systems in public policy services. Several software packages are used, like SPSS and ArcGIS.

**PPOL 608. SOCIAL POLICY. (Credit, 3 hours).** An investigation of policies in areas such as health, education, employment, and housing. Service provision and income transfer policies are analyzed from an organizational framework.

**PPOL 616. LABOR POLICY. (Credit, 3 hours).** An analysis of public policies in the areas of employment, unions, labor markets, and human resource policies. The impact of changes in wages, training, unemployment, regulatory policy, foreign trade policy, and long-term employment security.

**PPOL 654. URBAN POLICY AND POLITICS. (Credit, 3 hours).** This is a course in urban policy and politics for graduate students. The course addresses various issues facing urban government policies and policy. The course begins with the history of the development of urban centers and then proceeds with in-depth analysis of selected policy issues. We will discuss how urban centers (e.g., New York City, Atlanta) differ from a town and a village, and the special problems that cities face such as limits by states on their power and authority to solve their problems. Substantive topics include political machines, growth strategies, economic development, environmental regulation, law enforcement, land use regulation, and recreation. Additional topics include court decisions (e.g., Dillion's Rule), problems in implementation policy, and who participates in the policy process. (3 hours)

**PPOL 705. FINANCIAL POLICY FOR THE PUBLIC SECTOR. (Credit, 3 hours).** This course covers basic concepts, principles, and procedures of financial policy as it is applied to the public sector. Important topics include: private vs. public funds, financial statements, standard public funds and account groups, financial management of all public funds transactions, investment management and management of all public funds, and public accounting and auditing.

**PPOL 715. GOVERNMENT FINANCIAL MANAGEMENT. (Credit, 3 hours).** This course builds on the concepts covered in a Masters level government financial management course. Emphasis is placed on the application of various theoretical framework and technique in the analysis of critical issues in government finance. These issues include but are not limited to taxation and expenditures, state and local government debt management, pension funds management and the social security, and other current issues in public finance. Also, issues related to intergovernmental relations and performance auditing is introduced for in-depth analysis. The course will provide practice in analyzing the effects of government fiscal policies on economic development. There will be an in-depth review of many theories and models related to Government Financial Management. Several readings will be directed toward exploring current issues which will be useful in preparing students for the comprehensive examination. *(Prerequisites: PADM 531 or PPOL 711.)*

**PPOL 732. HEALTH POLICY. (Credit, 3 hours).** Health policy is critical for solving major system problems: controlling costs, increasing access to health services, and improving quality of health services. Therefore, effective health policy development and analysis is integral to the prevention of death, illness, and disability, and the promotion of health. Course participants will learn about the policymaking process, policies for organizing and financing care, and major health policy

issues. The first section of the course provides an overview of the health system, and discusses the comparative health systems. The second section covers the conceptual and methodological foundation for health policymaking: federal, state, and local roles in policymaking; the role of public opinion and interest groups in policymaking; developing policy by establishing evaluation criteria, identifying policy alternatives, and using criteria to analyze alternatives; and implementing and evaluating policy. The third section covers conceptual and methodological issues associated with policies for organizing and financing services: Medicare, Medicaid, private insurance and managed care. Finally, the course concludes with concepts and methods related to the major issues in health policy: controlling costs, increasing access, and improving quality care. *(Prerequisites: PPOL 730)*

**PPOL 736. HEALTH CARE ECONOMICS. (Credit, 3 hours).** This course introduces students to the principles, methods, and major issues in health economics. Understanding and applying economic concepts and methods to investigate the organization, delivery, and financing of health services is critical for developing health policies leading to equitable and efficient health services. The course includes: an overview of economic concepts and their applicability to health, an economic comparison of the US health systems with other health systems, health care expenditures, demand for health care, insurance, medical care production and costs, economic evaluation methods, basic characteristics of the competitive model, imperfect markets, hospital reimbursement systems, hospital and physician markets, governments intervention and insurance, private insurance industry, physician services industry, hospital services industry, pharmaceutical industry and health care reform. *(Prerequisites: PPOL 730)*

**PPOL 750. ENVIRONMENTAL REGULATIONS AND LAW. (Credit, 3 hours).** This course builds upon PADM 570 (Environmental Regulations and Law) and examines at an advanced level such regulations and law. All students must research and complete a substantial research paper of high quality. Topics covered include: environmental regulations and law vis a vis sustainable development; critical current issues in environmental regulations and law; efficiency and equity aspects of regulations; environmental regulations and law enforcements; evaluations of activities of Environmental Protection Agency (EPA); in-depth examinations of selected cases involving environmental regulations; effects of such regulations and law on manufacturing industries and general populations. *(Prerequisites: PADM 570 or consent of instructor.)*

**PPOL 754. ENVIRONMENTAL POLICY AND ETHICS. (Credit, 3 hours).** The global environment is threatened because of the development pressure, the lack of deliberate efforts to plan for growth, lack of adequate conservation and preservation strategies, lack of implementation of policies that would ensure that natural resources are available in perpetuity, and the lack of enforcement of local, national, and international laws. Students will be exposed to the opposing debates on global environmental matters. The course engages students in the theoretical underpinning of the global environmental debate. The ethical and political issues concerning biodiversity protection, trade in wildlife, urban and rural crises, multinational/transnational, and the implications of Agenda 21 are examined.

**PPOL 786. ENVIRONMENTAL POLICY. (Credit, 3 hours).** This seminar will focus on the environmental problems that are global in nature, problems that cross national boundaries. Some of the issues to be discussed include global environmental change, LA NiNo and LA NiNa, Acid Rain phenomenon, Ozone and ozone layer destruction and natural hazards and hazard mitigations, world energy reserves and energy politics, the role of Non-Governmental Organizations (NGO's) in International Environmental Policy and Global Biodiversity. **PPOL 799. ADVANCED RESEARCH. (Credit, 3 hours).**

**PPOL 800. DIRECTED INDEPENDENT STUDY I. (Credit, 3 hours).**

**PPOL 801. DIRECTED INDEPENDENT STUDY II. (Credit, 3 hours).**

**PPOL 825. DOCTORAL QUALIFYING EXAMINATION. (Credit, 0 hours).**

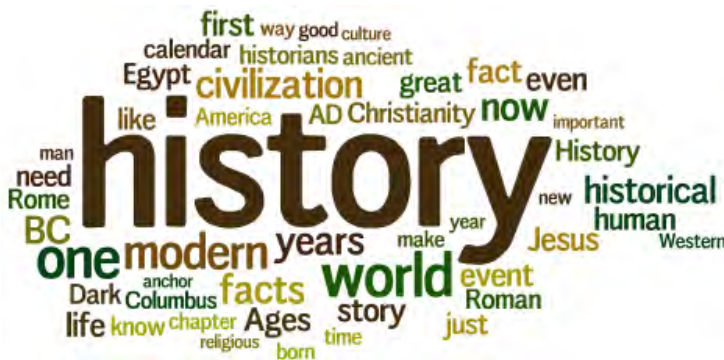
**PPOL 850. DISSERTATION RESEARCH. (Credit, 0-12 hours).**





## Master of Arts in Social Sciences (MA/SOSI)

- History Concentration
- Political Science Concentration
- Sociology Concentration



## Nelson Mandela College of Government and Social Sciences

Dean: Damien Ejigiri, Ph.D.

### Social Science Department

## Master of Arts in Social Sciences (MA/SOSI)

### History Concentration

**Program Leader: Dr. Shawn Comminey**

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Baton Rouge, LA 70813  
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Phone: (225) 771-3260  
Fax: (225) 771-5861  
E-Mail: [shawn\\_comminey@subr.edu](mailto:shawn_comminey@subr.edu)

### FACULTY

#### Professors:

**Vincent, Charles**  
Ph.D., History  
Louisiana State University

**Jackson, Wanda**  
Ph.D., History University of Kentucky

**Comminey, Shawn**  
Ph.D., History  
Florida State University

#### Associate Professors:

**Breaux, Peter**  
Ph.D., History  
Florida State University

#### Assistant Professors:

**Hernandez, Don**  
Ph.D., History  
Louisiana State University

**Firven, Michael**  
Ph.D., History  
Howard University

### Introduction

The Master of Arts in Social Sciences is an interdisciplinary degree encompassing the areas of history, political science and sociology, with a concentration in one of the three areas.

The program is designed to meet the needs of rural and metropolitan area teachers, junior and middle level social service and personnel administrators, and beginning graduate students who plan to pursue doctoral studies in one of the disciplines. Thesis and non-thesis options are offered.

### GRADUATE DEGREE OFFERED

#### M.A. Social Science

### ADMISSION REQUIREMENTS

- Admission to the Graduate School at Southern University with a minimum 2.7 G.P.A.
- Completion of a minimum of fifteen (15) hours of undergraduate courses in history
- Course deficiencies must be eliminated by completing the necessary undergraduate courses

### Thesis Option

### GRADUATION REQUIREMENTS

The Master of Arts in Social Sciences (Thesis option) consists of thirty (30) hours- fifteen (15) hours of history courses (500 level) selected in consultation with the graduate advisor, including a research course in the area of concentration, and six (6) hours in each of the two related fields:

HIST 500	Social Science Seminar.....	3 Hrs.
HIST	Electives..... (500 Level)	12 Hrs.
POLS	Electives..... (500 Level)	6 Hrs.
SOCL	Electives..... (500 Level)	6 Hrs.
HIST 600	Thesis.....	3 Hrs.
<b>Total</b>		<b>30 Hrs.</b>

In addition to the above requirements, students must meet general Graduate School requirements and maintain an overall average of "B" in all work credited toward the degree with not more than six (6) semester hours of "C". Students interested in teaching on the college level are strongly encouraged to take eighteen (18) hours of history courses.

### Thesis and Examination

All students must pass an oral examination on the thesis. A Thesis Advisory Committee of not less than three (3) members, representing at least two (3) disciplines, should be selected by the student by the end of the first year in the program. This committee serves as the student's thesis committee and is chaired by the student's major thesis advisor.

All graduate work, including the thesis, must be completed within six (6) years preceding the granting of the degree.

### Non-Thesis Option

### GRADUATION REQUIREMENTS

The Master of Arts in Social Sciences (Non-thesis option) for students concentration in history consists of thirty-six (36) credit hours of graduate level courses (500 Level). Students must also pass a six (6) hour written comprehensive examination (History, 4 Hours; Political Science, and Sociology 1 hour each), based on their plan of study/course work. The exam will test the student's competence in each discipline. The student is expected to demonstrate a high level of mastery of the subject matter and historiography in history. In the outside disciplines the student is expected to demonstrate a substantial degree of mastery of the subject matter. The exam will be administered during the course of one week. An advisory committee,

selected by the student in consultation with the graduate advisor by the end of the first year in the program and comprised of three (3) members of the graduate faculty, representing the disciplines of history, political science and sociology, will evaluate parts of exams in their respective areas and award a grade of "pass" or "fail." Each professor is responsible for making sure that the student is adequately prepared for the exam, for example, providing students with information in reference to potential essay questions and areas to be covered. Students must pass all three parts of the exam within six months of the date the degree is to be awarded and may take the exam twice.

## COURSE DESCRIPTIONS

### HISTORY

**HIST 548. AFRICAN AMERICAN CIVILIZATIONS OF LATIN AMERICA (Credit, 3 hours).** An examination of the culture politics, economy, and other social aspects of the Black man in Latin America from the voyages of Columbus to the present.

**HIST 494/545. AFRICAN HISTORY (Credit, 3 hours).** A study of the history of Africa from prehistoric times to circa 1800.

**HIST 546. AFRICAN HISTORY (Credit, 3 hours).** A continuation of HIST 494 with emphasis on African History from 1800 to present.

**HIST 500. SEMINAR IN SOCIAL SCIENCE (Credit, 3 hours).**

**HIST 504. AMERICAN HISTORY TO 1861 (Credit, 3 hours).** A study of the various interpretations of major developments in the United States to 1861.

**HIST 505. AMERICAN HISTORY FROM 1861 (Credit, 3 hours).** A study of the new interpretations of the consequences of the Civil War, Reconstruction, urbanization and imperialism.

**HIST 506. METHODS AND MATERIALS IN ETHNIC STUDIES (Credit, 3 hours).** The design, development and analysis of instructional materials for Ethnic Studies. The course will involve the study and formulation of behavioral objectives, content structures, consideration of materials, devices for evaluation, and various methodologies.

**HIST 507. PROBLEMS AND READINGS IN ETHNIC AND MINORITY STUDIES (Credit, 16 hours).** An interdisciplinary course designed to focus attention on the problems, history and culture of various ethnic groups.

**HIST 508. SEMINAR IN AMERICAN SLAVERY (Credit, 3 hours).** An examination of contemporary writings on American slavery. Emphasis on comparative viewpoints of authorities and their relevance to current values and interpretations.

**HIST 510. THE ELDERLY IN AMERICA (Credit, 3 hours).** A study of the provisions made to assist the elderly in adapting to new lifestyles.

**HIST 530. SEMINAR ON LOUISIANA (Credit, 3 hours).** Louisiana Historiography, emphasis on the Black experience.

**HIST 550. WEST AFRICAN HISTORY (Credit, 3 hours).** A survey of West African History from 1000 A.D. to the present.

**HIST 547. HISTORY OF SOUTH AFRICA (Credit, 3 hours).** An examination of the social economic and political development in the cape region after the European intrusion and their repercussion to the modern era.

**HIST 562. TOPICS IN AFRICAN HISTORY AND CULTURE (Credit, 3 hours).** An examination of the history and culture of selected African groups.

**HIST 584. SEMINAR IN 20TH CENTURY AMERICA (Credit, 3 hours).** Individual and group research of selected issues of problems for analyzing and discussion of Twentieth Century America.

**HIST 586. SEMINAR IN THE HISTORY OF AFRICAN AMERICAN IN THE TWENTIETH CENTURY (Credit, 3 hours).** Individual and group study of selected topics relating to Blacks since 1900.

**HIST 588. SEMINAR IN URBAN HISTORY (Credit, 3 hours).** An examination of urban development in the U.S. from early colonial towns to the twentieth century megalopolis.

**HIST 593. SEMINAR IN LATIN AMERICA HISTORY (Credit, 3 hours).** An examination of the political social, and economic conditions of Latin Americans from the voyages of Columbus to the present.

**HIST 598. HISTORY OF THE LABOR MOVEMENT (Credit, 3 hours).** This course presents an overview of the history, development, principles, and theory of the trade union movement in the United States, the impact of the trade union movement in the United States, and the impact of the trade unions on the political, social, and economic life of the country.

**HIST 599. SUPERVISED RESEARCH (Credit, 3-15 hours).**

**HIST 600. RESEARCH AND THESIS (Credit, 3 hours).**



## Nelson Mandela College of Government and Social Sciences

Dean: Damien Ejigiri, Ph.D.

### Social Science Department

### Master of Arts in Social Sciences

#### Sociology Concentration

**Program Leader: Dr. Anthony Igiede**

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E-mail: [anthony\\_igiede@subr.edu](mailto:anthony_igiede@subr.edu)

#### GRADUATE FACULTY

##### Professors:

**Christian, Ollie**  
Ph.D., Sociology  
Louisiana State University

**Igiede, Anthony**  
Ph.D., Public Policy  
Southern University and A&M College

**Spencer, Elouise**  
Ph.D., Sociology  
Kansas State University

**Thornton, Alma-Professor Emeritus**  
Ph.D., Sociology  
Louisiana State University

**Yehya, Riad**  
Ph.D., Sociology  
Bowling Green State University

#### Introduction

The Masters of Arts in Social Sciences is an interdisciplinary degree encompassing the areas of history, political science and sociology. This interdisciplinary program is designed to meet the needs of rural and metropolitan area teachers, social analysts, junior and middle-level interdisciplinary program is designed to meet the needs of rural and metropolitan area teachers, social analysts, junior and middle-level social service

The basic objectives of the program are:

1. to prepare students for further study in sociology,
2. to provide teachers with greater depth in sociology,
3. to prepare pre-collegiate level teachers for the multiethnic urban and rural areas of America,
4. to improve the overall quality of sociological knowledge through scientific research,
5. to enhance the scholarly publications in sociology, and
6. to improve sociological information and skill levels of social-service personnel through appropriate course offerings.

#### DEGREE OFFERED

Master of Arts in the Social Sciences.

#### ADMISSION REQUIREMENTS

- Admission to the Graduate School at Southern University and A&M College with a minimum 2.7 GPA.
- Completion of at least 12 hours of undergraduate courses in sociology, including Introduction to Sociology, Social Research, Sociological Theory and Social Statistics (without exception)
- Course deficiencies can only be eliminated by completing the necessary undergraduate courses.

#### DEGREE/GRADUATION REQUIREMENTS

Students pursuing the Master of Arts degree in the social sciences with a concentration in Sociology may select the thesis option or the non-thesis option. All students are required to complete Sociology 500, or Sociology 550 and Sociology 555.

Students must maintain an overall average of "B" in all work credited toward the degree with not more than six semester hours of "C" work. Also, students must meet all the general requirements of the Graduate School.

#### Thesis Option

Students selecting the thesis option must complete a total of 30 credit hours, including 18 credit hours in Sociology, 6 credit hours in History and 6 credit hours in Political Science. Included in the required 18 credit hours in Sociology are: Sociology 500, Sociology 550 or Sociology 555 and Sociology 600.

#### Thesis Option Sociology Requirements

SOCL 500	Social Science Seminar	
or		
SOCL 550	Techniques of Data Collection .....	3 credits
SOCL 555	Contemporary Social Thought.....	3 credits
SOCL ____	Electives (consult graduate advisor).....	9 credits
HIST ____	Electives .....	6 credits
POLS ____	Electives.....	6 credits
SOCL 600	Thesis .....	3 credits

#### TOTAL 30 credits

#### Thesis and Examination

Students must pass an oral examination on his/her research thesis. A Thesis Advisory/Examination Committee of not less than three faculty members, including at least one representative from History or Political Science, should be selected by each student by the end of their first semester of study. The Thesis Advisory/Examination Committee serves as the student's thesis examination Committee and determines whether the student has passed or failed the examination

The chairperson of the Committee serves as the student's thesis major advisor.

All graduate work, including the research thesis or the capstone project, must be completed within six years preceding the granting of the degree.

#### Non-Thesis Option



Students selecting the non-thesis option must complete a total of 36 credit hours that include 24 credit hours in Sociology, 6 credit hours in history and 6 credit hours in political science. Included in the 24 required credit hours in sociology are sociology 500 or sociology 550, sociology 555 and sociology 602.

### Non-Thesis Option Sociology Requirements

SOCL 500	Social Science Seminar	
or		
SOCL 550	Techniques of Data Collection .....	3 credits
SOCL 555	Contemporary Social Thought.....	3 credits
SOCL ____	Electives (consult graduate advisor).....	15 credits
HIST ____	Electives .....	6 credits
POLS ____	Electives.....	6credits
SOCL 602	Capstone Project.....	3 credits
<b>TOTAL</b>	<b>36 credits</b>	

### Capstone and Examination

All students selecting the non-thesis option must pass a written departmental comprehensive examination and complete a Capstone Project. A Capstone Project Advisor will provide oversight in the development of the Capstone Project. The Capstone Project must be presented to the graduate faculty in the Department of Sociology.

All graduate work, including the research thesis and capstone project, must be completed within the six years that precede granting of the

### COURSE DESCRIPTIONS

**SOCL 500. SOCIAL SCIENCE SEMINAR (Credit 3 hours).** The focus of this course is on research methods in the social sciences; interplay of theory and methods of research; formulation of research problems and design; measurement and scaling; sampling; ethics in research; and critiques of social science research.

**SOCL 503. RACE AND GENDER STUDIES (Credit 3 hours).** The course is an examination of theoretical perspectives on the impact of race and gender on individuals, collective experiences, and social institutions (education, family, criminal justice, media and entertainment, politics, and the economy).

**SOCL 504. THE SOCIOLOGY OF HEALTH AND HEALTHCARE (Credit 3 hours).** This course is a comprehensive examination of health and health care in American society, including the prevalence of epidemics, such as obesity, substance addiction, and drug abuse; health and behavioral and social characteristics; social construction of health; whether health care should be a right or a privilege; and social health issues, such as inequity and disparity in health and health care, and the rising cost of health care.

**SOCL 510. GLOBALIZATION AND SOCIAL CHANGE. (Credit 3 hours).** Sociological and historical perspectives on social, political, and economic differences among countries and regions of the world; global transactional processes in uneven development; state formation; and democracy

**SOCL 512. URBAN PROBLEMS AND POLICY ISSUES. (Credit 3 hours).** This course provides a critical assessment of recent developments in the history, dynamics, trends, extent, causes, nature, consequences, and correlates of urban poverty in the United States. Topics include trends and measurement, family structure, income

support programs, housing, workforce development, unemployment, homelessness, welfare dependence, isolation, and educational deprivation in the context of recent and current proposed policies to address these problems.

**SOCL 520. SEMINAR IN SOCIAL PSYCHOLOGY. (Credit 3 hours).** A review of contemporary issues related to current research in social psychology.

**SOCL 524. SOCIOLOGY OF CRIME AND PUNISHMENT (Credits, 3 hours).** This course primarily focuses on the theoretical development of crime and punishment, crime prevention and treatment, crime control, community action programs and sociological imagination of crime punishment.

**SOCL 529. URBAN STUDIES: FOCUS ON THE GHETTO (Credit, 3 hours).** This course examines the nature, structure, and function of the ghetto in urban community; its relationship to the internal organization of the ghetto, and the larger social organization area; controls from within and without the ghetto; and specific techniques of planning to avoid creating ghettos, poverty, and other problems.

**SOCL 530. SOCIAL ORGANIZATION: STATICS AND DYNAMICS (Credits, 3 hours).** A study of the order, disorder, and change factors that are characteristic of human society.

**SOCL 540. SOCIETY, CULTURE AND PERSONALITY (Credit 3 hours).** This course examines the relationships between society and the individual, culture and personality, human experience, and personal and group behavior viewed from a sociological perspective.

**SOCL 545. QUALITATIVE RESEARCH METHODS (Credits, 3 hours).** This course is an examination of the qualitative-method approaches and rationales for their use, including various techniques for gathering, analyzing and using qualitative data, and writing academic papers and reports.

**SOCL 550. TECHNIQUES OF DATA COLLECTION AND ANALYSIS (Credit, 3 hours).** A study of the main data-collection techniques, including observation, questionnaire construction, sampling, and interviewing. Special emphasis is placed on quantitative data analysis.

**SOCL 555. CONTEMPORARY SOCIOLOGICAL THEORY (Credit, 3 hours).** An analytical study of major social, theoretical works from 1900 to the present.

**SOCL 560. SOCIAL SCIENCE STATISTICS (Credit, 3 hours).** This course focuses on inductive statistics, including sampling bivariate and multivariate statistical analysis, regression, analysis of variance, multiple discriminant analysis, residual analysis, etc. Emphasis is placed on hypothesis testing and its logic, various test requirements, and interpretation of statistical outcomes. Prerequisite: SOCL 350, its equivalent, or instructor permission.

**SOCL 598. SUPERVISED RESEARCH (Credits, 1-6 hours).** Designed for Social-Science Master's students concentrating in Sociology. Admission requires approval of the instructor.

**SOCL 599. SUPERVISED RESEARCH (Credit, 3 hours).** Designed for Social-Science Master's degree students concentrating in sociology. Admission requires approval of the instructor. Prerequisite: SOCL 598.

**SOCL 600. SOCIOLOGY: THESIS (Credits, 3 hours).** Designed for Social-Science Master's degree students concentrating in sociology. The focus is on thesis writing. Admission requires approval from the department chair or the

student's major advisor.

**SOCL 601. SOCIOLOGY DEPARTMENTAL  
COMPREHENSIVE (Credit, 0 hours).**

**SOCL 602. SOCIOLOGY CAPSTONE COURSE (Credits, 3 hours).** Comprehensive, synthesizing project applying the knowledge and skills learned from the completed courses of a student's degree program. Projects may have theoretical/academic and/or applied components.

## Nelson Mandela College of Government and Social Sciences

Dean: Damien Ejigiri, Ph.D.

### Social Science Department

### Master of Arts in Social Sciences Political Science Concentration

**Chair: Dr. Albert Samuels**

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#### GRADUATE FACULTY

##### Professors:

**Esedo, Kingsley**  
Ph. D., Political Science  
Boston University

**Hines, Revathi**  
Ph.D., Political Science  
Howard University

**Samuels, Albert**  
Ph.D., Political Science  
Louisiana State University

#### Introduction

The departments of political science, history and sociology jointly offer the Master of Arts in Social Sciences. This interdisciplinary program is designed to meet the needs of metropolitan area teachers, junior and middle level social service, personnel administrators and beginning graduate students who plan a career in law, or will seek the doctorate in one of the social science disciplines. Thesis options and non-thesis options are available.

#### DEGREES OFFERED

Master of Arts in Social Sciences (MA/SOSI)

##### ADMISSIONS REQUIREMENT

- Admission to the Graduate School at Southern University with minimum GPA of 2.7
- Admission to the Political Science department
- Completion of a minimum of 15 hours of undergraduate courses in political science: American Government, Constitutional Law and 9 hours of electives
- Deficiencies must be eliminated by taking the necessary undergraduate courses.

#### GRADUATION REQUIREMENTS

The Master of Arts in Social Sciences (Thesis option) for students' concentration in political science consists of thirty (30) hours-fifteen (15) hours of political science courses. Students are required to take POLS 500 (Seminar in American Politics) and POLS 502 (Research Seminar in Political Science) and at least one course from each of the following groups:

Political Theory, American Politics/ Public Law,  
Comparative Politics/International Law **15**

Six hours in each of two related fields **12**

**Thesis 3**

**TOTAL 30**

#### Academic Average

Students must meet all of the general requirements of the Graduate School. The student must maintain an overall average of "B" in all work credited toward the degree with not more than six semester hours of "C" work. Students interested in teaching on the college level are strongly encouraged to take eighteen (18) hours of political science courses to satisfy minimum SACS accreditation requirements.

#### Thesis and Examination

All students must pass an oral examination on the thesis. An Advisory committee of three faculty members, representing at least two disciplines should be selected for each student by the end of the first semester in the program. This interdisciplinary committee will also serve as the student's thesis examination committee. The chairperson of the committee shall be the major adviser for the thesis.

Each student shall present a seminar on the thesis after the oral examination and prior to the awarding of the master's degree.

All graduate work, including the thesis, must be completed within six years preceding the granting of the degree.

#### Non-Thesis Option

#### GRADUATION REQUIREMENTS

The Master of Arts in Social Sciences (non-thesis option) for students consists of thirty-six (36) credit hours of graduate level courses (500 Level). In addition to the courses that are required for thesis option students, those pursuing the non-thesis option must take POLS 583 (Graduate Seminar in Political Science) in which they will produce a capstone project or major research paper. They will also be required to take two other political science courses at the 500 level.

Students must also pass a six (6) hour written comprehensive examination (Political Science, 4 hours; History and Sociology 1 hour each), based on their plan of study/course work. The exam will test the student's competence in each discipline. The student is expected to demonstrate a high level of mastery of the relevant literature and theoretical perspectives in political science. In the outside disciplines, the student is expected to demonstrate a substantial degree of mastery of the subject Matter. The exam will be administered during the course of one week.

An advisory committee, selected by the student in consultation with the graduate advisor by the end of the first year in the program and comprised of three (3) members of the graduate faculty representing the disciplines of political science, history, and sociology, will evaluate parts of exams in their respective areas and award a grade of "pass" or "fail." Each professor is responsible for making sure that the student is adequately prepared for the exam, for example, by providing students with information on potential essay questions and areas which the exam may cover. Students must pass all three parts of the exam within six months of the date the degree is to be awarded and may take the exam twice.

#### COURSE DESCRIPTIONS

**POLS 500. SEMINAR IN AMERICAN POLITICS (Credit, 3 hours).** An interdisciplinary course which provides an extensive

review of the American political system by focusing on the three major institutions of government (President, Congress, and the Supreme Court) and the role of blacks in the American political arena.

**POLS 501. SEMINAR IN BLACK POLITICS (Credit, 3 hours).** An extensive review of the research in political science and related disciplines on the nature, role, and techniques of the Black community in American politics at the local, state, and national level.

**POLS 502. RESEARCH SEMINAR IN POLITICAL SCIENCE (Credit, 3 hours).** Definitions of the scope and subject matter of political science; methodological issues; current leading studies of politics; the current state of research in political science.

**POLS 503. METHODOLOGY (Credit, 3 hours).** A research seminar designed to introduce advanced students to data processing in political science. "Hands-on" experience at the computer terminal utilizing computer programs.

**POLS 505. SEMINAR IN POLITICAL SOCIALIZATION (Credit, 3 hours).** An examination of theoretical propositions in findings of recent empirical research in the field of political socialization. Special consideration given to the role of the school and the teacher in the socialization process and the studies on the political socialization of Blacks and other minorities.

**POLS 510. SEMINAR IN THE LEGISLATIVE PROCESS (Credit 3, hours).** The theory and practice of legislative organization and procedures, policy determination, and executive legislative relationship.

**POLS 512. SEMINAR IN INTEREST GROUP POLITICS (Credit 3 hours).** An examination of the impact of interest group influence on the governmental process to include strategies, finance, and lobbying.

**POLS 515. PUBLIC OPINION AND THE POLITICAL PROCESS (Credit, 3 hours).** An analysis of the impact of public opinion on the political process to include an introduction to the development and application of polling and surveying instruments.

**POLS 522. INTERNATIONAL LAW AND ORGANIZATIONS (Credit, 3 hours).** Nature, sources, and development of international law, general development and basic principles of world organizations, principles, structure, methods, and actual operation of international governmental institutions with emphasis on the United Nations and related agencies.

**POLS 532. SEMINAR IN COMPARATIVE POLITICS (Credit, 3 hours).** An advanced seminar dealing with the analysis of contemporary political systems from the perspective of recent developments in comparative politics.

**POLS 550. GOVERNMENT AND POLITICS OF CHINA (Credit, 3 hours).** Evolution, structure, and functioning of the Chinese governmental system, the theories, structure and functioning of the communist party in modern China.

**POLS 572. SEMINAR IN CIVIL LIBERTIES (Credit, 3 hours).** General review of civil liberties in the United States with attention to racial discrimination, freedom of press, speech, religion, and the other civil liberties issues.

**POLS 573. SEMINAR IN PUBLIC LAW (Credit, 3 hours).** General overview of the origins of law with an emphasis on American constitutional and civil law.

**POLS 580. CONTEMPORARY POLITICAL PHILOSOPHIES (Credit, 3 hours).** Major tendencies in political philosophy in the 20th century.

**POLS 583. GRADUATE SEMINAR IN POLITICAL SCIENCE (Credit, 3 hours).** Definitions of the scope and subject matter of political science; methodological issues; current leading studies of politics, and the current state of research in political science.

**POLS 584. URBAN COMMUNITY (Credit, 3 hours).** An interdisciplinary course in urban community affairs from historical, social, economic, and political perspectives.

**POLS 600. THESIS (Credit, 3 hours).** Open to students writing a thesis. Three hours of credit given only upon completion of an acceptable thesis.

**POLS 601. COMPREHENSIVE (Credit, 8 hours)**





## College of Humanities and Interdisciplinary Studies

## COLLEGE OF HUMANITIES AND INTERDISCIPLINARY STUDIES

Dean: Dr. Cynthia Downing Bryant

### Clinical Mental Health Counseling

### Master of Arts in Clinical Mental Health Counseling

#### Department of Counseling and Educational Leadership

**Chair: Joycelyn Denise Harrison, Ph.D.**

P.O. Box 9983

Baton Rouge, LA 70813

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#### FACULTY

*Associate Professors:*

**Donald Anderson, Ed.D.**

**Roxanne M. Davidson, Ph.D., LPC, NCC**

**Joycelyn Denise Harrison, Ph.D.**

*Adjunct Professors:*

**Lionel Jolla, BSW, MSW**

**Jada J. Netters, MA, SSP**

**Susan S. Thornton, Ed.D., LPP, LPC-S, RPT-S**

**Catrice Tolbert, Ph.D.**

#### CLINICAL MENTAL HEALTH COUNSELING

#### PROGRAM OF STUDY

##### *Introduction*

The Department of Counseling & Educational Leadership administers a master's degree program in Clinical Mental Health Counseling. Adjunctive to the teacher preparation program, the department offers undergraduate service courses in the area of psychological foundations of education to preservice and in-service teachers.

#### MASTER OF ART IN CLINICAL MENTAL HEALTH COUNSELING

##### *Mission*

The mission of the Southern University A&M College Clinical Mental Health Counseling Program is to train competent, culturally aware, ethical counselors who will provide exceptional mental health services in both public and private settings to meet the needs of increasingly diverse communities.

##### *Vision Statement*

The faculty believes that mental health counselors play an important role in the creation of a nurturing mental health environment, which fosters good mental health and family development. We are committed to developing highly qualified mental health professionals who are in the unique position to understand the needs of clients and their families and to design and coordinate mental health activities to meet those needs. The Clinical Mental Health Counseling Program at Southern University seeks to provide a variety of opportunities in which counselors in preparation will gain knowledge and experience in the following:

- Understanding and acquiring skills related to the mental health setting: etiology, diagnosis, assessment, treatment, and prevention of mental and emotional disorders;
- Effectively working with individuals, small groups and families for prevention as well as intervention;
- Accepting other people's behaviors/differences and developing sensitivity to a variety of human perspectives;
- Increasing candidates' knowledge, skills, and awareness to work with individuals, families, and groups from diverse populations;
- Working in managed care clinical environments; communicating effectively with others and expressing themselves effectively in writing using APA style;
- On-going professional and personal development that strongly adhere to ethical standards; assuming leadership and advocacy roles as mental health counselors; and
- Becoming academically qualified to become certified, licensed and registered clinical professionals.

##### *Program Learning Outcomes*

##### **Outcome 1: Professional Orientation and Ethics**

Develop an understanding of the professional roles and ethical responsibilities of clinical mental health counselors in order to document and provide direct services and referrals in an ethical, professional manner.

##### **Outcome 2: Human Growth**

Develop knowledge of human growth in order to design and deliver prevention, educational, and support-based programming in response to community needs.

##### **Outcome 3: Career Development**

Develop knowledge of career development in order to design and deliver prevention, educational, and support-based programming in response to community needs.

##### **Outcome 4: Helping Relationships**

Develop theoretical and applied knowledge of helping relationships at the personal, group, and systemic levels in order

to develop treatment plans, properly document services, provide consultation, and implement individual, group, and family counseling interventions.

#### **Outcome 5: Social and Cultural Diversity**

Develop an understanding and appreciation of social and cultural diversity in order to provide culturally sensitive services to all clients and to advocate for equity in other community-based services.

#### **Outcome 6: Assessment**

Develop knowledge of assessment principles, test instruments, and interview practices in order to provide responsible test administration and interpretation, case conceptualization, and diagnosis.

#### **Outcome 7: Research**

Develop theoretical and applied knowledge of research and evaluation practices in order to perform community needs assessments, program evaluation, and quality assurance.

#### **Outcome 8: Group Processing**

Demonstrate an understanding of group counseling and group work to include group development, dynamics, and counseling theories; group leadership styles; group counseling methods and skills, and other group approaches.

#### **Program – Specific Admission Requirements**

- (1) Grade Point Average: To be accepted for the Master of Arts in Clinical Mental Health Counseling, the prospective student must have completed a baccalaureate degree from an accredited institution with a GPA of 2.7 or better. Applicants who have at least 2.5 GPA may be admitted conditionally.
- (2) GRE Scores: The prospective student must take a combined GRE score (Verbal and Quantitative) of 281. Students may be conditionally admitted.
- (3) Letters of Reference: Prospective students must submit three letters of reference, of which two must be from former or current college professors. The letters should address the student's: scholastic aptitude and potential to pursue a research-based program of graduate study; oral and written competencies; emotional maturity; and professional integrity. Performance indicators might be requested by the Admissions Committee, descriptions of which are encouraged in the reference letter.
- (4) Personal Statement of Goals: The Admission Committee considers the Personal Statement of Goals to be a major part of the application packet. The Statement should be a concise essay of 3-5 pages, double-spaced, and typewritten. A statement receiving the highest possible credit for structure and content, will be one that is well organized, displaying correct grammar, punctuation, and spelling. It is expected that the statement will convey sensitivity to cultural diversity, relevant personal background characteristics, and identification with the counseling profession.

- (5) Interview: Participate in an interview with program faculty

#### **Curriculum**

The curriculum consists of 60 semester hours of academic credit, including 100 clock hours of practicum and 600 hours of internship experiences in a mental health setting. At least 40 clock hours of the clinical experiences in practicum and 360 in internship must involve direct service to individuals and groups in a mental health setting.

#### **PLAN OF STUDY**

#### **MASTER OF ARTS IN CLINICAL MENTAL HEALTH COUNSELING**

##### **Core Courses:**

BHVS 552	Theories of Counseling and Psychotherapy .....3 credit hours
BHVS 559	Theories of Vocational Development .....3 credit hours
BHVS 556	Group Counseling Processes .....3 credit hours
BHVS 582	Social and Cultural Foundations of Counseling .....3 credit hours
BHVS 579	Personality and Developmental Dynamics .....3 credit hours
BHVS 575	Behavioral Research Methodology .....3 credit hours
BHVS 578	Behavioral Science and the Law .....3 credit hours

##### **Clinical Mental Health Concentration:**

BHVS 584	Foundations of Mental Health Counseling .....3 credit hours
BHVS 561	Clinical Psychodiagnostic Assessment .....3 credit hours
BHVS 557	Analysis of the Individual .....3 credit hours
BHVS 563	Substance Abuse, Dynamics and Treatments .....3 credit hours
BHVS 562	Advanced Psychopathology and Family System .....3 credit hours
BHVS 576	Marriage and Family Therapy .....3 credit hours

##### **Supervised Counseling Experience:**

BHVS 583	Techniques and Method of Behavioral Change (Pre-Practicum)
BHVS 554	Practicum in Counseling (100 hours)
BHVS 574	Internship in Professional Counseling (600 hours)



**COURSE DESCRIPTIONS****BHVS 552. THEORIES AND TECHNIQUES OF COUNSELING AND PSYCHOTHERAPY (Credit, 3 hours).**

Major theories of counseling as they apply to helping situations; supervised experiences in role playing utilizing major approaches to counseling; lectures, discussions, audiovisual aids; practice in case study analysis and interviewing. (Prerequisite: BHVS 584)

**BHVS 554. PRACTICUM IN COUNSELING (Credit, 3 hours).**

Supervised practice in counseling and related functions. Includes actual group counseling experience under the supervision of a certified licensed counselor. Critiques of student leadership styles, facilitative ability, and understanding of group dynamics procedures will be systematically done. (Prerequisites: BHVS 584, BHVS 552, BHVS 556, and BHVS 578)

**BHVS 556. GROUP COUNSELING PROCESSES (Credit, 3 hours).**

Theoretical bases of group behavior and techniques for facilitating group interactions are among the topics given consideration, along with participatory experiences in interpersonal exploration. (Prerequisites: BHVS 584 and BHVS 552)

**BHVS 559. THEORIES OF VOCATIONAL DEVELOPMENT (Credit, 3 hours).**

A study of theories of Career and Vocational Development. Emphasis is placed on the value of work, labor trends, vocational decision-making skills and vocational counseling strategies and techniques.

**BHVS 561. CLINICALPSYCHODIAGNOSTIC ASSESSMENT (Credit, 3 hours).**

Introduction to the broad spectrum of psychological assessment procedures and techniques. The selection, administration, scoring, and interpretation of objective and projective testing instruments. Comprehensive report writing. Discussion of DSM-V. (Prerequisite: BHVS 584)

**BHVS 562. ADVANCED PSYCHOPATHOLOGY AND FAMILY SYSTEMS (Credit, 3 hours).**

Provides an in-depth exploration of the concepts of psychopathology, emphasizing the role families play in the development of mental health impairments including schizophrenia, depression, anxiety disorders, disruptive behavior disorders, substance abuse disorders, and personality disorders, with associated psychopharmacology. Uses the DSM V as the organizing format for the class with special attention paid to the role of culture in etiology, diagnosis, and the development of treatment plans. (Prerequisites: Undergraduate course in Abnormal Psychology, BHVS 583, BHVS 561, and BHVS 576)

**BHVS 563. SUBSTANCE ABUSE, DYNAMICS AND TREATMENT (Credit, 3 hours).**

This course will provide the information and skills necessary to diagnose, refer, and treat substance abusers and their families. Topics to be covered will include the addiction process; the disease concept of alcoholism; family dynamics; diagnosis; treatment plans and modalities; and special populations.

**BHVS 571. BEREAVEMENT COUNSELING (Credit, 3 hours).**

Theories and concepts related to the issues of dying and death, and guidelines for dealing with some of the sensitive issues, are examined. Living with loss and guiding children through grief and loss will be given special emphasis.

**BHVS 574. INTERNSHIP IN PROFESSIONAL COUNSELING (Credit, 3 hours).**

Minimum 20 hours per week field placement in an agency setting under the supervision of a qualified mental health provider. Includes one and one-half hours per week of participation in a supervised group of approximately six students. (Prerequisites: Completion of all major core requirements, specifically BHVS 583 or BHVS 572, and BHVS 554)

**BHVS 575. BEHAVIORAL RESEARCH METHOD (Credit, 3 hours).**

The purpose of this course is to advance candidates' knowledge of 1) the role of reliability in measurement where sources of error, estimates of reliability, and factors that affect reliability are understood; 2) the role of validity in measurement where construct validity, content validity, concurrent validity, convergent and divergent validity, predictive validity, and factors that affect validity are understood. A broad understanding of qualitative, quantitative, single-case designs, action research, and outcome-based research is gained through the design and implementation of research projects.

**BHVS 576. MARRIAGE AND FAMILY THERAPY (Credit, 3 hours).**

Interactions of the family unit from historical, contemporary, society, and small-group perspectives. Psychotherapeutic intervention by means of an extensive analysis of current therapeutic approaches, including communications theory models, systems theory models, and transactional theory models. A mini-practicum format will be utilized. (Prerequisites: BHVS 584, BHVS 552 and BHVS 556)

**BHVS 577. BEHAVIORAL ASSESSMENT METHODS AND PROCEDURES (Credit, 3 hours).**

Considers the statistical understanding necessary for the administration, scoring, and interpretation of standardized tests of achievement such as ACT, SAT, and others, as well as those pertaining to group measures of intelligence, aptitude, vocational choice, and personality.

**BHVS 578. BEHAVIORAL SCIENCE AND THE LAW (Credit, 3 hours).**

Includes legal and ethical considerations, certification, licensing, and legislative advocacy for issues related to mental health. Rights of the individual as participants in research experiments, therapeutic relationships, and consumers of mental health marketing information will also be emphasized.

**BHVS 579. PERSONALITY AND DEVELOPMENTAL DYNAMICS (Credit, 3 hours).**

Provides a broad understanding of the nature and needs of individuals at all developmental stages, emphasizing psychological, and sociobiological approaches.

**BHVS 581. DYNAMICS OF PLAY THERAPY (Credit, 3 hours).**

Includes a study of cognitive and affective functioning with an emphasis on play and fantasy in child behavior. Therapeutic meaning of symbolic representations in children's play with toys.



Playroom acquisitions and management will also be covered. Pre-practicum experience required. (Prerequisites: BHVS 584 and BHVS 552)

**BHVS 582. SOCIAL AND CULTURAL FOUNDATIONS OF COUNSELING (Credit, 3 hours).**

Includes studies of change, ethnic groups, subculture, changing roles of women, sexism, urban and rural societies, population patterns, cultural mores, and differing life patterns. (Prerequisite: BHVS 584)

**BHVS 583. TECHNIQUES AND METHODS OF BEHAVIOR CHANGE (Credit, 3 hours).**

Includes preparation and laboratory experiences in the use and application of various change methods corresponding to the major theories of counseling and psychotherapy. (Prerequisite: BHVS 552)

**BHVS 584. FOUNDATIONS OF MENTAL HEALTH COUNSELING (Credit, 3 hours).**

This course includes theoretical bases of processes used in the enhancement of the mental health of individuals, families, and groups. Introduction to: 1) history, 2) roles, 3) organizations and standards, 4) professional issues, and 5) ethical, legal and diversity issues will constitute the foundations for mental health program development. Contextual dimensions such as assumptions and roles, and community needs assessment will be comprehensively explored.

**BHVS 601. COMPREHENSIVE (Credit, 0 hour).**

Comprehensive Examination

## College of Humanities and Interdisciplinary Studies

Dean: Dr. Cynthia Downing Bryant

### Master of Education in Educational Leadership

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#### FACULTY

*Associate Professor*

**Jarrett Landor, MPA, Ph.D.**

*Adjunct Professors:*

**Perry Daniel, Ed.D.**

**Carolyn Johnson, M.Ed.**

**Melanie S. Johnson, Ph.D.**

**Joni Roberts**

**Camacia Smith-Ross, E.D.**

#### EDUCATIONAL LEADERSHIP

##### Introduction

The Department of Educational Leadership is housed in the College of Education. This department offers the master of education in Educational Leadership. In addition, this department offers a licensure program for the endorsement of Teacher Leaders.

In accordance with the mission of the university, the Educational Leadership Department offers programs that will enable degree candidates to become educational leaders in a variety of school settings including, but not limited to, building level administrators (K-12), teacher leaders, central office supervisors, and upper level administrators. The goal of this program is produce principals and other school leaders who better match the needs of the school districts. The program is standard driven and addresses guidelines and benchmarks articulated by the Interstate School Leaders Licensure Consortium (ISLLC), Educational Leadership Consortium Council, Southern Regional Education Board (SREB), and Louisiana Standards for School Principals (LPS).

##### Mission

The mission of the Southern University A&M Educational Leadership is to engage candidates in a transformational process of systematic problem solving and data-driven decision-making. The primary aim is to prepare candidates to meet the

challenges of leading schools, organizations, communities, and people.

#### Program Learning Outcomes

##### Outcome 1: Mission, Vision, and Core Values

Effective educational leaders develop, advocate, and enact a shared mission, vision, and core values of high-quality education and academic success and well-being of each student.

##### Outcome 2: Ethics and Professional Norms

Effective educational leaders act ethically and according to professional norms to promote each student's academic success and well-being.

##### Outcome 3: Equity and Cultural Responsiveness

Effective educational leaders strive for equity of educational opportunity and culturally responsive practices to promote each student's academic success and well-being.

##### Outcome 4: Curriculum, Instruction, and Assessment

Effective educational leaders develop and support intellectually rigorous and coherent systems of curriculum, instruction, and assessment to promote each student's academic success and well-being.

##### Outcome 5: Community of Care and Support for Students

Effective educational leaders cultivate an inclusive, caring, and supportive school community that promotes the academic success and well-being of each student.

##### Outcome 6: Professional Capacity of School Personnel

Effective educational leaders develop the professional capacity and practice of school personnel to promote each student's academic success and well-being.

##### Outcome 7: Professional Community for Teachers and Staff

Effective educational leaders foster a professional community of teachers and other professional staff to promote each student's academic success and well-being.

##### Outcome 8: Meaningful Engagement of Families and Community

Effective educational leaders engage families and the community in meaningful, reciprocal, and mutually beneficial ways to promote each student's academic success and well-being.

##### Outcome 9: Operations and Management

Effective educational leaders manage school operations and resources to promote each student's academic success and well-being.

##### Outcome 10: School Improvement

Effective educational leaders act as agents of continuous improvement to promote each student's academic success and well-being.

#### Program – Specific Admission Requirements

- (1) Grade Point Average: To be accepted for the Master of Education in Educational Leadership, the prospective student must have completed a baccalaureate degree from an accredited institution with a GPA of 2.7 or better.

Applicants who have at least 2.5 GPA may be admitted conditionally.

- (2) GRE Scores: The prospective student must take a combined GRE score (Verbal and Quantitative) of 281. Students may be conditionally admitted.
- (3) Letters of Reference: Prospective students must submit three letters of reference, of which two must be from former or current college professors. The letters should address the student's: scholastic aptitude and potential to pursue a research-based program of graduate study; oral and written competencies; emotional maturity; and professional integrity. Performance indicators might be requested by the Admissions Committee, descriptions of which are encouraged in the reference letter.
- (4) Personal Statement of Goals: The Admission Committee considers the Personal Statement of Goals to be a major part of the application packet. The Statement should be a concise essay of 3-5 pages, double-spaced, and typewritten. A statement receiving the highest possible credit for structure and content, will be one that is well organized, displaying correct grammar, punctuation, and spelling. It is expected that the statement will convey sensitivity to cultural diversity, relevant personal background characteristics, and identification with the educational leadership profession.
- (5) Interview: Participate in an interview with program faculty

## GRADUATION REQUIREMENTS

### Curriculum

The curriculum consists of 36 semester hours of academic credits.

### PLAN OF STUDY

#### Master of Education in Educational Leadership

EDLD 500	Prioritizing, Mapping and Monitoring the Curriculum .....3 credit hours
EDLD 510	Program Evaluation and Data Interpretation .....3 credit hours
EDLD 520	Vision of Leadership: Issues and Practices .....3 credit hours
EDLD 530	Research for Educational Leaders ..... 3 credit hours
EDLD 540	Curriculum Development: Issues, Trends & Assessment.....3 credit hours
EDLD 550	Supervising, Analyzing, and Improving Instruction .....3 credit hours
EDLD 560	Managing Effective Schools .....3 credit hours
EDLD 570	Ethics and Legal Issues for Educational Leaders.....3 credit hours
EDLD 580	Fostering Community Support in Schools .....3 credit hours

EDLD 590	Technology Leadership in Schools .....3 credit hours
EDLD 595	Internship .....3 credit hours
EDLD 600	Capstone Seminar/Thesis .....3 credit hours
EDLD 601	Comprehensive

### Taking and passing the School Leaders Licensure Assessment (SLLA), Licensure Examination

## COURSE DESCRIPTIONS

### EDLD 500. PRIORITIZING, MAPPING, AND MONITORING THE CURRICULUM (Credit, 3 hours).

This course is designed to review the schools' curriculum as it relates to (1) prioritizing the curriculum; (2) mapping the curriculum; and (3) monitoring the curriculum.

### EDLD 510. PROGRAM EVALUATION AND DATA INTERPRETATION. (Credit, 3 hours).

This course is intended to provide students with an opportunity to learn about program evaluation, related concepts in education and their application in practice. General information will be acquired from the internet, from discussion as well as from readings and reports. Content areas include: evaluation terminology, types and models planning, data collection, quantitative and qualitative methods, and data analysis and interpretation. ***This course is required for Teacher Leader Endorsement.***

### EDLD 520. VISION OF LEADERSHIP: ISSUES AND PRACTICES. (Credit, 3 hours).

This course is designed to enhance prospective school leaders about educational leadership. The content areas include the review of current educational literature, goals and mission of education, theories of learning, leadership, decision-making, communication, motivation, and the changing role of the federal and state government in education. Students will apply this knowledge to build and enhance his/her philosophical and theoretical framework as a prospective school leader. ***This course is required for Teacher Leader Endorsement.***

### EDLD 530. RESEARCH FOR EDUCATIONAL LEADERS. (Credit, 3 hours).

This course is designed to develop skills necessary to solve educational problems through research activities. It will also provide experiences in data collection, statistical analysis and interpretation, and research design.

### EDLD 540. CURRICULUM DEVELOPMENT: ISSUES, TRENDS, AND ASSESSMENT FOR EDUCATIONAL LEADERS. (Credit, 3 hours).

This course is designed to give potential educational leaders skills in historical development of curriculum. Additionally, how the influence of social trends and issues impact the curriculum. Assessing the curriculum and determining how data impact planning and changing the curriculum.

### EDLD 550. SUPERVISING, ANALYZING, AND IMPROVING INSTRUCTION. (Credit, 3 hours).

This course is concerned with the improvement of classroom instruction. Special emphasis is placed on teaching and learning; profile of students; classroom management, assessing student learning; profile of students, assessing the changing

school climate and culture. In addition, the key issues in supervision will be investigated as well as the role of the supervision in helping teachers plan instruction.

**EDLD 560. MANAGING EFFECTIVE SCHOOLS. (Credit, 3 hours).**

This course is designed to explore the aspects of school administration as it relates to her/his responsibilities in finances, business management, collective bargaining, organization, leadership, staffing, and supervision of personnel.

**EDLD 570. ETHICS AND LEGAL ISSUES FOR EDUCATIONAL LEADERS. (Credit, 3 hours).**

This course provided the legal, ethical, and policy that promote student learning. School administrators are vulnerable to litigation and issues that distract from academic achievement. Relevant, concise, and clear personnel policies become the foundation upon which the human functions rest. Administrative process and procedures provide the internal structure to accomplish the school's primary mandate, to educate children.

**EDLD 580. FOSTERING COMMUNITY SUPPORT IN SCHOOL. (Credit, 3 hours).**

This course includes the study and design of school community relations programs based on the inter-communication between the school and the community. Emphasis will be placed on the role of administrators in the development of a comprehensive program of school community relations. General information will be acquired from discussions, readings, reports, and the internet. The course content will also include such issues as school crisis such as shooting and terrorism and the role and power of new technology in school community relations. In addition, issues associated with "No Child Left Behind" and reporting school achievement and test scores are explored to provide future school leaders with guidance in dealing with cutting edge school community relations issues.

**EDLD 590. TECHNOLOGY LEADERSHIP IN SCHOOLS. (Credit, 3 hours).**

Students will demonstrate an understanding of skills needed for managing technology facilities and resources for administration and teaching and learning at a K-12 school site.

**EDLD 595. INTERNSHIP IN EDUCATIONAL LEADERSHIP. (Credit, 3 hours).**

A practicum in Administration and Supervision in a field based setting. The role of the principal and /or supervisor is to demonstrate competency with both state and national standards.

**EDLD 600. CAPSTONE SEMINAR/THESIS. (Credit, 3 hours).**

A culminating research project that is presented in a seminar at the completion of all course work in the program.





**College of Nursing and Allied Health  
School of Nursing**

## COLLEGE OF NURSING AND ALLIED HEALTH

### School Of Nursing

**Interim Dean:** Dr. Jacqueline J. Hill PhD, RN

- **Ph.D. IN NURSING CURRICULUM (PhD)**
- **DOCTOR OF NURSING PRACTICE (DNP)**
- **MASTER OF SCIENCE IN NURSING (MSN)**

**Chair:** Dr. Cheryl Taylor PhD, RN

P.O. Box 11784  
Baton Rouge, LA 70813  
School of Nursing Building – Room 107 Phone: (225) 771-2663  
Fax (225) 771-3547

### FACULTY

#### **Professors:**

##### **Janet S. Rami**

Ph.D., Research Methodology,  
Louisiana State University

##### **Brown, Sandra C.**

D.N.S., Nursing  
Louisiana State University Health Sciences Center

##### **Spurlock, Wanda R.**

D.N.S., Nursing  
Louisiana State University Health Sciences Center

#### **Associate Professors**

##### **Hill, Jacqueline J.**

Ph.D., Educational Leadership Research and Counseling  
Louisiana State University

##### **Taylor, Cheryl**

Ph.D., Nursing  
Texas Woman's University

#### **Assistant Professors:**

##### **Stover, Annisa**

DNP, Walden University

#### **Adjunct Faculty**

##### **Blair, Lewis**

Pharm D, Xavier University, New Orleans

##### **Lewis-Moore, Carolyn**

Ed.D. University of Phoenix

##### **Graham, Jamie**

DNP, Southern University

#### **Introduction**

The School of Nursing offers four (4) degrees: the Bachelor of Science

in Nursing (BSN), the Master of Science in Nursing (MSN) with a specialty in family nursing, and role options as administrator, educator, or family nurse practitioner, the Doctor of Nursing Practice (DNP) and the Doctor of Philosophy (Ph.D) with a major in nursing.

The School of Nursing is a professional school within the context of higher education. It has as its major focus the preparation of professional nurses and the ongoing development and maintenance of an educational climate of relevancy inclusive of professional culture, research and standards of practice.

#### **Goal Statements**

- **Goal I.** Develop and maintain high quality degree programs that focus on and are compatible with the mission of the university, as well as with the needs of the community and the health care system it serves.
- **Goal II.** Provide for an effective research infrastructure to enhance faculty and student scholarship, research, and other creative pursuits.
- **Goal III.** Recruit, hire, develop, and reward highly competent faculty who bring appropriate expertise and who are committed to providing quality-learning opportunities for students.
- **Goal IV.** Provide a leadership role in public service activities.
- **Goal V.** Establish and maintain effective systems of program review and assessment to assure high quality programs. Program reviews will be systematic, ongoing and outcome-oriented.
- **Goal VI.** Place strong emphasis on providing an organizational structure and resources to enhance attainment of educational, research and public service goals

#### **Accreditation**

The MSN and DNP programs are approved by the Louisiana State Board of Nursing and are accredited by the Commission on Collegiate Nursing Education (CCNE). CCNE may be contacted at the following address:

Commission on Collegiate Nursing Education  
655 K Street, NW Suite 750  
Washington, D. C. 20001  
**202-887-6791**  
**<http://www.aacnnursing.org/CCNE>**

## Doctor of Philosophy in Nursing (Ph.D.)

**Chair: Dr. Cheryl Taylor**

P.O. Box 11784  
Baton Rouge, LA 70813  
School of Nursing Building – Room 107  
Phone: (225) 771-2663; Fax (225) 771-3547

The Ph.D. in Nursing is a research-oriented doctorate that focuses on research related to issues and public policy associated with the health of vulnerable women and children. The program prepares scientists whose research in nursing will extend the knowledge base that informs nursing education, nursing practice, and nursing leadership.

### Competencies

Graduates of the PhD in nursing program should be able to:

- Synthesize knowledge from nursing as well as the biological and behavioral phenomena relevant to the discipline of nursing.
- Conduct, and communicate independent research that advances the body of scientific nursing knowledge.
- Integrate advanced knowledge of nursing and related disciplines to construct, analyze, and test theoretical models that are pertinent to the practice of nursing.
- Apply knowledge of philosophical and ethical principles and methods in analyzing health related issues and practice dilemmas.
- Provide leadership for nursing in clinical, academic, and/or political settings.
- Integrate in-depth knowledge of theory and research into a substantive field of study.
- Seek new opportunities for exploring phenomena of concern to nursing and health care.

### APPLICATION PROCESS AND MATERIALS

For the fall semester admission applications should be completed and submitted by April 1st. Applications for spring semester should be submitted by November 1.

### Interested persons should:

Request a Graduate Application Package from Southern University Graduate School. An application is also available on the web under the Graduate School home page at [www.subr.edu](http://www.subr.edu). Completed applications should be submitted to the Graduate School, Southern University Baton Rouge.

### Completed applications should include:

- Complete Graduate School Application Form
- Three Letters of Recommendation
- Official undergraduate and graduate transcripts from all colleges and universities attended.
- Official GRE Score Report taken within 5 years of the application
- A two to three page Statement of Interest in Doctoral Study
  - Curriculum Vitae

- Evidence of original scholarship or research in nursing
- Applicants may be asked to interview by phone or come to Campus.
- Scholarly Writing Sample

Completed applications are submitted to the Graduate School.

Applications that meet the minimum standards are referred to SUSON Graduate Nursing Program and are reviewed by the program's Admissions Committee.

### ADMISSION REQUIREMENTS *Regular Admission*

A Master's Degree in Nursing.

#### 1. GPA

A minimum over-all grade point average (GPA) of 3.0 on a 4.0 scale for courses counted toward the student's Master's degree, as indicated by official transcript.

#### 2. GRE

A satisfactory score on the GRE.

#### 3. Statement of Interest

Submission of a 500-1000 word statement of interest that addresses the following:

- a) Applicant's personal goals for doctoral study
- b) Statement of how PhD education is important to the fulfillment of applicant's career goals

#### 4. Submission of Current Curriculum Vitae/ Resume

Dated employment history and clinical practice experience, honors, awards, professional memberships, and scholarly works (such as grants, publications, and presentations)

#### 5. Sample of Scholarly Writing

Scholarly writing sample in health care or nursing research, including any publications or research

#### 6. Interview

An interview of the applicant

#### 7. Completion of a prerequisite master's level statistics course.

#### 8. Evidence of Credentials and Certification

A current unencumbered license to practice nursing in a state or U.S. territory, and eligibility for licensure in Louisiana.

#### 9. Letters of Recommendation

Three letters of recommendation from:

- a) A former faculty member in a graduate nursing program
- b) An employer of advanced level professional in research, education, or leadership/ administration who can attest to applicant's competencies
- c) An individual of the applicant's choice who can attest to the applicant's character, level of integrity, professional traits, and the ability to successfully complete a doctorate in nursing practice program with academic excellence

### RETENTION AND PROGRESSION REQUIREMENTS:

Students must earn a grade of "B" or above in each nursing course in which they are enrolled in the program to be eligible for progression.

**GRADUATION REQUIREMENTS**

Completion of the required minimal of 60 credit hours of course work with a GPA of 3.0 or above on a 4.0 scale, successful completion of the Qualifying Examination, and acceptance of the dissertation.

**FINANCIAL SUPPORT FOR STUDENTS**

A financial support package has been designed to attract full-time students. The availability of teaching and research assistantships is based on current needs for part-time clinical nursing faculty and research assistants.

**Ph.D. IN NURSING CURRICULUM**

The program of study for the Ph.D. in Nursing requires 60 semester credit hours beyond the master's degree: 9 hours of core; 18 hours of research (includes 3 credit hours for a research practicum and 3 credit hours for advanced research); 12 credits for focus of study courses; 9 credits for cognates (700 level and above), and 12 credit hours for dissertation.

**Core Courses (9 Hours)**

N700	History and Philosophy of Nursing Science .....	3 credits
N702	Theory Construction in Nursing.....	3 credits
N704	Health Policy, Politics and Economics in Nursing .....	3 credits

**Research Courses (18 Hours)**

N710	Advanced Statistics .....	3 credits*
N712	Advanced Nursing Research.....	3 credits
N714	Population Health Research Methodologies .....	3 credits
N716	Measurement and Informatics in Nursing Research and Practice.....	3 credit
N720	Research Practicum .....	3 credits
N799	Advanced Research.....	3 credits

**Focus of Study Courses (12 Hours)**

N730	Theories and Concepts of Health Behavior and Health Promotion .....	3 credits
N731	Family Nursing: Theory and Research .....	3 credits
N732	Issues in Health Care of Vulnerable Women and Children .....	3 credits
N733	Policy and Strategies for Improving the Health of Vulnerable Women and Children.....	3 credits

**Cognates (9 Hours)**

Cognates are selected with approval of the student's advisor. They may be selected from, but are not limited to, the following areas: Epidemiology, Nutrition, Sociology, Psychology, Health Care Administration, Health Policy, Social Work, and Nursing.

**Dissertation Research (12 Hours)**

N800	Dissertation Research .....	12 credits
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**TOTAL 60 Hours**

***\*With the advisors permission, course substitution is allowed.***

**N 798 Qualifying Examination**

Students must apply to take the qualifying examination after completion of at least 36 credit hours of course work with a minimum GPA of 3.00, and no Grade below "B" in nursing courses.

The qualifying examination will include content from core, research, focus of study, and cognate courses.

**Admission to Candidacy**

Successful completion of the qualifying examination and an approved dissertation topic qualifies students to apply for admission to doctoral candidacy.

**Dissertation Proposal**

Students must present and defend their dissertation proposal to their doctoral committee upon successful advancement to candidacy. Once the doctoral committee approves the dissertation proposal, the student can begin the data collection process.

**Dissertation Defense**

This is the final oral examination of the completed dissertation and it is under the supervision of the student's doctoral committee.

**Time Limit**

All program requirements for the Ph.D. must be completed within eight years from the date the first credit hours are earned. All doctoral work must be completed within five calendar years after the student passes the qualifying examination.

**FULL-TIME PLAN OF STUDY**

The example is for full-time students entering in the Fall Semester.  
Fall Semester Year I

N700	History and Philosophy of Nursing Science.....	3 credits
N710	Advanced Statistics .....	3 credits
N730	Theories and Concepts of Health Behavior and Health Promotion.....	3 credits
N704	Health Policy, Politics and Economics in Nursing.....	3 credits

**Spring Semester Year I**

N712	Advanced Nursing Research .....	3 credits
N714	Population Health Research Methodologies.....	3 credits
N716	Measurement and Informatics in Nursing Research and Practice.....	3 credits

**Summer Semester Year I**



Elective 1 cognate .....3 credits

Elective 2 cognate.....3 credits

### Fall Semester Year II

N702 Theory Construction in Nursing.....3 credits

N731 Family Nursing: Theory and Research.....3 credits

N732 Issues in Healthcare of Vulnerable  
Women and Children.....3 credits

### Spring Semester Year II

N733 Policy and Strategies for Improving the Health  
of Vulnerable Women and Children.....3 credits

N720 Research Practicum.....3 credits

Elective 3 Cognate .....3 credits

### Summer Semester Year II

N799 Advanced Research.....3 credits

### Fall Semester Year III

N798 Comprehensive Examination..... 3 credits

N800 Dissertation Research.....3-15 credits

### Spring Semester Year III

N800 Dissertation Research

### Summer Semester Year III

N800 Dissertation Research

*SMED 739 Applied Statistics, PPOL 700 Quantitative Methods I or an equivalent course for transfer at the 700 level may be substituted for N710*

### COURSE DESCRIPTIONS

**700. HISTORY AND PHILOSOPHY OF NURSING SCIENCE (CREDIT, 3 hours).** Overview and critical analysis of the historical and contemporary views of knowledge development and science. The development of nursing as a discipline is examined from a historical perspective.

**702. THEORY CONSTRUCTION IN NURSING (CREDIT, 3 hours).** Foundation for generating nursing theory for professional practice focusing on the relationship between theory construction and research. Emphasis is on generation, testing, and formulation of a theory for professional practice and analysis of existing health and nursing theories. Strategies for analysis and derivation of concepts, statements, and theories, are practiced. Meta-theories and grand theories are examined and critiqued. (Prerequisite: N700)

**N704 HEALTH POLICY, POLITICS AND ECONOMICS IN NURSING (CREDIT, 3 hours).** Interrelated areas concerning the nurse's role in health care policy. Topics include examination of health care policy, policy analysis, and the political process. Issues that currently shape health care policy development and future policy, and their implications for nursing and health care are explored. The nurse's involvement in

influencing health policy formulation, legislation, and regulations are discussed. (Prerequisite: N700, N710, N712, N730)

**710. ADVANCED STATISTICS (CREDIT, 3 hours).** Principles of bivariate and multivariate regression and correlation are studied. Emphasis is on the application of these techniques in the analysis of nursing and health-related data. Course substitution is allowed with consent of the program. (Prerequisite: Graduate Level Statistics Course)

**712. ADVANCED NURSING RESEARCH (CREDIT, 3 hours).** The relationship of theoretical perspective and the design of nursing research. Critical analysis, research rigor, qualitative and quantitative methods, Meta-analysis, and other methodologies are presented. Alternative designs are discussed in consideration of underlying assumptions, ethical issues, design sensitivity and threats to validity. Hypotheses relating to current nursing problems are derived and appropriate methodology is applied. (Prerequisite: N700, N710, N730)

**714. POPULATION HEALTH & RESEARCH METHODOLOGIES (CREDIT, 3 hours).** Application and critical analysis of quantitative and qualitative research methodologies in the study of health issues in vulnerable persons. Emphasis is on appropriateness of methodology to various research questions and/or problems formulation. Sampling frameworks, types of samples, sampling errors and biases for designs will be addressed. (Prerequisite: N712)

**716. MEASUREMENT & INFORMATICS IN NURSING RESEARCH AND PRACTICE H (CREDIT, 3 hours).** Critical analysis of principles and theories of measurement. Instrumentation, analysis of existing data, reliability and validity are emphasized. Various approaches to measurement and scaling, techniques of instrument construction, and procedures for the critical evaluation of instruments are stressed. (Prerequisite: N712 and N714)

**720. RESEARCH PRACTICUM (CREDIT, 3 hours).** Application/implementation of the research process in an ongoing research project. Students will develop methodological or substantive expertise in research while working with a scientist at a Research Center. Emphasis will be placed on the interdisciplinary aspects of health research and teamwork. Dissemination of research findings and grant writing are stressed. (Prerequisite: N710, N712, N714, N716)

**730. THEORIES AND CONCEPTS OF HEALTH BEHAVIOR AND HEALTH PROMOTION (CREDIT, 3 hours).** Examination of health, health seeking behaviors and barriers to health care of vulnerable populations (i.e. women and children). Included are theoretical and empirical approaches to understanding the impact of culture, economics, and the environment of health. Research on health promotional behaviors of vulnerable individuals, families, and communities is incorporated in the development of interventions that promote, maintain or restore health. Emphasis is placed on the nurse's role in helping individuals to monitor and improve their health and quality of life.

**731. FAMILY NURSING: THEORY AND RESEARCH (CREDIT, 3 HOURS).** Examination of family theories and research from nursing and related disciplines. Focus will be directed toward examination of factors that impact vulnerable families. (Prerequisite: N700, N702, N730)

**N732. ISSUES IN HEALTH CARE OF VULNERABLE WOMEN AND CHILDREN (CREDIT, 3 hours).** Focus on

theory, research and interventions for actual or potential health problems in women and children across the life span.

**733. POLICY AND STRATEGIES FOR IMPROVING THE HEALTH OF VULNERABLE WOMEN AND CHILDREN (CREDIT, 3 hours).** An in-depth analysis of health policy, research and community-based intervention strategies for women and children. Students conduct a critical analysis of health policies and scientific knowledge related to the health of women and children. (Prerequisites: N731, N732, N702)

**798. DOCTORAL QUALIFYING EXAMINATION, (Credit 0 hours).**

**799. ADVANCED RESEARCH (CREDIT, 3-15 hours).** Discussion of practical and philosophical problems associated with dissertation research. (Prerequisite: N710, N712, N714, N716, N720)

**800. DISSERTATION RESEARCH (CREDIT, 3-15 hours).** The dissertation is an original research study completed in partial fulfillment of the requirements for the Ph.D degree. Guidelines for the dissertation have been developed by Southern University's graduate school and will be given to the student. (Prerequisite: Completion of all course work and passing of the Qualifying Examination).

## Doctor of Nursing Practice (DNP)

**Chair: Dr. Cheryl Taylor**

**Program Leader: Dr. Sandra Brown**

P.O. Box 11784

Baton Rouge, LA 70813

School of Nursing Building – Room 107

Phone: (225) 771-2663; Fax (225) 771-3547

The doctor of nursing practice (DNP) degree is a practice-focused doctorate. The program prepares advanced nurse practitioners who will provide competence and leadership in translating research into practice, evaluate ever-growing bodies of evidence, applying research in decision-making, and implementing viable clinical innovations to change nursing practice

### STUDENT LEARNING OUTCOMES

**Graduates of the DNP program should be able to:**

- Analyze data for practice by integrating knowledge from arts and sciences within the context of nursing's philosophical framework and scientific foundation.
- Synthesize theory, research knowledge and methods to create, implement, and evaluate practice interventions and health-delivery systems.
- Integrate nursing science with knowledge from the organizational, biophysical, psychological, and analytical sciences as the basis for evidenced-base practice.
- Utilize information systems/technology and patient care technology to improve and transform health care.
- Integrate health policy and ethics to improve health care outcomes through advocacy roles.
- Provide leadership to foster inter-collaboration that uses critical and reflective thinking.
- Apply clinical investigative skills for evaluation of health outcomes at the patient, family, population, clinical unit, systems, and/or community level.

### APPLICATION PROCESS AND MATERIALS

For the fall semester admission applications should be completed and submitted by April 1st. Applications for spring semester should be submitted by November 1.

**Completed applications should be submitted to the Graduate School, Southern University Baton Rouge.**

**Completed applications should include:**

- Complete Graduate School Application Form
- Three Letters of Recommendation
- Official undergraduate and graduate transcripts from all colleges and universities attended.
- Official GRE Score Report taken within 5 years of the application

- A two to three page Statement of Interest in Doctoral Study
- Curriculum Vitae
- Evidence of original scholarship or research in nursing
- Interview
  - Scholarly Writing Sample

Completed applications are submitted to the Graduate School. Applications that meet the minimum standards are referred to SUSON Graduate Nursing Program and are reviewed by the program's Admissions Committee.

### ADMISSION REQUIREMENTS

#### Regular Admission

##### 1. Academic Preparation

Applicants must hold a master's degree in nursing from an accredited program in nursing and certification as a nurse practitioner.

##### 2. GPA

A minimum over-all grade point average (GPA) of 3.2 or above on a 4.0 scale for courses counted toward the student's Master's degree, as indicated by official transcript.

##### 3. GRE

A satisfactory score on the GRE

##### 4. Statement of Interest

Submission of a 500-1000 word statement of interest that addresses the following:

- a) Applicant's personal goals for doctoral study
- b) Statement of how DNP education is important to the fulfillment of applicant's career goals

##### 5. Submission of Current Curriculum Vitae/ Resume

Dated employment history and clinical practice experience, honors, awards, professional memberships, and scholarly works (such as grants, publications, and presentations)

##### 6. Sample of Scholarly Writing

Scholarly writing sample in health care or nursing research, including any publications or research

##### 7. Interview

An interview of the applicant

##### 8. Evidence of Credentials and Certification

- Evidence of current unencumbered Louisiana Advanced Practice Registered Nurse (APRN) license with no restrictions.
- Three years of full-time clinical practice experience as a certified nurse practitioner (APRN) or certified nurse midwife within the past 5 years.

##### 9. Letters of Recommendation

Three letters of recommendation from:

- a) A former faculty member in a graduate nursing program
- b) An employer of advanced level professional in research, education, or leadership/ administration who can attest to applicant's competencies
- c) An individual of the applicant's choice who can attest

to the applicant's character, level of integrity, professional traits, and the ability to successfully complete a doctorate in nursing practice program with academic excellence

## DNP CURRICULUM

The program of study for the DNP requires a total of 32 credit hours to complete the program with 6 credit hours of core courses, 9 credit hours of graduate-level research courses, and 17 credit hours of focus study courses. Additionally, students are required to complete 500 required practice hours.

### Core Courses (6 Hours)

N700	History and Philosophy of Nursing Science.....	3 credits
N704	Health Policy, Politics and Economics in Nursing.....	3 credits

### Graduate Level Research Courses (9 Hours)

	Graduate Statistics.....	3 credits
NURS 714	Population Health & Research Methodologies.....	3 credits
NURS 716	Measurement and Informatics In Nursing Research and Practice .....	3 credits

### Focus Study Courses (17 Hours)

NURS 730	Theories and Concepts of Health Behavior & Health Promotion.....	3 credits
NURS 740	Leadership in Advanced Practice Primary Care Practicum .....	5 credits
<b>(300 Practicum Hours)</b>		
NURS 742	Advanced Practice Practicum (200 Practicum Hours).....	5 credits
NURS 746	Capstone Project: Evidence-Based Practice and Research Translation.....	1–4 credits
NURS 797	DNP Comprehensive Exam.....	0 credits

### Full-Time Plan of Study

#### Fall Semester Year 1

NURS 700	History and Philosophy of Nursing Science .....	3 credits
NURS 704	Health Policy, Politics, and Economics in Nursing .....	3 credits
NURS 730	Theories and Concepts of Health Behavior & Health Promotion.....	3 credits
	Graduate Statistics* .....	3 credits

\*A graduate statistics course at the 500 Or 600 level is required for academic progression

#### Spring Semester Year I

NURS 714	Population Health & Research Methodologies.....	3 credits
NURS 716	Measurement and Informatics in Nursing Research and Practice.....	3 credits
NURS 740	Leadership in Advanced Practice Primary Care Practicum.....	5 credits
<b>(300 practicum hours)</b>		

#### Summer Semester Year 1

NURS 742	Advanced Practice Practicum (200 credit hours) .....	5 credits
NURS 746	Capstone Project: Evidence-Based Practice and Research Translation.....	1–4 credits
NURS 797	DNP Comprehensive Exam .....	0 credits

### COURSE DESCRIPTIONS

**700. HISTORY AND PHILOSOPHY OF NURSING SCIENCE (CREDIT, 3 hours).** Overview and critical analysis of the historical and contemporary views of knowledge development and science. The development of nursing as a discipline is examined from a historical perspective. (Consent of the Dean and the Program)

**N704 HEALTH POLICY, POLITICS AND ECONOMICS IN NURSING (CREDIT, 3 hours).** Interrelated areas concerning the nurse's role in health care policy. Topics include examination of health care policy, policy analysis, and the political process. Issues that currently shape health care policy development and future policy, and their implications for nursing and health care are explored. The nurse's involvement in influencing health policy formulation, legislation, and regulations are discussed. (Prerequisite: N700, N710, N712, N730)

**714. POPULATION HEALTH & RESEARCH METHODOLOGIES (CREDIT, 3 hours).** Application and critical analysis of quantitative and qualitative research methodologies in the study of health issues in vulnerable persons. Emphasis is on appropriateness of methodology to various research questions and/or problems formulation. Sampling frameworks, types of samples, sampling errors and biases for designs will be addressed. (Prerequisite: N712)

**716. MEASUREMENT & INFORMATICS IN NURSING RESEARCH AND PRACTICE (credit, 3 HOURS).** Critical analysis of principles and theories of measurement. Instrumentation, analysis of existing data, reliability and validity are emphasized. Various approaches to measurement and scaling, techniques of instrument construction, and procedures for the critical evaluation of instruments are stressed. (Prerequisite: N712 and N714)

**730. THEORIES AND CONCEPTS OF HEALTH BEHAVIOR AND HEALTH PROMOTION (CREDIT, 3 hours).** Examination of health, health seeking behaviors and barriers to health care of vulnerable populations (i.e. women and children). Included are theoretical and empirical approaches to understanding the impact of culture, economics, and the environment of health. Research on health promotional behaviors of vulnerable individuals, families, and communities is incorporated in the development of interventions that promote, maintain or restore health. Emphasis is placed on the nurse's role in helping individuals to monitor and improve their health and quality of life.



**740. LEADERSHIP IN ADVANCED PRACTICE PRIMARY CARE PRACTICUM, (5 credits, 300 practicum hours).** In this clinical practicum with seminar, students will integrate DNP role behaviors into clinical practice. A focus on transformational leadership in the practice setting to deliver advanced practice nursing services to individuals, families, communities or systems is emphasized. This course addresses the leadership role of the advanced practice nurse within healthcare organizations to affect change and ensure quality improvement, with a focus on inter- and intra-professional collaboration. In conjunction with their designated faculty advisor, students will design a clinical practicum experience that permits achievement of the student's individual goals and the program objectives with primary emphasis on the integration of DNP competencies directly into advanced nursing practice. (PREREQUISITES: N700, N704, N714, N730)

**742. ADVANCED PRACTICE PRACTICUM, (5 CREDIT HOURS, 200 PRACTICUM HOURS).** In this clinical practicum with seminar, the philosophic basis of ethics and implications for advanced clinical practice will be explored. Using ethical principles, students will examine a variety of clinical, research and practice management dilemmas that arise in the provision of advanced practice nursing services to individuals, populations and communities. Issues related to social justice, health care disparities and vulnerable populations will be explored. In conjunction with their designated faculty advisor, students will design a clinical practicum experience that permits achievement of the student's individual goals and the program objectives with primary emphasis on the integration of DNP competencies directly into advanced nursing practice. PREREQUISITES: (N700, N704, N714, N716, N730, N740)

**746. CAPSTONE PROJECT: EVIDENCE-BASED PRACTICE AND RESEARCH TRANSLATION (Credit, 1-4 hours).** The Capstone Project Course is a synthesis of advanced practice nursing knowledge for the purpose of creating a scholarly project based on advanced clinical practice. Scholarly projects that embrace partnerships with other healthcare or community agencies are emphasized. Faculty mentorship is provided to ensure adherence to research standards, ethical considerations and human assurances, relevance to advanced practice nursing, addresses client needs, and improvement of population, groups or community outcomes. Utilization of databases and dissemination of findings required. (PREREQUISITES N700, N704, N714, N716, N730, N740) (CO-REQUISITE N742)

**797. DNP COMPREHENSIVE EXAMINATION (Credit, 0 hours).**

**MSN ADMISSION REQUIREMENTS****Master of Science in Nursing (MSN)****Chair: Dr. Cheryl Taylor****Program Leader: Dr. Sandra Brown**

P.O. Box 11784

Baton Rouge, LA 70813

School of Nursing Building – Room 107

Phone: (225) 771-2663; Fax (225) 771-3547

The Master of Science in Nursing (MSN) program prepares graduates to assume leadership roles as administrators, educators, and family nurse practitioners (FNP). The curriculum prepares graduates to design and implement nursing practices that take into account the values, beliefs, and self-care practices of individuals, and of families experiencing family-system deficits. Graduates are supported in acquiring expertise to evaluate and manage situations that may compromise a family in meeting universal, developmental, or health-deviation self-care requests. Each recipient of the MSN degree has specialized in family health nursing and either of the following professional role concentrations:

- Nursing Administration
- Nursing Education
- Family Nurse Practitioner

**M.S.N. PROGRAM PURPOSES**

- Provide a base in nursing theory, nursing research, and issues in advanced practice nursing.
- Provide advanced clinical preparation in Family Health Nursing
- Provide advanced role preparation in administration of nursing services, the teaching of nursing, or as a family nurse practitioner.

**MSN STUDENT LEARNING OUTCOMES**

- Synthesize relevant knowledge and skills from nursing science and related disciplines for advanced family health nursing.
- Evaluate family nursing and nursing systems in order to provide nursing care in an advanced practice role.
- Initiate collaborative efforts in the health care delivery system to promote family health.
- Analyze ethical-legal issues that impact family health and wellness with accountability to self, the family, and the profession.
- Evaluate multiple cultural variables that affect the achievement of family health.
- Formulate and test hypotheses to validate theoretical constructs of advanced family health nursing practice.
- Propose leadership strategies, which influence health care policies that impact family health.
- Develop a functional role as a teacher, administrator, family health, or family nurse practitioner.
- Develop a base for advanced study at the post master's, predoctoral, and doctoral study levels.

**1. Academic Preparation**

A Bachelor of Science in Nursing from an accredited college or university as evidenced by official transcript.

**2. GPA**

- A minimum over-all cumulative undergraduate grade point average (GPA) of 3.0 on a 4.0 scale as evidenced by official Bachelor of Science (BSN) transcript is required for regular admission status. Applicants who have a cumulative undergraduate GPA of no less than 2.70 may be considered for conditional admission at the discretion, and upon the recommendation, of the School of Nursing Graduate Nursing Program Admissions Committee.
- To be removed from Conditional Admission status, the student must receive a grade of "B" or above in all graduate-level courses in the first 9 hours attempted. A grade of "C" or lower will warrant immediate dismissal from the program.
- Post-BSN undergraduate courses taken as a non-degree student will not be considered as part of the overall cumulative undergraduate grade point average.

**3. GRE**

A satisfactory Graduate Record Exam (GRE) Score taken within 5 years of the application.

**4. Statement of Interest**

Submission of a 500-1000 word statement of interest that addresses the following:

- Applicant's personal goals for doctoral study
- Statement of how PhD education is important to the fulfillment of applicant's career goals

**5. Submission of Current Curriculum Vitae/ Resume**

Dated employment history and clinical practice experience, honors, awards, professional memberships, and scholarly works (such as grants, publications, and presentations)

**6. Sample of Scholarly Writing**

Scholarly writing sample in health care or nursing research, including any publications or research

**7. Licensure**

Evidence of a current unencumbered Louisiana Registered Nurse (RN) license with no restrictions.

**8. Years of Experience**

**Nurse Practitioner Focus:** A minimum of two (2) years full-time experience as a Registered Nurse in direct patient care delivery within the past five (5) years.

**Administration/Education Focus:** A minimum of two (2) years of full-time experience as a Registered Nurse within the past five (5) years.

**9. Computer Literacy**

Evidence of computer literacy.

**10. Statistics Course**

Completion of a prerequisite course introductory statistics at the 200, 300 level, or above

For the fall semester admission applications should be completed and

submitted by April 1st. Applications for spring semester should be submitted by November 1.

Interested persons should:

Request a Graduate Application Package from Southern University Graduate School. An application is available on the web under the Graduate School link at [www.subr.edu](http://www.subr.edu).

Completed applications should be submitted to the Southern University Graduate School

#### Completed applications should include:

- Completed Graduate School Application Form
- Three Letters of Recommendation
- Official undergraduate and graduate transcripts from all colleges and universities attended.
- Official GRE Score Report
- Submission of 500-1000 word Statement of Interest in pursuing graduate nursing studies
- Scholarly Writing Sample

Applications that meet the minimum standards are referred to the Graduate Nursing Program and are reviewed by the program's Admissions Committee for a recommended action.

### ADMISSION REQUIREMENTS

#### Regular Admission

- A Baccalaureate Degree in Nursing from an accredited college or university as evidenced by official transcript.
- A minimum over-all grade point average (GPA) of 3.0 on a 4.0 scale for courses counted toward the student's baccalaureate degree as indicated by official transcript.
- Completion of a prerequisite course in introductory statistics at the 200, 300 level or above.
- Nurse Practitioner Focus: A minimum of two (2) years of full-time nursing experience as an RN in direct patient care delivery within the past 5 years.
- Evidence of current unencumbered license to practice nursing in a state or U.S. territory, and eligibility for licensure in Louisiana.
- Three letters of recommendation.
- Evidence of computer literacy

#### Conditional Status

**Conditional Admission Status** Applicants who have a cumulative undergraduate GPA of at least 2.70 (at the time of graduation with a BSN degree) may be considered for conditional admission at the discretion, and upon the recommendation, of the School of Nursing Graduate Nursing Program Admissions Committee. In order to be removed from conditional status, the student must receive a grade of B or above in all graduate-level courses in the first 9 hours attempted. A grade of "C" or lower will warrant immediate dismissal from the program.

### DEGREE REQUIREMENTS

Degree requirements consist of: 34-37 credit hours for family health nurse education or administration; and 41-44 credit hours for nurse practitioner. Semester credit hours may be pursued through part-time or full-time study. Students are expected to perform satisfactorily on a written comprehensive examination and complete an approved research project (non-thesis option) or thesis. Students enrolled in the FNP focus can pursue the non-thesis option.

### GRADUATION REQUIREMENTS

Graduation is based on satisfactory completion of all course work in an approved program of study and the student must meet all graduation requirements of the University.

The minimum grade point average (GPA) required for graduation is 3.0 on a 4.0 scale.

All MSN students must pass a written comprehensive examination. The comprehensive examination is developed by the faculty and administered in the final semester of the program of study.

Thesis option students must complete an oral defense of the thesis in addition to the comprehensive exam. If a student is unable to complete a thesis in one semester, a second semester to continue the work is allowed.

The program must be completed within eight calendar years.

#### Certification

Graduates of SUSON's family nurse practitioner program meet eligibility requirements to take the American Nurse Credentialing Center's (ANCC) national certification or the American Academy of Nurse Practitioners Certification Program (AANPCP) exams for family nurse practitioner.

### RECOMMENDED CURRICULUM

#### Family Nurse Practitioner Program

##### Core Courses

N600 Theoretical Foundations of Advanced Nursing.....	3 credits
N602 Design & Method of Nursing Research.....	3 credits
N604 Issues in Advanced Practice Nursing.....	3 credits

**TOTAL 9**

##### Advanced Practice Core Courses

N606 Practicum for Health Assessment & Diagnostic Reasoning.....	1 credit (64 clinical hrs)
N616 Health Assessment & Diagnostic Reasoning Lecture.....	3 credits
N651 Advanced Pathophysiology for Nursing Practice.....	3 credits
N652 Advanced Pharmacology for Advanced Nursing Practice.....	3 credits

**TOTAL 10**

#### Specialty Courses

N608 Family Health Promotion for Advanced Nursing Practice .....	3 credits (64 clinical hrs)
N649 Primary Health Care of Families I.....	2 credits
N650 Primary Health Care of Families II.....	2 credits

**TOTAL 7**

**Role Preparation Courses**

N653 NP Practicum I.....6 credits  
(320 clinical hrs)

N654 NP Practicum II .....6 credits  
(320 clinical hrs)

**TOTAL 12**

**TOTAL 640 direct clinical practicum hours**

**RECOMMENDED CURRICULUM: NURSE ADMINISTRATION  
and NURSE EDUCATION**

N600 Theoretical Foundations of Advanced Nursing.....3

N602 Design and Method of Nursing Research .....3

N604 Issues in Advanced Practice Nursing .....3

N606 Practicum for Health Assessment  
& Diagnostic Reasoning .....1

N608 Family Health Promotion for Advanced Nursing  
Practice.....3

N616 Health Assessment & Diagnostic Reasoning  
for Advanced Practice Nursing .....3

N651 Advanced Pathophysiology for Nursing  
Practice.....3

N652 Advanced Pharmacology for Advanced Nursing Practice.3

N614 Nursing Administration I or Nursing Education I .....3

N615 Nursing Administration II or Nursing Education II.....3

N696 Clinical Research Project .....3

Or

N699 Thesis (Must complete at least 6 hours of Thesis .....3-6

N698 Comprehensive Exam .....0

**COURSE DESCRIPTIONS****MASTER OF SCIENCE IN NURSING (MSN)**

**600. THEORETICAL FOUNDATIONS OF ADVANCED NURSING (Credit, 3 hours).** A systematic examination of the concepts of nursing, human beings, health, and environment as the basis for the advanced practice of Nursing in a variety of health care settings. Includes an analysis of the major theories in nursing, the nature and use of theory, the process of theory construction, the implications of theoretical formulations for advanced nursing practice, and the development a conceptual model for practice that incorporates a theory of Nursing.

**602. DESIGN AND METHODOLOGY OF NURSING RESEARCH (Credit, 3 hours).** Presents the logic, methods, and techniques of scientific research. Emphasis will be placed on design decisions, psychometrics, statistical analyses, and computerized databases. Students will design a research proposal applicable to nursing.

**604. ISSUES IN ADVANCED NURSING PRACTICE (Credit, 3 hours).** An analysis of current issues confronting advanced practice nursing with discussion of strategies to influence health care decisions.

**606. PRACTICUM FOR HEALTH ASSESSMENT AND DIAGNOSTIC REASONING (Credit hours, 1 (64 contact hours @ 4:1 ratio for 16 weeks).** Clinical Practicum for application of advanced knowledge and clinical skills related to health assessment and development of individuals in groups and communities throughout the life cycle.

**608. FAMILY HEALTH PROMOTION FOR ADVANCED NURSING PRACTICE (Credit, 3 hours).** The focus of this course is on family health promotion and family health nursing. Critical analysis of health promotion, protection, and restoration of health at the level of family as a system and unit of society is a major course goal. Principles of nursing and family theories are synthesized and applied to health promotion within the scope of advanced nursing practice. Analyzing evidence-based health promotion delivery models, this course evaluates evidence-based interventions to improve family health outcomes. Emphasis is placed on developing strategies for providing evidence-based health promotion interventions and disease management within the context of the family.

**610. NURSING ADMINISTRATION I: MANAGEMENT THEORIES AND CONCEPTS (Credit, 3 hours).** An investigation of the theories of management. The student will develop advanced skills in communication, decision-making, conflict management, and budgeting. Concepts will be explored for the selection, motivation, and evaluation of staff. Organizational structure and dynamics of the health care system will be analyzed. Past perspectives and current trends will be studied to project future realities of nursing management.

**611. NURSING ADMINISTRATION II: LEADERSHIP AND STRATEGIES (Credit, 3 hours).** Development of the leadership role through application of the concepts of power, authority, influence, and motivation. Utilization of management theories in the development of nurse manager practice. Implementation of planned change in the clinical setting. (Prerequisite N610)

**614. NURSING EDUCATION I: CURRICULUM DEVELOPMENT (Credit, 3 hours).** The course is designed to prepare the student for the process of curriculum development and the procedures of structuring and evaluating nursing curricula. Emphasis is on the use of educational theory and conceptual frameworks; development of a personal philosophy of education, terminal and level objectives, curriculum plan, and methods to evaluate curricula. Other topics of discussion include the curriculum patterns used in nursing education, staff development, and continuing education. The role of formative and summative evaluation for assessing the effectiveness of the curriculum as well as its parts; the role of consultants to an educational program; and, program and institutional accreditation are also examined in the course.

**615. NURSING EDUCATION II: TEACHING PRACTICUM (Credit, 3, Hours).** This course is designed to prepare the student to utilize theories of learning, and principles and methods of teaching in nursing curricula. A variety of methods of instruction in classrooms and clinical laboratory settings will be included. Students will participate in planned practice teaching experiences in an undergraduate curriculum, staff development, or continuing education setting. (Prerequisite: N614)

**616. HEALTH ASSESSMENT AND DIAGNOSTIC REASONING FOR ADVANCED NURSING PRACTICE (Credit 3, hours)** Diagnostic reasoning models and theories utilizing knowledge of advanced health assessment and development of individuals in groups and communities throughout the life cycle. Emphasis is placed on multigenerational, gender, and cultural/ethnic issues.



**649. PRIMARY HEALTH CARE OF FAMILIES I (Credit, 3 hours).**

This course explores periodic health evaluations and episodic health care problems of persons across the life span. Emphasis is placed on family health theories, health promotion and families experiencing disorders with normal childhood illnesses and infectious diseases, EENT, STD, HIV/AIDS, Behavioral & Mental Health, Men's Health, Women's Health, and Prenatal Care. Therapeutic nursing interventions for the management of problems will emphasize health promotion strategies to prevent episodic health problems.

**650. PRIMARY HEALTH CARE OF FAMILIES II (Credit, 3 hours).**

This course explores chronic health care problems of persons across the life span. Emphasis is placed on health promotion and families experiencing disorders related to hematology/immunology, neurology, musculoskeletal, gastrointestinal, cardiovascular, respiratory, endocrine, and dermatology. Environmental health issues and occupational health as it relates to families will also be explored. The therapeutic nursing intervention management of the health care problems of families will emphasize health promotion strategies to prevent, monitor, and stabilize chronic health problems. Application of Wright and Leahey's Family Assessment Model is emphasized. (Prerequisite: N655)

**651. ADVANCED PATHOPHYSIOLOGY for NURSING PRACTICE (Credit, 3 hours).**

Focuses on common diseases and pathology found in individuals in all age groups. Physiology and psychopathology are used as a basis for examining mechanisms of selected disease states. Nursing care is emphasized in terms of early disease detection, illness management, and complication prevention. Relevant research and laboratory data are integrated throughout the course. (Prerequisites: Admission to graduate status, current licensure as registered nurse in Louisiana.)

**652. PHARMACOLOGY FOR ADVANCED NURSING PRACTICE (Credit, 3 hours).**

This course focuses on the application of advanced knowledge of pharmaco-therapeutics in relation to the management of client health needs across the lifespan. Concepts of legal, ethical, developmental, and multicultural issues are addressed. (Prerequisites: Admission to graduate status, current licensure as registered nurse in Louisiana and evidence of entry level health assessment skills.)

**653. FAMILY NURSE PRACTITIONER PRACTICUM I CREDIT HOURS: (Credit, 6 credits hours: 1 didactic & 20 clinical: clinical ratio 1:4).**

This course is the first of two family nurse practitioner practicum courses focusing on advanced practice of nursing in primary care. Students are provided the opportunity to work collaboratively with a preceptor in management of the care of families with selected health problems across the lifespan. Principles of pharmacological and non-pharmacologically therapeutic interventions are integrated in plans of care. Concepts of growth and development, health status, and environmental interactions are explored within a health promotion, illness prevention framework. (Prerequisites: N. 640, 641, 642, 643, 606, 616, 618, 620, 650, 651, 652)

**654. FAMILY NURSE PRACTITIONER PRACTICUM II CREDIT HOURS: (Credit, 6 hours: 1 didactic & 20 clinical; clinical ratio 1:4).**

This is the second of two family nurse practitioner practicum courses, which concentrates on specialization, expansion, and further development of skills related to the advanced practice of nursing in primary care. Students are provided with the opportunity to work collaboratively with a preceptor in management of the care of families with selected health problems across the lifespan. Principles of pharmacological and non-pharmacological therapeutic interventions are integrated in plans of care. Concepts of growth and development, health status, and environmental interactions are

explored within a health promotion, illness prevention framework. (Prerequisites: N653)

**696. CLINICAL RESEARCH PROJECT (Credit, 3-6 hours).** An independent research project under the supervision of a graduate faculty member that employs the research scientific process in analyzing a clinical problem or issue relative to advanced practice nursing. Emphasis is on a project that has tangible application to the practice setting. Prior approval of the research topic by the faculty of record must be obtained prior to registration for the course. The project may be extended for a second semester. (Prerequisites; N600, N602)

**697. DIRECTED INDEPENDENT STUDY (DIS), (Credit, 3 6 hours)** Requires a formal proposal of study to be completed in advance of registration and approved by the supervising faculty, the chairperson and the dean of the school of nursing. May be repeated for up to six hours. Prerequisites: A minimum of 12 semester hours of course work in nursing and approval of the Dean.

**698. COMPREHENSIVE EXAMINATION, (Credit, 0 hours).**

**699. THESIS (Credit 3 hours).** Independent study of a selected topic in nursing requiring a written proposal, data collection and analyses, and resulting in a written thesis under the guidance of graduate nursing faculty. The thesis may be extended for a second semester. An oral defense of thesis is required. (Prerequisites; N600, N602)



# Master of Science in Clinical Rehabilitation Counseling

## College of Nursing and Allied Health

**Interim Dean: Dr. Jacqueline J. Hill**

### Master of Science in Clinical Rehabilitation Counseling

**Chair: Dr. Madan M. Kundu**

Augustus C. Blanks Hall, Room 230  
Phone: 225-771-2390; Fax: 225-771-2293  
E-mail: kundusubr@aol.com | www.subr.edu/rehabilitation

#### GRADUATE FACULTY

##### **Professors:**

**Kundu, Madan M. Ph.D., FNRCA, CRC, NCC, LRC**  
Rehabilitation Counseling  
Michigan State University

##### **Associate Professors:**

**Washington, Carliss, Rh.D., CRC**  
Rehabilitation  
Southern Illinois University

##### **Assistant Professors:**

**Merckerson, Clarence, Ph.D., CRC, LPC (AL)**  
Rehabilitation  
Auburn University

**Ruiz, Derek, Ph.D., CRC, LPC (WI)**  
Rehabilitation Psychology  
University of Wisconsin, Madison

##### **Adjuncts:**

**Blalock, Kacie, Ph.D., CRC, LPC**  
Rehabilitation Psychology  
University of Wisconsin, Madison

**Johnson, Ebonee, Ph.D., CRC**  
Rehabilitation Psychology  
University of Wisconsin, Madison

**Larson, Jonathon, Ed.D., CRC, LCPC (IL)**  
Educational Psychology  
Roosevelt University, Chicago

**Puckett, Frank, Rh.D, CRC, ATP**  
Rehabilitation  
Southern Illinois University

**Schweitzer, John, Ph. D.**  
Michigan State University

##### **Introduction**

The Rehabilitation Counseling Program (RCP) was established in 1983 as a part of the Consent Decree. The RCP has the distinguished honor of being the first nationally accredited Rehabilitation Counseling program in the State of Louisiana. In 1988, the program received an Honorable Mention from the Commissioner of Rehabilitation Services Administration, U.S. Department of Education, Washington, D.C. The RCP manages

three long-term training grants and a national technical assistance center grant on Vocational Rehabilitation Technical Assistance Center for Targeted Communities (VR-TAC-TC): Project E3 (Educate, Empower, and Employ) funded by Rehabilitation Services Administration (RSA), U.S. Department of Education. In addition, the department has a Field Initiated Research on Cooperative Learning and Individualized Mentoring to Build Self-Efficacy, Persistence, and Goal Attainment in Post-secondary African American Students with Disabilities (CLAIM) funded by the National Institute on Disability and Independent Living Rehabilitation Research (NIDILRR).

In recognition of its quality in academic preparation, RCP was reaccredited for 8 years (2010-2018) by the Council on Rehabilitation Education (CORE). On July 1, 2017 the RCP was accredited by the Council for Accreditation of Counseling and Related Education Programs (CACREP).

The mission of the program is to educate and train individuals at the master's level to satisfy the personnel needs of the rehabilitation counseling profession and enhance quality of services to individuals with disabilities. The main objectives are as follows:

- To develop skills, knowledge, and competencies required to provide quality services to persons with disabilities.
- To prepare the students to conduct rehabilitation research and participate in scholarly activities.
- To prepare the students to become effective advocates for individuals with disabilities.
- To provide continuing education to professionals in the rehabilitation community for further skills development and attainment/maintenance of national certification/state license, and/or completion of a degree.

#### **GRADUATE DEGREE OFFERED- M.S. in Clinical Rehabilitation Counseling**

The Program offers a 60-semester hour curriculum to qualified students from diverse origins, both nationally and internationally.

#### **ADMISSION REQUIREMENTS**

##### **Master of Science in Clinical Rehabilitation Counseling**

In addition to the requirements of the Graduate School, applicants must:

- ✓ Possess a bachelor degree in Rehabilitation Services or related human services fields such as education, special education, psychology, social work, sociology, criminal justice, counseling, mental health counseling, nursing, speech pathology and audiology, therapeutic recreation, physical and occupational therapy.
- ✓ Complete the graduate school application
- ✓ Complete the program application
- ✓ Submit 3 letters of recommendation
- ✓ Provide official transcript(s)

- ✓ Participate in a personal interview with the graduate admissions committee

### Admission is granted in two statuses:

An applicant with a cumulative undergraduate GPA of 3.0 or above receives regular admission status.

An applicant with a cumulative undergraduate/graduate GPA of 2.5 - 2.9 receives conditional admission status.

A student admitted in this status is required to complete the first 12 semester hours of core courses with a minimum of B in each course.

### DEGREE/GRADUATION REQUIREMENTS

In order to earn a master's degree in Clinical Rehabilitation Counseling, the students are required to complete a 60-hour curriculum in the following domains:

- I. PROFESSIONAL COUNSELING IDENTITY: 30 HOURS; REHB 502, REHB 510, REHB 511, REHB 512, REHB 514, REHB 515, REHB 520, REHB 564, REHB 565, and REHB 571.
- II. PROFESSIONAL PRACTICE: 9 HOURS; REHB 590, REHB 591, and REHB 592
- III. SPECIALTY AREA: CLINICAL REHABILITATION COUNSELING: 21 HOURS; REHB 501, REHB 504, REHB 525, REHB 572, REHB 575, REHB 580, and REHB 581
- IV. Pass the national examination of Certified Rehabilitation Counselor (CRC) or the departmental Comprehensive examination.

### PLAN OF STUDY

#### Master of Science in Clinical Rehabilitation counseling

##### First Semester: Fall

REHB501	Introduction to Clinical Rehabilitation Counseling .....	3 credits
REHB 502	Professional Orientation and Ethics in Counseling.....	3 credits
REHB510	Theories and Processes of Counseling .....	3 credits
REHB580	Medical & Psychosocial Aspects of Disability I .....	3 credits

##### Second Semester: Spring

REHB 514	Psychopathology and Diagnosis DSM-V .....	3 credits
REHB 515	Human Growth and Development.....	3 credits
REHB 564	Rehabilitation Assessment & Diagnosis .....	3 credits

REHB581	Medical & Psychosocial Aspects of Disability II .....	3 credits
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##### Third Semester: Summer

REHB 504	Rehabilitation Caseload Management & Reporting .....	3 credits
REHB 575	Application of Assistive Technology in VR ...	3 credits
REHB590	Clinical Practicum .....	3 credits

##### Fourth Semester: Fall

REHB 525	Substance Abuse and Mental Health Counseling .....	3 credits
REHB 565	Research Methods, Statistics, and Program Evaluation .....	3 credits
REHB 571	Career Development, Job Development & Job Placement .....	3 credits
REHB 591	Clinical Internship I .....	3 credits

##### Fifth Semester: Spring

REHB 511	Counseling Culturally Diverse.....	3 credits
REHB 512	Advocacy, Ethics, and Empowerment ...	3 credits
REHB 520	Family and Group Counseling for Allied Health Professionals .....	3 credits
REHB 592	Clinical Internship II .....	3 credits
REHB 699	CRC/COMPREHENSIVE.....	0 credits

##### Sixth Semester: Summer

REHB 572	Foundations of Vocational Evaluation....	3 credits
REHB 699	CRC/COMPREHENSIVE.....	0 credits

### COURSE DESCRIPTIONS

#### REHB 501. INTRODUCTION TO CLINICAL REHABILITATION COUNSELING.

This course presents an overview of the field of rehabilitation. It focuses upon current rehabilitation practices, policies, principles, and ethics within the context of the history of rehabilitation, and also within the context of today's political climate. The spectrum of rehabilitation services is discussed, ranging from referral, intake, evaluation, training through placement and follow-up. Upon successful completion of this course, the students are prepared for more specialized courses in the field of rehabilitation.

#### REHB 502. PROFESSIONAL ORIENTATION AND ETHICS IN COUNSELING.

This course is designed to introduce the student to the profession of counseling. The history of the counseling profession, its various settings and modalities, the major theories underlying the practice of counseling, and ethical principles will be studied. Included will be major discussions about current trends in the counseling profession and the outlook for work opportunities.



**REHB 504. REHABILITATION CASELOAD MANAGEMENT AND REPORTING.**

This course focuses on counseling strategies and caseload management methods for public and private rehabilitation. The course work facilitates development of the following skills: interpersonal, intake interview, goal setting, time management and report writing and documentation. The overall goals of the course are to assist students to become effective diagnosticians, interviewers, goal-setters, coordinators of caseloads, and service providers to culturally diverse consumers with disabilities.

**REHB 510. THEORIES AND PROCESS OF COUNSELING.**

This course is a survey of counseling theories applicable to the field of rehabilitation. Discussions will focus on the basic concepts of each approach such as the view of human nature, therapeutic process, and the client-counselor relationship. The following theories will be considered: Psychoanalytic, Adlerian, Existential, Person-centered, Gestalt, Reality Therapy, Cognitive Behavior therapy and narrative therapy. In addition, modern approaches including: solution-focused brief therapy and narrative therapy will be addressed.

**REHB 511. COUNSELING CULTURALLY DIVERSE.**

The course is designed to: heighten the students' sensitivity to the unique needs of consumers of diverse cultural origins; assist students to become culturally competent clinical rehabilitation counselors; and facilitate integration of knowledge, skills, and competencies necessary to provide quality services.

**REHB 512. ADVOCACY, ETHICS, AND EMPOWERMENT.**

This course focuses upon the empirical as well as the philosophical bases of advocacy, empowerment, and ethics. These three topics play an important role in the professional life of the Clinical Rehabilitation Counselors. Upon successful completion of the course, students are able to better utilize the rehabilitation and counseling principles taught in other classes by re-interpreting some of the tenets from the perspective of ethics, empowerment, and advocacy.

**REHB 514. PSYCHOPATHOLOGY AND DIAGNOSIS DSM-V.**

This course is designed to provide rehabilitation and mental health counselors with basic information so that they may have an understanding of the major types of psychiatric conditions, as well as the implications of these conditions for the client's personal, social, and vocational functioning. Psychiatric conditions will be considered in terms of their description, diagnostic criteria, treatment planning considerations, and expected outcomes. The medical and psychiatric rehabilitation models, and their interrelationships in providing services to persons with psychiatric disabilities will be discussed. Special emphasis will be placed on functional assessment of persons with chronic mental illness, and studying and developing client driven rehabilitation models for community re-integration.

**REHB 515. HUMAN GROWTH AND DEVELOPMENT.**

This course will cover the physical, cognitive, emotional, psychological, and social factors in human development, from conception to death. This course is designed to provide students with an understanding of human development over a lifetime focusing on life stages of infancy, adolescence and adulthood incorporating cognitive, physical, and social development concerns.

**REHB 520 FAMILY AND GROUP COUNSELING FOR ALLIED HEALTH PROFESSIONALS.**

This course will provide the theoretical and technical foundations for the practice of group and family counseling. Students will understand how individual counseling theories can be modified and applied in group settings. This course will include an overview of systems theory as it applies to family dynamics with a focus on family organization, family subsystems, etc. Students will also learn specific interventions applicable to group and family clientele and

settings. As an experiential component, this course will include simulated group and family counseling sessions in which students will have the opportunity to apply, practice and refine their skills.

**REHB 525 SUBSTANCE ABUSE AND MENTAL HEALTH COUNSELING.**

This course provides an overview of the evidence-based practices and common practices for the treatment of substance use disorders (SUDs). Emphasis is placed on training of the interventions in the treatment of SUDs, the various treatment modalities and outcomes, and the components of the therapeutic process (from initial meeting to discharge).

**REHB 564. ASSESSMENT AND DIAGNOSIS.**

This course covers basic principles and theories underlying psychological tests, including reliability and validity. It focuses on a variety of assessment procedures including both observational methods and more traditional tests. Instruction in the administration, scoring, and interpretation of intelligence, personality, and interest inventories are provided. Emphasis is on special considerations necessary for using traditional tests with persons with disabilities and on specific tests developed for use with this population.

**REHB 565. RESEARCH METHODS, STATISTICS, AND PROGRAM EVALUATION.**

This course provides an introduction to basic concepts essential to understanding and conducting research in counseling. The course will include an analysis of research methods and designs, as well as statistical tools necessary, used for examining research and for evaluating programs. This course will provide a basis for interpreting and evaluating published research, as well as a fundamental understanding of programmatic evaluation to better assist with the dissemination of evidence-based research through practice.

**REHB 571. CAREER DEVELOPMENT, JOB DEVELOPMENT AND PLACEMENT.**

This course provides a practical and theoretical foundation for understanding the relationships of career development theories to counseling practice. Includes vocational choice theory, lifestyle choices, occupational and educational information, decision-making processes and career exploration techniques, focusing especially on ethical service delivery to diverse population. Additionally, the contents will cover techniques of job development, job analysis, and placement as applied to assist persons with disabilities to obtain and maintain competitive employment. Attempts will be made to demystify the role of vocational rehabilitation counselors in the process of job development and placement. Strategies to involve the consumers, the family, the employer, and other stakeholders in all phases of career development and placement will be discussed.

**REHB 572 FOUNDATIONS OF VOCATIONAL EVALUATION.**

This course provides an introduction to general principles in vocational evaluation techniques (interest, intelligence, achievement, aptitude, values, temperaments, memory, learning style and work samples) as they apply to a person with disabilities are reviewed. The use of modern, contemporary assessment techniques including labor market analysis be presented along with the collaboration between assistive technology and vocational evaluation will be addressed. The course utilizes the major vocational evaluation and assessment systems in the VEWA LAB, as they apply to the assessment of the vocational potential of individuals with disabilities. The course uses worker qualifications as they apply to descriptions of jobs listed in the O'Net classification system and positions listed by the Louisiana Workforce Commission. Didactic experience in testing, report writing, and interpretations are provided.

**REHB 575 APPLICATIONS OF ASSISTIVE TECHNOLOGY IN VOCATIONAL REHABILITATION.**

This course reviews the applications of assistive technology as applied to the needs of individuals with disabilities. The course covers various types of assistive technology (AT) including: computer access, electronic devices for activities of daily living, communication devices and strategies and other devices to accommodate visual and hearing impairment. The course includes the application of clinically based strategies for determining an individual's need for and acceptance of assistive technology to improve functional outcomes with interviews with AT specialists.

**REHB 580 AND 581. MEDICAL AND PSYCHOSOCIAL ASPECTS OF DISABILITY I AND II.**

This foundation course is offered in two sequential parts. It is designed to provide an overview of medical terminology and anatomy and physiology of the organ system; describe the major diseases and associated etiologies, pathologies and disabilities; delineate the diagnosis and prognosis of major injuries/acquired disabling conditions and related complications; and outline the vocational implications. Upon successful completion of this course, the students will be able to comprehend medical reports; determine functional abilities and transferrable skills required to develop a rehabilitation plan; communicate effectively with medical professionals and health care workers; and embrace the dynamics of adjustment to disabilities, coping mechanism, and the psychosocial impact of disability.

**REHB 590. CLINICAL PRACTICUM.**

This supervised clinical experience of 100 clock hours is designed to provide students with the first formal opportunity to utilize the knowledge acquired through course work. The practicum site is selected, in consultation with the faculty supervisor, from a list of accredited agencies serving consumers with a variety of disabilities, especially those from culturally diverse backgrounds. Prerequisite: The student must demonstrate knowledge, skills, competencies, ethical conduct and professionalism conducive to serving people with significant disabilities before being permitted to enroll.

**REHB 591 AND 592. CLINICAL INTERNSHIPS I AND II.**

The students are eligible for Clinical Internship upon completion of first three semester of courses (30 hours). This supervised clinical experience is acquired in REHB 591 Clinical Internship I 300 clock hours in Fall and REHB 592 Clinical Internship II of 300 clock hours Spring, a total of 600 hours in the second year of the curriculum. It is designed to provide students with the first formal opportunity to utilize the knowledge acquired through course work. The internship site is selected, in consultation with the faculty supervisor, from a list of accredited agencies serving consumers with a variety of disabilities, especially those from culturally diverse backgrounds. The courses provide intensive student exposure to: process referral, intake interview, counseling and guidance, case management, career counseling, job development, job placement process in state vocational rehabilitation agencies, community rehabilitation programs, and other private for-profit and non-profit agencies. The Clinical Internship Manual delineates the requirements, responsibilities, stages of internships and other pertinent details. Pre-requisite: The student must demonstrate knowledge, skills, competencies, ethical conduct and professionalism conducive to serving people with significant disabilities before being permitted to enroll.

**REHB 699 CRC OR DEPARTMENTAL COMPREHENSIVE.**

Upon completion of 75% of course work, the students are eligible to take the national certification examination administered by the Commission on Rehabilitation Counselor Certification (CRCC). The final requirement to graduate from the program is to pass the national examination of Certified Rehabilitation Counselor (CRC) administered by the Commission on Rehabilitation Counselor Certification or Departmental Comprehensive.







## **Master of Science in Speech-Language Pathology**



## College of Nursing and Allied Health

*Interim Dean: Dr. Jacqueline J. Hill*

### Master of Science in Speech-Language Pathology

#### Interim Department Chairperson:

**Stephen Enwefa, PhD**

Augustus C. Blanks Hall

Phone: 771-2449 | Fax: (225) 771-5652

[Stephen\\_enwefa@subr.edu](mailto:Stephen_enwefa@subr.edu)

#### Graduate Program Director:

**Enwefa, Regina, PhD**

Augustus C. Blanks Hall

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#### Director of Clinical Education

**Christy Wynn Moland, Ph.D.**

Augustus C. Blanks Hall

Phone: (225) 771-3950

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### GRADUATE FACULTY

#### *Professors:*

**Enwefa, Regina Ph.D.,**

Communication Sciences & Disorders, CCC-SLP

Howard University

**Enwefa, Stephen Ph.D.,**

Communication Science & Disorders, CCC-SLP

Howard University

MPA, Grambling State University

**Lewnau, Elaine Bremer Ed.D.,**

Speech Pathology, CCC-SLP

Columbia University

#### *Assistant Professors:*

**Moland, Christy Wynn Ph.D.,**

Communication Disorders, CCC-SLP

Louisiana State University

**Gillis, Terrilynn Jenkins Ph.D.**

Speech and Hearing Sciences, CCC- SLP

University of Illinois at Urbana-Champaign

#### *Adjuncts:*

**Seibert, Marilyn PhD**

Communication Sciences & Disorders, CCC-SLP

University of Washington

#### *Introduction*

The Master of Science in Speech Language Pathology at Southern University offers students' academic and clinical preparation that meets the requirements of the American Speech-Language Hearing Association (ASHA) for the Certificate of Clinical Competence in

Speech-Language Pathology.

### PLAN OF STUDY

#### MASTER OF SCIENCE IN SPEECH-LANGUAGE PATHOLOGY

The goal of the program is to prepare highly competent speech-language pathologists who are dedicated to providing services to diverse individuals across the lifespan who have communication disorders. This goal is achieved through a curriculum that integrates academic rigor, research activities, technology, and clinical practicum. The curriculum is designed to produce speech-language pathologists from diverse backgrounds who are capable of engaging in evidence based practices as they work independently and collaboratively in a variety of things, including hospitals, rehabilitation centers, community clinics, private practice, preschool programs, and public schools.

#### *Instructional Core*

##### Basic Science Coursework

- (12 semester hours at the undergraduate level)
- **Biological Sciences**
- **Physical Science (Physics or Chemistry)**
- **Social /Behavioral Sciences**
- **Statistics**

##### Academic Course Work (36 semester hours)

SECD 504	Sociolinguistics.....	3 credits
SECD 530	Phonological Disorders.....	3 credits
SECD 555	Voice Disorders .....	3 credits
SECD 558	Neurodegenerative Disorders of Speech .....	3 credits
SECD 559	Aphasia .....	3 credits
SECD 560	Stuttering .....	3 credits
SECD 563	Advanced Aural Rehabilitation.....	3 credits
SECD 584	Augmentative Communication.....	3 credits
SECD 566	Language Disorders and Assessment.....	3 credits
SECD 599-03	Special Populations.....	3 credits
SECD 610	Seminar in Language Disorders.....	3 credits
SECD 667	Dysphagia Assessment & Intervention.....	3 credits

##### Clinical Core\* (15+ semester hours)

SECD 528	Clinical and Diagnostic Methods .....	3 credits
SECD 567	Advanced Clinical Practicum .....	3 credits
SECD 568	Advanced Clinical Practicum .....	3 credits
SECD 569	Advanced Clinical Practicum .....	3 credits
SECD 571	Advanced Clinical Practicum .....	3 credits

*\*Additional clinical practicum courses may be necessary to fulfill the 400 clock-hour requirement of the American Speech Language Hearing Association (ASHA)*

##### Research & Exit Core (6 semester hours)

Students are introduced to Research Methods their first semester then complete research projects in most academic courses to prepare them for clinical evidenced based practice (EBP) projects and, ultimately, the Departmental Comprehensive Exam. The Departmental Comprehensive Exam consists of successfully passing the Praxis Exam and the Departmental Oral/Written EBP Project.

SECD 500	Research Methods .....	3 credits
SECD 599- 01	Praxis Preparation.....	3 credits
SECD 601	Departmental Comprehensive Exam.....	0 credits

## ADMISSION REQUIREMENTS

- ✓ In addition to meeting the general admission requirements of the Graduate School, applicants must meet the following criteria for admission into the Graduate Program in Speech Language Pathology:
- ✓ An undergraduate degree in speech-language pathology
- ✓ An overall GPA of 3.0 in general coursework and a GPA of 3.0 in speech-language pathology with a minimum grade of "B" in each speech-language pathology course.
- ✓ Three typewritten letters of recommendation on professional letterhead from practitioners and/or educators in speech-language pathology or audiology who are familiar with the applicant's academic performance.
- ✓ Personal statement of goals
- ✓ Evidence of undergraduate clinical clock hours with a grade of B or better (including observation hours)
- ✓ A transcript showing at least twenty-seven (27) semester credit hours in undergraduate speech-language pathology courses which must include:
  - Phonetics (3 credits)
  - Normal speech and language acquisition/development (3 credits)
  - Anatomy and physiology of the ear and vocal mechanism (3 credits)
  - Introduction to communication disorders (3 credits)
  - Introduction to audiology (3 credits)
  - Voice Science (3 credits)
  - Aural Rehabilitation (3 credits)
  - Stuttering (3 credits)
  - Articulation (3 credits)

Questions concerning admission status should be submitted in writing to:

**Speech Language Pathology Program**  
**Post Office Box 11298**  
**Southern University Branch Post Office**  
**Baton Rouge, LA 70813**

## Admission Requirements for the Graduate Program in Speech Language Pathology

Some requirements for regular admission, conditional admission, and provisional admission to the SU SLP department exceed those of the Graduate School. The following requirements apply to admission to the graduate program in speech-language pathology:

### Regular Admission

**Bachelor's degree in speech-language pathology.** Applicants have a 3.00 minimum cumulative GPA; Grade of B or better in the undergraduate SLP prerequisite courses required for ASHA certification; Acceptable scores on the Graduate Record Examination; Three letters of recommendation – two of which must be from professors who are familiar with the applicant's academic performance.

### Conditional Admission

**Bachelor's degree in speech-language pathology.** Applicants who do not meet all admissions criteria for regular admission may be admitted for up to one academic year on a conditional basis, upon recommendation of the departmental admissions committee, provided additional evidence of capacity to do satisfactory work is presented. To qualify for conditional admission status, applicants must have a 2.80 minimum cumulative GPA; a 3.00 minimum GPA in SLP courses; and all other non-GPA requirements for regular admission.

### Provisional Admission

**Bachelor's degree in speech-language pathology.** Students who have applied for admission to the Graduate School but whose credentials were not completed or received by the admissions deadline may be admitted provisionally, for one semester, upon recommendation of the departmental admissions committee. Applicants given this provisional status have met all requirements for regular admission but are missing a required document. One semester only is allowed for students who are admitted provisionally to have their credentials completed. Provisional admission has a limitation of one semester; therefore, it cannot be extended or granted for the second time to the same student. To continue to enroll in SLP courses beyond the one-semester limitation of a Provisional Admission, a student must apply to the departmental admissions committee for a Change of Status from Provisional to Regular. This re-application must be accompanied by the original admissions letter from the Graduate School along with documents showing that the missing documents have been provided.

**NOTE:** Any level of admission to the graduate program in speech-language pathology requires a bachelor's degree in speech-language pathology, which must be completed by the date of projected enrollment. Upon acceptance, official transcript verification of the degree must be provided prior to beginning courses in the graduate program. If an applicant holds a bachelor's degree in another discipline, he/she is required to complete a second bachelor's degree in speech-language pathology prior to admission to the graduate program. Applicants with a second bachelor's degree must meet the same admissions requirements (stated above) as those with an initial degree.

### Course of Studies for Master's Degree Program in Speech-Language Pathology

Students participate in academic advising a minimum of once a semester. To ensure that students systematically and successfully matriculate through the program, they are introduced to the 2, 3 and 4 Year Programs during their initial orientation.

### Program of Study: Three Options

**Two-Year Program of Study** is for students who are admitted with Regular Admission Status and who will be involved in the program on a full-time basis (fewer than 20 hours of outside

employment per week).

Students with Provisional Admission Status also may enroll in the two- year program with the provision that they obtain regular admission status

by the end of their first semester of enrollment in accordance with the requirements of this admission status. Advisement by the assigned faculty advisor is required at least once each semester prior to registration.

**Three-Year Program of Study:** *Required* for students who are admitted with Conditional Admission Status and/or who work more than twenty hours per week. These full-time students will be limited to nine credit hours per semester and must follow the sequence of courses in the three-year program of study. Advisement by the assigned faculty advisor is required at least once each semester prior to registration and immediately following the submission of mid-term grades by faculty.

**Four-Year Part-Time Program of Study** is for students who have other full-time obligations such as work, family obligations, etc., or who choose to take a slower pace in the program for other personal reasons. Students admitted with Regular, Provisional, or Conditional Status may choose to enroll in the program on a part-time basis. In addition, there may be cases where the faculty advisor, graduate program director, or departmental chair may advise a student to choose this option based on the student's progress in the program. Advisement by the assigned faculty advisor is required at least once each semester prior to registration and for students of conditional status, immediately following the submission of mid-term grades by faculty.

## COURSE DESCRIPTIONS

### Speech Language Pathology

**SECD 500. (3 credit hours).** Introductory course in research methodology. Emphasis is on providing basic competencies necessary to understand and evaluate the research of others, and familiarize the beginning researcher with procedures to plan and develop a research proposal.

**SECD 502. LINGUISTICS (3 credit hours).** Scientific investigation of the origin, form and structure, and modification of language, includes phonology, morphology, syntax and semantics.

**SECD 504. SOCIOLINGUISTICS (3 credit hours).** A consideration of the correlation between linguistic structures and sociological variables. Some of the topics covered are the role of standard language, the role and value of dialect and the social functions of language.

**SECD 505. PSYCHOLINGUISTICS (3 credit hours).** The field of study that blends the disciplines of psychology, and linguistics to analyze areas of human behavior and culture with areas of human learning function.

**SECD 506. SPEECH SCIENCE (3 credit hours).** The study of sound (acoustics) and the zero dynamics of speech. Instrumentation and measurement of respiratory, laryngeal and supraglottal (kinematic) functions of speech production. Discuss the functional flow diagram and speech information process. Consider guidelines and principles for incorporation of microcomputer applications into clinical realms.

**SECD 510. LANGUAGE OF NORMAL CHILDREN (3 credit**

**hours).** Advanced study of language acquisition and use by normal children, with emphasis on behavioral, semantic, syntactic and pragmatic aspects tools employed in the study of early language development are presented.

**SECD 528. CLINICAL AND DIAGNOSTIC METHODS INCOMMUNICATIVE DISORDERS (3 credit hours).** Approaches and experiences in differential diagnosis of speech and language disorders, to include the principles and procedures for planning effective management of speech and language disorders.

**SECD 530. PHONOLOGICAL DISORDERS (3 credit hours).** A study of the many phonological terms, theories and applications, includes the underlying, covert level of phonological knowledge, and the manifest, overt level of speech production. To include an analysis of the disorders of the sound system in the light of current linguistic theory.

**SECD 548. HEARING SCIENCE (3 credit hours).** A systematic survey of the current knowledge of the operation of the hearing mechanism, the auditory and perceptual systems.

**SECD 549. DISORDERS AND ASSESSMENT OF THE AUDITORY SYSTEM (3 credit hours).** Consideration of techniques used in testing hearing of the normal and the disordered auditory mechanisms, to include vocal anatomy, the physical characteristics of speech sounds, and the psychophysiological process involved in hearing.

**SECD 550. ADVANCED ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISM (3 credit hours).** Detailed study of the anatomy of the speech and hearing mechanism, the physiology of speech production with emphasis on the neurological bases of speech.

**SECD 553. ADVANCED AUDIOLOGY (3 credit hours).** Laboratory demonstration and practice in the administration and interpretation of tests for site of lesion.

**SECD 555. FUNCTIONAL AND ORGANIC VOICE DISORDERS (3 credit hours).** Principles of differential diagnosis and clinical management of children and adults presenting voice disorders; a critical review of the literature. (Prerequisite SECD 558).

**SECD 558. NEUROGENIC DISORDERS OF SPEECH (3 credit hours).** Differential diagnosis and management of speech disorders that result from neurological dysfunction. Special consideration to diversity and cultural differences, as well as to concomitant diagnoses such as stroke, traumatic brain injury, and degenerative diseases.

**SECD 559. APHASIA (3 credit hours).** Assessment and intervention, strategies in aphasia and related language disorders; emphasis on major approaches to treating language impairments in adults with aphasia. (Prerequisite SECD 558).

**SECD 560. STUTTERING DIAGNOSIS AND MANAGEMENT (3 credit hours).** The diagnosis and clinical management of stuttering are considered. Therapy models are presented along with data bearing on the efficacy of particular approaches. Specific rehabilitation procedures are described.

**SECD 563. ADVANCED AURAL REHABILITATION (3 credit hours).** A detailed survey and study of the pertinent research literature with consideration of the theoretical and methodological approaches of auditory training, amplification, visual speech perception and speech conservation in the rehabilitation process of the hearing impaired.

**SECD 566. LANGUAGE DISORDERS AND ASSESSMENT (3 credit hours).** Consideration of descriptions and theories, both historical and contemporary, of disordered language in children and related problems. Procedures and tools used in evaluating the



language skills of children are presented along with professional reporting methods.

**SECD 567. ADVANCED PRACTICUM IN COMMUNICATIVE DISORDERS (3 credit hours).** Advanced speech and language practice in supervised laboratory experience in the on-campus as well as off-campus sites. (Prerequisite SECD 528)

**SECD 568. ADVANCED PRACTICUM IN COMMUNICATIVE DISORDERS (3 credit hours).** Advanced speech and language practice in supervised laboratory experience on-campus as well as off-campus sites. (Prerequisite SECD 528).

**SECD 569. ADVANCED PRACTICUM IN COMMUNICATIVE DISORDERS (3 credit hours).** Advanced speech and language practice in supervised laboratory experience in the on-campus as well as off-campus sites. (Prerequisite SECD 528).

**SECD 570. ADVANCED STUDY OF LANGUAGE AND CULTURE (3 credit hours).** The study of coping behaviors. The relationship between language and behavior and the variables that affect them in a restricted environment with differences and variations in the prosodic, phonologic, morphologic, syntactic and semantic aspects of language.

**SECD 571. ADVANCED PRACTICUM IN COMMUNICATIVE DISORDERS (3 credit hours).** Advanced speech and language practice in supervised laboratory experience in the on-campus as well as off-campus sites. (Prerequisite SECD 528).

**SECD 572. OROFACIAL DISORDERS (3 credit hours).** Emphasizes the effects of orofacial anomalies on the communication process. Topics discussed include types of cleft of palate and lip, velopharyngeal inadequacy, etiology, physical management and speech therapy.

**SECD 583. COMPUTER METHODS FOR STUDYING SPEECH AND HEARING PROCESSES (3 credit hours).** Review of modern research on digital data processing and specific computer applications.

**SECD 584. AUGMENTATIVE COMMUNICATION (3 credit hours).** This course will address current issues, terminology, technological advances and augmentative systems including various sign and symbol systems. Augmentative communication assessment, intervention guidelines and procedures for management to be addressed.

**SECD 598. SUPERVISED RESEARCH (3-15 credit hours).** This course is designed to enable students to develop knowledge of processes used in research and the integration of research principles into evidenced-based clinical practice.

**SECD 599-01. SPECIAL PROJECT: PRAXIS PREPARATION (3 credit hours).** Preparation and mastery for the PRAXIS Examination in Speech-Language Pathology, the national examination in speech-language pathology, to include a more focused view of specific content in: speech language sciences, theory, language acquisition and language disorders across the life span, articulation/phonological disorders, dysphagia, aphasia, cleft palate/orofacial/syndrome disorders, augmentative and alternative communication, neurogenic/motor speech disorders, voice and resonance disorders, fluency disorders, genetic disorders, psychometrics and measurement, research in communication disorders, evidence based practice in speech language pathology, audiological assessment, auditory habilitation and rehabilitation; speech-language

assessment and intervention, cultural and linguistic diversity/multicultural awareness.

**SECD 599-02. SPECIAL PROJECT: AUTISM (3 credit hours).** This course provides an overview of autism across the lifespan and examines characteristics, definitions, eligibility criteria, incidence rates, and etiology. Assessment, diagnostic, and identification criteria are described, and methods for monitoring the impact of interventions in a variety of delivery models will be explored.

**SECD 599-03. SPECIAL POPULATIONS (3 credit hours).** Overview of autism spectrum disorder across the lifespan, and orofacial anomalies and other akin abnormalities of human morphology that affect communication. Examines definitions, types, characteristics/manifestations, incidence and etiology. Assessment, diagnostic and identification methods and criteria are described. Explores evidence-based practice models of intervention. (Prerequisite: SECD 558).

**SECD 601. DEPARTMENTAL COMPREHENSIVE EXAMINATION (0 credit hours).**

**SECD 610. SEMINAR IN LANGUAGE DISORDERS (3 credit hours).** Diagnosis and treatment of language disorders in children. Emphasis on research in language problems of the mentally retarded, emotionally disturbed, and language retarded children. (Prerequisite: SECD 566)

**SECD 630. EXPERIMENTAL PHONETICS (3 credit hours).** Advanced transcriptional and feature analysis of abnormal and nonstandard speech patterns. Review and critical study of current experimental literature in acoustics, physiology and perception of speech.

**SECD 650. SEMINAR IN SPEECH SCIENCE (3 credit hours).** Study in physiology, acoustical, perceptual and linguistic parameters of speech.

**SECD 651. SEMINAR IN ARTICULATION DISORDERS (3 credit hours).** The etiology, diagnosis and treatment for articulation disorders, current research, procedures and techniques will be addressed.

**SECD 655. SEMINAR IN VOICE DISORDERS (3 credit hours).** Phonatory disorder with emphasis on etiology, diagnosis and treatment of the voice disorders, including problems related to clefts of the palate.

**SECD 658. SEMINAR IN APHASIA (3 credit hours).** Analysis of current trends and research on examination and treatment of aphasic patients, principles and procedures and descriptive examination.

**SECD 660. SEMINAR IN STUTTERING (3 credit hours).** Advanced study of symptoms, theories of causation, and scientific bases for rehabilitation of persons who stutter, with emphasis on critical review and analysis of research.

**SECD 667. DYSPHAGIA ASSESSMENT AND INTERVENTION (3 credit hours).** This course will include theoretical and applied knowledge of feeding and swallowing disorders in children and adults. The course will include a survey of the research literature, current management trends and professional and health care industry standards utilized in the rehabilitation of patients with dysphagia. (Prerequisite: SECD 558 and 559).

**SECD 672. SEMINAR IN CLEFT PALATE (3 credit hours).**



Incidence, etiology, surgical procedures, parental counseling and intervention considerations, student observation required.

**SECD 674. SEMINAR IN CEREBRAL PALSY AND ASSOCIATED DISORDERS (3 credit hours).** Etiology, classification, diagnosis, prognosis and treatment, intensive student reviews of current research in selected topics dealing with the dysarthria, the myoneural diseases and the myopathies affecting the speech structures; student exploration, class discussion and evaluation.

**SECD 680. ADMINISTRATION AND SUPERVISION IN SPEECH, LANGUAGE AND HEARING PROBLEMS (3 credit hours).** Discussion of the problem in the administration, professional supervision, and clinical research. An examination of university programs in speech pathology and problems on the development and organization of public school, language and hearing problems.



## Graduate Certificate in Therapeutic Recreation

## College of Nursing and Allied Health

**Interim Dean:** Dr. Jacqueline J. Hill

### Graduate Certificate in Therapeutic Recreation

**Chair:** Dr. Kathryn Cage Jones, Ph.D., CTRS

P.O. Box 9805  
Baton Rouge, LA 70813  
Seymour Hall, Room 216 Phone:  
(225) 771-4527  
Fax: (225) 771-2621

### GRADUATE FACULTY

#### Professors:

**Jones, Kathryn Cage, Ph.D., CTRS**

BS, MS, Southern University  
Ph.D., Capella University

**Patricia Melson, Ph.D.**

BS, Southern University  
M.S. Ph.D., University of Oregon, Ph.D.,

### DEGREE OFFERED

#### Graduate Certificate in Therapeutic Recreation

##### Introduction

Therapeutic Recreation, also known as recreation therapy, is a unique profession that uses recreation and activity-based interventions to help improve people's physical, emotional, cognitive, social, spiritual and leisure functioning to enjoy life more fully.

The Graduate Certificate in Therapeutic Recreation program at SUBR is for those who already have a four-year degree from an accredited institution and who would like to pursue certification as a recreation therapist or continuing education credits for certified professionals.

Therapeutic Recreation is an allied health profession which utilizes recreation & play experiences to facilitate health promotion and rehabilitation for children, adults, and the elderly. Employment opportunities exist within community, correctional, hospital, and residential settings throughout the United States. Upon completion of the curriculum, students will be able to apply to take a national certification examination.

#### The program emphasizes the following:

Development of professional competency as defined by the American Therapeutic Recreation Association, The Commission on Accreditation of Allied Health Education Program (CAAHEP), The Committee on Accreditation of Recreation Therapy Education (CARTE) and The National Council for Therapeutic Recreation Certification

Development of professional clinical skills

Development of oral, written, and electronic communication skills

What can you do with a Certificate in Therapeutic Recreation?

This program is designed to help support the pathway toward certification in Recreation Therapy and will provide you with theoretical and practical backgrounds in recreation and activity-based interventions.

### APPLICATION PROCESS

Students need to hold a minimum of a bachelor's degree to enter the Certificate Program. Additionally, individuals who are certified with the National Council for Therapeutic Recreation Certification (NCTRC) may wish to complete 1 or more courses to comply with continuing education requirements. The first step to obtaining a Certificate in Therapeutic Recreation is:

Submit an application to the Graduate School and declare therapeutic recreation as a major. Submit the application by April 15<sup>th</sup> for fall admission as well as submit the following information:

- Transcripts of all undergraduate and graduate courses completed (regular admission requires a minimum GPA of 2.7)
- A brief essay discussing your reasons for wanting a graduate Certificate in therapeutic recreation
- Three letters of reference

To meet the criteria for taking the national examination students need to have taken the following required courses.

Human Anatomy and Physiology 3 credits, Developmental Psychology 3 credits and Abnormal Psychology 3 credits

Upon completion of the requirements, students will apply to the National Council for Therapeutic Recreation certification (NCTRC) to sit for the national certification examination. Please note under the equivalency path to certification, full-time paid work experience is required instead of an academic internship experience

### GRADUATION REQUIREMENTS

#### PLAN OF STUDY

#### GRADUATE CERTIFICATE IN THERAPEUTIC RECREATION

\*\*\*Three undergraduate courses are required to qualify to sit for the therapeutic recreation certification exam

Human Anatomy and Physiology 3 credits, Developmental Psychology 3 credits and Abnormal Psychology 3 credits

#### Required Courses:

##### Course Work:

*Six courses are required to successfully complete the Certificate in Therapeutic Recreation. A minimum cumulative grade point average of 3.0 must be maintained on all the required coursework.*

#### Courses

TRLS 501	Advanced Program Planning in Therapeutic Recreation .....	3 credit hrs
TRLS 502	Therapeutic Recreation and Disability Seminar .....	3 credit hrs
TRLS 504	Principles and Practices of Therapeutic Recreation .....	3 credit hrs
TRLS 511	Therapeutic Recreation and	

	Community Facilities.....	3 credit hrs
TRLS 515	Therapeutic Recreation Seminar .....	3 credit hrs
TRLS 526	Therapeutic Recreation for Older Adults .....	3 credit hrs

\* Completion of this certificate program allows the individual to meet one portion of the academic coursework required for the credential as a Certified Therapeutic Recreation Specialist with National Council for Therapeutic C. Additional requirements are needed to fully qualify for the credential.

#### **TOTAL HOURS 18**

#### **COURSE DESCRIPTIONS**

**TRLS 501 Advanced Program Planning in Therapeutic Recreation (3 credit hours).** Emphasizes efficacy-based programming and treatment modalities

**TRLS 502. Therapeutic Recreation and Disability Seminar (3 credit hours).** Provides an in-depth understanding of the implications of chronic illness and developmental disabilities for the practice of therapeutic recreation.

**TRLS 504. PRINCIPLES AND PRACTICES OF THERAPEUTIC RECREATION (3 credit hours).** Historical, philosophical and practical applications of basic concepts for professionals in leisure and recreational studies

**TRLS 511 Therapeutic Recreation and Community Facilities (3 credit hours).** Analyzes the scope of recreation areas and facilities and the impact of the environment, society and clientele on the planning and operation of those facilities and programs

**TRLS 515 Therapeutic Recreation Seminar (3 credit hours).** Readings and the history and philosophy of therapeutic recreation services. Emphasis on the background of current issues and trends in professional practice.

**TRLS 526 Therapeutic Recreation for Older Adults (3 credit hours).** Emphasis on understanding the impact of aging on the design and implementation of programming for older adults

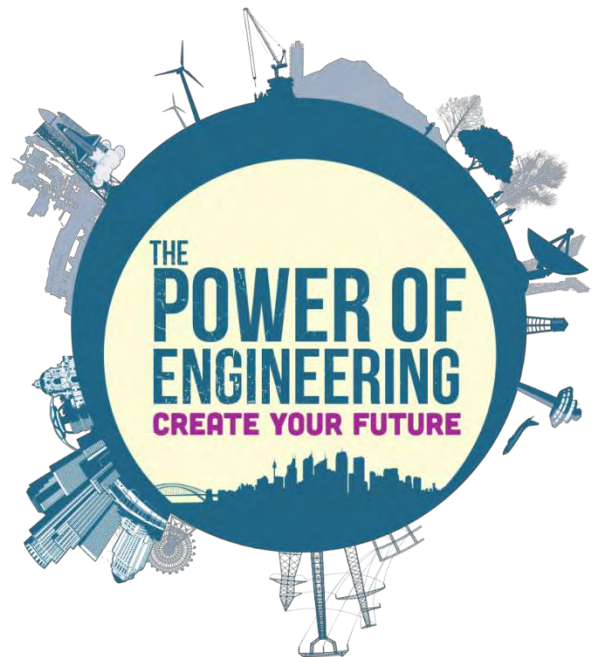


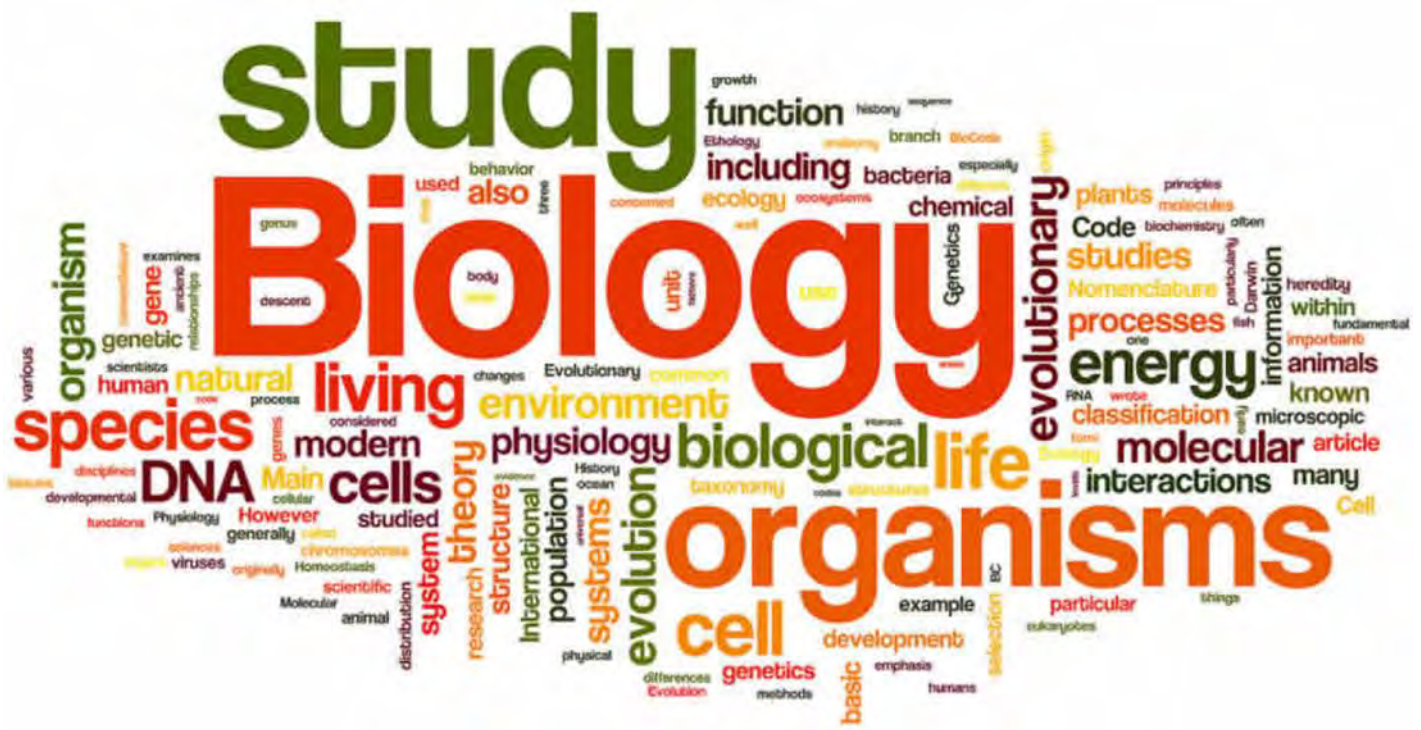


## College of Sciences and Engineering



**The Role of Science: Challenges in a Time of Global Changes**





# Master of Science in Biology



## COLLEGE OF SCIENCES AND ENGINEERING

Dean: Dr. Patrick Carriere

### Master of Biology (MS/BIOL)

Chair: D'Auvergne, Oswald

P.O. Box 9310

Baton Rouge, LA 70813 William James Hall – Room 244

Phone: (225) 771-5210; Fax: (225) 771-5386

#### FACULTY

*Professors:*

**D'Auvergne, Oswald**

Ph.D., Immunoparasitology

University of Michigan

**Samkutty, Pushpa**

Ph.D., Dairy Microbiology Louisiana State University

Martinez-Ceballos, Eduardo Ph.D., Cell and Molecular Biology

Tulane University

*Associate Professors:*

**Johnson, Alice Ward**

Ph.D., Cellular, Molecular, and Developmental Biology

Iowa State University

**Rogers, Bryan**

Ph.D., Genetics

University of California

**Ogunkoya, Yetunde**

Ph.D., Gastroenterology

Murdoch University, Australia

**Telles, Caroline**

Ph.D., Microbiology

Louisiana State University

**Dubyska, Lidiya**

Ph.D., Molecular Genetics

Ivan Franko National

University of Lviv, Ukraine

*Assistant Professors:*

**Atkins-Ball, Deidra**

Ph.D., Pharmacology

Meharry Medical College

**Yi, Xiaoping**

Ph.D., Cell Biology/Plant Genetics

Sichuan Agricultural University, China

#### DEGREE/GRADUATION REQUIREMENTS

##### Thesis Option

- ✓ Completion of a program consisting of 24 hours of course work (16 hours in biology must be at least 500 level courses) and six hours of thesis research
- ✓ A composite passing score on the departmental Comprehensive Examination
- ✓ A successful defense of the thesis.

##### Non-Thesis Option

- ✓ Completion of a program of 30 hours of course work
- ✓ (24 hours must be at or above the 500 level) and six hours of research.
- ✓ A composite passing score on the departmental Comprehensive Examination.
- ✓ A written research project.

#### MASTER OF SCIENCE IN BIOLOGY

##### PLAN OF STUDY

###### First Semester (Fall)

	Credits
BIOL 501 Graduate Seminar I .....	1
BIOL 507 Scientific Writing .....	2
BIOL Required Electives .....	6-12

###### Second Semester (Spring)

	Credits
BIOL 505 Graduate Seminar II .....	1
BIOL 598 Supervised Research .....	1-15
BIOL Required Elective .....	8

###### Summer#1

	Credits
BIOL 598 Supervised Research .....	1-15
(Non-Thesis option)	
BIOL 600 Thesis .....	1-15

###### Third Semester (Fall)

Thesis preparation and defense

BIOL Required Electives.....	6
(Non-Thesis option)	

Electives are to be chosen in consultation with the student's academic advisor. All electives must be approved by the department chair as part of an overall, academically sound plan of study before being submitted to the Graduate School for approval by the Graduate Dean.

##### Introduction

The Department of Biological Sciences offers a thesis option and a non-thesis option, both of which may lead to the Master of Science degree.

##### Objectives

The objectives of the program are as follows:

- ✓ To provide advanced training in biology for individuals who wish to pursue careers in industry, government, and education
- ✓ To provide advanced training in biology for individuals who wish to pursue study at the doctoral level
- ✓ To provide advanced training in biology for individuals who wish to strengthen their background in the life sciences

##### GRADUATE DEGREE OFFERED

###### M.S. Master of Science in Biology

##### ADMISSION REQUIREMENTS

In addition to meeting the admission requirements of the Southern University Graduate School, all applicants must:

1. Possess a bachelor's degree from an accredited institution.
2. Have a minimum cumulative 2.7 grade point average on a 4.0 scale.
3. Submit three letters of recommendation; one of which must be from a faculty advisor.
4. Submit a brief description of career plans.
5. Have a combined GRE score (General Test) of 286 or higher, and have a minimum TOEFL score of 525 (International Students).

## COURSE DESCRIPTION

**BIOL 500. SPECIAL PROBLEMS IN BIOLOGY (Credit, 3 hours).** Provides an opportunity for the student to pursue a topic or problem of interest, under the supervision of members of the faculty.

**BIOL 501. GRADUATE SEMINAR I (Credit, 1 hour).** Discussion of a wide range of topics from the biological sciences.

**BIOL 502. GENERAL TOXICOLOGY (Credit, 3 hours).** This course is designed to present information relative to a wide variety of pollutants which persist in the environment as a result of modern industry and pest-control management programs. The student will acquire knowledge concerning the modes of action of various chemicals which disrupt the normal physiology of living organisms. Phenomena such as biomagnification, genetic resistance, synergism, antagonism, and the effects of drugs on human behavior will also be studied. (Prerequisites: Chemistry 220, 221, 230, and 231.)

**BIOL 505. GRADUATE SEMINAR II (Credit, 1 hour).** Discussions of a wide range of topics from the biological sciences.

**BIOL 506. BIostatistics: EXPERIMENTAL DESIGN AND ANALYSIS (Credit, 3 hours).** This course is designed to acquaint advanced biology students with research designs for biological experimentation. Emphasis is on parametric and non-parametric statistical analysis and their applicability to more advanced experiments.

**BIOL 507. SCIENTIFIC WRITING (Credit, 2 hours).** This course is designed to teach the writing skills necessary to effectively communicate scientific information in a format that is acceptable to the scientific community. The course will emphasize the development of writing skills needed for proposals and theses.

**BIOL 508. ENVIRONMENTAL SCIENCE EDUCATION (Credit, 3 hours).** This course is concerned with general ecological principles and basic concepts of environmental science. Topics discussed include characteristics of the biotic and abiotic environment, interactions and interrelationships within and between the various environments, the conservation and management of natural resources, and the effect of the environment upon man's physical, economic, and recreational well-being.

**BIOL 510. ADVANCED FIELD BOTANY (Credit, 3 hours).** This course incorporates the method for the study, preservation, taxonomic treatment, and storage of botanical materials. (Prerequisites: Biology 310 or consent of the instructor.)

**BIOL 511. PHYSIOLOGY OF PLANTS (Credits, 4 hours).** This course is designed to review, understand, and demonstrate some

life supporting phenomena that occur in plants. A study of plants' physiological phenomena, such as absorption and movement of water, mineral nutrition, photosynthesis, and growth regulators will be conducted.

**BIOL 512. ELECTRON MICROSCOPY TECHNIQUES (Credit, 4 hours).** This course is designed to familiarize graduate students in biomedical fields with the basic principles and techniques involved in preparing specimens for the scanning and transmission electron microscopes.

**BIOL 520. ECOLOGICAL PRINCIPLES (Credit, 4 hours).** This course involves the study of animals, plants, and microorganisms in relation to habitat and the factors which affect them directly or indirectly. The principles of ecology will be discussed in detail.

**BIOL 523. ENVIRONMENTAL MICROBIOLOGY (Credit, 4 hours).** (Lecture, 2 hrs; Lab., 4 hours per week). This course will involve an advanced study of the practices of biodegradation and bioremediation with emphasis on microbial ecology. Basic concepts of entrophication, indicator organisms, soil and aquatic microorganisms; assessment of biological treatment practices in water reuse and/or purification. Current practices in biodegradation and bioremediation will be discussed.

**BIOL 530. ADVANCED VIROLOGY (Credit, 3 hours).** This course will involve the study of the molecular biology and pathogenesis of animal viruses. Recent discoveries and new directions in research will be emphasized. (Prerequisites: Biology 402 and Chemistry 340 and 342.)

**BIOL 532. IMMUNOBIOLOGY (Credit, 4 hours).** A study of cells and cellular events involved in humoral and cell-mediated immune responses. Topics to be covered will include development of the immune system, antigenicity, antigen-antibody reactions, immunoglobulin structure, complement, transplantation immunity, autoimmunity, immune deficiency diseases, and tumor immunity.

**BIOL 533. MICROBIAL PHYSIOLOGY (Credit, 3 hours).** The principles of functional activities and the intermediary metabolism of microbes. The course will also involve a study of microbial growth and methods used to measure this activity. In addition, cell extract preparation, enzyme activity, and metabolic products will be studied. (Prerequisites: Biology 232, Chemistry 230, 220, 231, and 221.)

**BIOL 534. CELL PHYSIOLOGY (Credit, 4 hours).** (Lecture, 2 hrs; Lab., 4 hours per week). A study of the fundamental cellular functions with emphasis on molecular and biochemical principles, enzyme catalysis, metabolic pathways, the flow of information and energy, and energy transformation and mobilization. (Prerequisite: Chemistry 230, 220, 231, and 221.)

**BIOL 536. MAMMALIAN PHYSIOLOGY (Credit, 4 hours).** (Lecture, 2 hrs; Lab., 4 hours per week). A comprehensive coverage of the mechanisms and functions associated with the maintenance of the overall steady state in the mammalian body. (Prerequisites: Chemistry 230, 220, 231, and 221.)

**BIOL 540. REPRODUCTIVE PHYSIOLOGY (Credits, 4 hours).** This course is designed as a basic, scientific study of reproductive processes in mammals (primarily humans and rats) and as a framework for the proper assessment of current progress and problems related to important aspects of human reproductive biology. (Prerequisites: Biology 442.)



**BIOL 543. PARASITOLOGY (Credit, 4 hours). (Lecture, 2 hrs; Lab., 4 hrs per week).** This course is designed to an in-depth study of the phenomena of parasitism and pathogenicity in vertebrates, including humans. Emphasis will be on the identification, life cycles, physiology, symptoms, diagnosis, epidemiology, causes and treatments of parasitic diseases. The course will include a discussion of host-parasite relationships. The biochemical aspects of parasitology will be stressed.

**BIOL 550. MOLECULAR BIOLOGY OF THE CELL (Credits, 3 hours).** This course covers topics concerning the molecular organization of cells, genomic organization, and the expression of the genes of prokaryotic and eukaryotic organisms. The application of the biochemical and molecular genetic principles of cell biology, the structural organization of genes, the mechanisms of gene expression, and modern molecular biology techniques used for gene manipulation will be discussed. (Prerequisites: Chemistry 340, 342.)

**BIOL 551. PROKARYOTIC GENETICS (Credits, 4 hours). (Lecture, 2 hrs; Lab., 4 hours per week).** This course is designed to familiarize students with topics associated with gene organization, chromosome structure, regulation of gene action, gene mutation, repair and transfer and genetic recombination. Laboratory exercises involve properties and structural study of DNA, analysis of a genome segment, polymerase chain reaction, DNA sequencing, DNA fingerprinting, and cloning of phage DNA in *E. coli* cells. (Prerequisites: Chemistry 340, 342.)

**BIOL 552. SELECTED TOPICS IN BIOMEDICAL SCIENCES (Credits, 3 hours).** This is a multidisciplinary seminar/laboratory course. Topics will include advances in biomedical sciences relating to human health and disease, with emphasis on nutritional and genetic disorders, diabetes, Alzheimer's disease, AIDS, and cancer. Laboratory demonstrations of methods will be presented.

**BIOL 598. Supervised Research (Credit, 1-15 hours).**

**BIOL 600. THESIS (Credit, 1-15 hours).**



# Master of Computer Science

## College of Sciences and Engineering

Dean: Dr. Patrick Carriere

### Master of Computer Science (MS/CMPG)

#### Department of Computer Science

Dr. Ebrahim Khosravi

Chair

P.O. Box 9221

Department of Computer Science Baton Rouge, LA 70813

Henry Thurman Hall, Room N101 Phone: (225) 771-2060

Fax: (225) 771-4223

Email: [Ebrahim\\_khosravi@subr.edu](mailto:Ebrahim_khosravi@subr.edu)

Coordinator of Graduate Programs: Dr. MD Abdus Salam

Office: E107 Henry Thurman Jr. Hall

Phone: 225-771-4383

Email: [md\\_salam@subr.edu](mailto:md_salam@subr.edu)

#### GRADUATE FACULTY

##### *Professor:*

##### **Bai, Shuju**

Ph.D., Computer Science Louisiana State University

Ph.D., Forestry and Natural Resources Purdue University

##### **Gwee, Nigel**

Ph.D., Computer Science

Ph.D., Musicology

Louisiana State University

##### **Khosravi, Ebrahim**

Ph.D., Computer Science

Louisiana State University

##### **Salam, Md Abdus**

Ph.D., Electrical and Computer Engineering

Fukui University, Japan

##### **Trivedi, Sudhir**

Ph.D., Mathematics

Ph.D., Computer Science

Louisiana State University

##### *Associate Professor:*

##### **Kandara, Osman**

Ph.D., Computer Science

Louisiana State University

##### **Kourouma, Mathieu**

Ph.D., Computer Engineering

University of Louisiana at Lafayette

##### **Yang, Shizhong**

Ph.D., Computational Physics & Electrical Computer Engineering

University of Missouri

##### *Assistant Professor:*

##### **Banadaki, Yaser**

Ph.D., Electrical and Computer Engineering

Louisiana State University

#### MASTER OF COMPUTER SCIENCE

#### OBJECTIVE

The main objective of this graduate program is to foster students' independent study and research capabilities so that graduates from this program could be inspired to pursue a doctoral degree in computer science or related fields; or pursue careers in business, industry, or government.

#### AREAS OF EMPHASIS

Students pursuing Master of Science degree may concentrate their studies in any one of the following areas of emphasis:

1. Operating Systems and Architecture
2. Computational Science
3. Programming Languages and Software engineering
4. Digital Data Communications
5. Data Analytics and Data Mining.

The **Computational Science** concentration is a collaboration between the Department of Computer Science and the Department of Environmental Toxicology. This option is built on current content and research already present in both departments. Students engaged in this concentration will have the opportunity to earn an **MS degree in Computer Science** and/or **Ph.D. in Environmental Toxicology**.

#### ADMISSIONS REQUIREMENTS

Applicant must meet all entrance requirements of Graduate School.

Applicant must have a bachelor's degree in Computer Science. Special admission will be considered for applicants with B.S. degrees from related fields, where appropriate.

An overall GPA of 2.7 is required. TOEFL score is required for International students. GRE is required for every student.

#### DEGREE OPTIONS/GRADUATION REQUIREMENTS

Thesis and special project options are available. Students must complete and successfully defend the thesis or the special project.

The Department's Graduate Comprehensive Examination is a requirement for non-thesis option students. The comprehensive examination will be compiled from the content of the four core courses. The student who selects the non-thesis option must pass a comprehensive examination. Students may take the comprehensive examination after successfully completing all four core courses or after the two core courses; if the student is enrolled in the two other core courses. The examination is given once during the spring and fall semesters. The student who fails the first attempt must retake the entire examination. There is no limit on the number of retakes.

In order to be eligible as a candidate for the M.S. degree, a student successfully complete the core courses with a grade of at least "B" in each course.

**The two options for degree requirements available are:**

1. **Thesis Option (24 hours coursework plus 6 hours thesis research)**
2. **Special Project Option (30 hours coursework plus 6 hours project design)**

#### Master of Computer Science Degree Options

Degree Options	Core Courses (credits)	Areas of Emphasis (credits)	Research Techniques (CMPS 574) (credits)	Supervised Research (CMPS 598) (credits)	Thesis or Project (CMPS 600/599)	Electives (credits)	Total Credits
Thesis Option	12	9	3	3	3	0	30
Special Project Option	12	12	3	3	3	3	36

**\*Electives:** Student may select elective courses from any areas of emphasis other than his/her own area of emphasis.

#### PLAN OF STUDY

##### CORE COURSES

CMPS 500	Operating Systems
CMPS 501	Programming Languages
CMPS 502	Computer Organization
CMPS 512	Theory of Computing

##### AREAS OF EMPHASIS

#### I. OPERATING SYSTEMS AND ARCHITECTURE

CMPS 511	Design & Analysis of Algorithms
CMPS 514	Compiler Theory
CMPS 532	Distributed Processing
CMPS 535	Neural Networks
CMPS 537	Autonomous Robotics
CMPS 580	Artificial Intelligence
CMPS 587	Object Oriented Design Patterns
CMPS 592	Adv. Topics in Computer Science

#### II. COMPUTATIONAL SCIENCE

CMPS 507	Scientific Computing
CMPS 511	Design & Analysis of Algorithms
CMPS 520	Database Management Systems
CMPS 555	Introduction to Data Mining
CMPS 558	Modeling and Simulation
CMPS 559	Introduction to Computational Science and Application
CMPS 560	Big Data

CMPS 592	Advanced Topics in Computer Science
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#### III. PROGRAMMING LANGUAGES AND SOFTWARE ENGINEERING

CMPS 511	Design & Analysis of Algorithms
CMPS 525	Software Engineering: Development
CMPS 526	Software Engineering: Control
CMPS 527	Software Engineering: Management
CMPS 555	Introduction to Data Mining
CMPS 587	Object Oriented Design Patterns
CMPS 592	Advanced Topics in Computer Science

#### IV. DIGITAL DATA COMMUNICATIONS

CMPS 507	Scientific Computing
CMPS 516	Graph Theory and Networks
CMPS 532	Distributed Processing
CMPS 533	Telecommunications
CMPS 534	Digital Data Networks
CMPS 535	Neural Networks
CMPS 536	Information and Coding Theory
CMPS 592	Advanced Topics in Computer Science

#### V. DATABASE MANAGEMENT AND DATAMINING

CMPS 511	Design and Analysis of Algorithms
CMPS 520	Database Management Systems
CMPS 525	Software Engineering: Development
CMPS 532	Distributed Processing
CMPS 535	Neural Networks
CMPS 555	Introduction to Data Mining
CMPS 587	Object Oriented Design Pattern
CMPS 592	Advanced Topics in Computer Science

#### RESEARCH COURSES

CMPS 574	Research Techniques
CMPS 598	Supervised Research
CMPS 599	Special Project
CMPS 600	Thesis

#### COURSE DESCRIPTIONS

**CMPS 500 OPERATING SYSTEMS (Credit, 3 hours).** Study of resource management for multiprogramming and time-sharing operating systems, supervisors, scheduling I/O control systems, and interrupt handling will be discussed. Prerequisite: Consent of instructor.

**CMPS 501 PROGRAMMING LANGUAGES (Credit, 3 hours).** Study of various programming languages from conceptual standpoint; topics will include formal language definition, data storage techniques, grammars. Both numeric and string processing languages will be covered. Prerequisite: Consent of instructor.

**CMPS 502 COMPUTER ORGANIZATION (Credit, 3 hours).** Study of the organization of various modern digital computers including



both hardware and software requirements; topics in Boolean algebra, switching circuit design, and total system design will be included. Prerequisite: Knowledge of Discrete Structures and

**CMPS 507 SCIENTIFIC COMPUTING (Credit, 3 hours).** This course is designed to explore the effectiveness of various advanced techniques and algorithms for the solution of mathematical problems in science and engineering involving the computer. Topics covered will be computational algorithms, error analysis, roots of equations, approximation theory, interpolation and numerical differentiation, numerical integration, solution of system of linear equation, spline functions, numerical solution of ordinary and partial differential equations, method of least squares and smoothing of data, boundary value problems, partial differential equations, minimization of multivariate functions.

**CMPS 511 DESIGN AND ANALYSIS OF ALGORITHMS (Credit, 3 hours).** This course will cover the design, implementation and analysis of advanced computer algorithms. Sets and graphs, sorting, searching, graph theoretic algorithms, matrix multiplication, dynamic programming, NP hard and NP complete problems. Prerequisite: Basic understanding of programming, data structure and discrete structure concepts or consent of the instructor.

**CMPS 512 THEORY OF COMPUTING (Credit, 3 hours).** The course covers theoretical topics including Turing Machines, algorithmic languages and recursive functions. Coding schemes are used for universal machines and programs, and to show that some problems, including the Halting problem, are unsolvable. Polynomial and exponential time algorithms are discussed. Prerequisite: Knowledge of Discrete Structures

**CMPS 514 COMPILER THEORY (Credit, 3 hours).** Timesharing, real time and virtual systems, review of Backus Normal Form language descriptions and basic parsing concepts, Polish and matrix notation as intermediate forms, and target code representation: topics to be covered include a study of techniques for semantic and syntactic analysis, and allocation of storage areas. Prerequisite: CMPS 500 and CMPS 501

**CMPS 516 GRAPH THEORY AND NETWORKS (Credit, 3 hours).** This course will develop basic results about graphs, as well as efficient algorithms associated with the solution of many important problems involving graphs in communication systems. Topics to be studied include spanning trees, algorithms, network immunity, heuristic network design algorithms, routing, Warshall's algorithm flows in networks (Ford-Fulkerson Algorithm), capacity assignment in centralized and distributed networks, matrices associated with a graph, planar and nonplanar graphs. Prerequisite: Consent of instructor.

**CMPS 520 DATABASE MANAGEMENT SYSTEMS (Credit, 3 hours).** This course will discuss data modeling, SQL, database application development, indexing, query optimization, transaction management and database design. Concepts of parallel databases, data warehousing and data mining will be covered. Prerequisite: CMPS 420.

**CMPS 525 SOFTWARE ENGINEERING: DEVELOPMENT (Credit, 3 hours).** Introduces the concept of software lifecycle, looks at a number of life-cycle models, then considers in depth the requirements analysis and design phases. Topics covered include systems engineering, Structured Analysis, Warnier Orr Methodology, Jackson Methodology, object-oriented design, real-time design, and implementation. Prerequisite: Consent of instructor.

**CMPS 526 SOFTWARE ENGINEERING: CONTROL (Credit, 3 hours).** Non-trivial software systems must be developed using formal

methods of control to ensure a correct and quality product. Topics covered include quality assurance, software testing, independent validation and verification, and configuration management. Prerequisite: CMPS 525.

**CMPS 527 SOFTWARE ENGINEERING: MANAGEMENT (Credit, 3 hours).** Good management is vital to the development of all non-trivial software systems. This course covers the management aspect of planning, organizing, staffing, directing and controlling a software development project. Prerequisite: CMPS 525.

**CMPS 532 DISTRIBUTED PROCESSING (Credit, 3 hours).** Distribution of data, computation and control in distributed processing systems will be discussed. This course will cover study of a distributed programming language such as ADA. Selected topics include networking, inter-networking, data communication principles, inter-process communication in UNIX, distributed coordination, distributed databases, distributed deadlock detection, recovery, fault tolerance and security issues. Prerequisite: CMPS 500 or permission of the instructor.

**CMPS 533 TELECOMMUNICATIONS (Credit, 3 hours).** Basic concepts in telecommunications are covered with emphasis on the types of communication links, data transmission, noise and distortion, data errors, and message switching. Selected topics in data communication will be surveyed. Prerequisite: CMPS 500.

**CMPS 534 DIGITAL DATA NETWORKS (Credit, 3 hours).** An in-depth presentation of the technology and architecture of local, metropolitan and wide area networks. Covers OSI model and related protocols, FDDI, Frame Relay/SMDS/ATM Switching, SONET, and the newer technologies including Broadband ISDN. Prerequisite: CMPS 500.

**CMPS 535 NEURAL NETWORKS (Credit, 3 hours).** This course will consider design, architecture and implementation of neural networks. Neural networks are becoming increasingly versatile due to their ability to solve difficult nonlinear problems that are not solvable using traditional methods. Inherently parallel design and ability to interact with the environment make neural networks ideal for large applications. Topics include neural networks as emerging technology, perceptions, associative memory networks, radial-basis networks, spline networks, recurrent networks, neural learning, gradient descent method and back-propagation. Issues related to neuro-computing hardware and neuro-VLSI implementation will be discussed. Neural networks will be examined as problem solving tools as compared with the fuzzy systems and expert systems. Prerequisite: Consent of instructor.

**CMPS 536 INFORMATION AND CODING THEORY (Credit, 3 hours).** This course is a study of the underlying concepts in digital communications systems. Topics covered are representation of signals and systems, limits in information theory, complete random processes, time-frequency analysis, error control coding, group codes, burst-error detecting codes, convolution coding and the Viterbi algorithm, trellis coding, turbo codes, sequential and majority logic decoding, automatic repeat-request strategies, advanced systems. Prerequisite: Consent of instructor.

**CMPS 537 AUTONOMOUS ROBOTICS (Credit, 3 hours).** Practice in designing robotic systems that, with no human aid, sense and act upon complex environments. Topics include behaviors, deciding what to do next, perception via programmed concepts and via neural nets, social behavior, language emerging from shared concepts and architecture of nodes.

**CMPS 555 INTRODUCTION TO DATA MINING (Credit, 3 hours).** The course will cover an introduction of the fundamental

concepts of data mining, key data mining techniques such as association rules, neural networks, genetic algorithms, and statistical based mining techniques, efficient high performance mining algorithms, and exposure to applications of data mining in various areas.

**CMPS 558. MODELING AND SIMULATION (Credit, 3 hours).** Covers the use of computer simulation as a tool to predict system behavior. Topics include statistical models, biomedical system models, computer-based simulation, simulation languages, simulation packages, data analysis, data visualization, and result interpretation. Applications are drawn from diverse areas of science and engineering. Delivery of knowledge includes textbook, lecture notes, labs, lab assignments and projects. Prerequisite: CMPS500 (with grade C or above)

**CMPS 559. INTRODUCTION TO COMPUTATIONAL SCIENCE AND APPLICATION (Credit, 3 hours).** Covers the introduction to Distributed Computing, High Performance Computing, and Cloud Computing, which are the broad range of systems. It is a graduate level course that describes computer architectures, network architectures, and scalable and parallel computational algorithms. The focus of this course will be given to the methods that allow reducing computational time implementing Message Passing Interface and Open Multi-Processing for multicore and many processor machines. There are two major problems that can be solved: a) problem size and b) system size implementing MPI and Open MP. These methods will be discussed and applied to solve practical problems. The examples of the practical problems are sorting, tree searching, linear algebra, numerical integration and other.

**CMPS 560. BIG DATA (Credit, 3 hours).** This course covers the knowledge of Big Data science. It serves as a graduate level course for graduate students. The focus will be Big Data storage, processing, analysis, visualization, and applications. State-of-art computational frameworks for Big Data will be introduced to students. Students will learn the essentials of Big Data management, processing, and system reliability. Delivery of knowledge includes textbook, lectures, labs, lab assignments, programming projects, and research projects. Prerequisite: CMPS500.

**CMPS 574 RESEARCH TECHNIQUES (Credit, 3 hours).** Students will learn how to conduct literature reviews of articles, journals, white papers using Internet, computerized databases and library resources. Students will learn to develop research questions, hypotheses, research topics, research designs and write research papers in standard format.

**CMPS 580 ARTIFICIAL INTELLIGENCE (Credit, 3 hours).** Review of attempts to initiate human and animal intelligence and of commercial spin-offs there from. Topics come from such diverse areas as machine perception, game-playing, autonomous robotics and knowledge engineering.

**CMPS 583 INDEPENDENT RESEARCH (Credit, 3 hours).** A three hour course in which the graduate student conducts research on a project with a research advisor or works in industry with supervisors acting as research advisor. Prerequisite: Consent of Advisor. (Not for degree credit)

**CMPS 586 INDEPENDENT RESEARCH (Credit, 6 hours).** A six hour course in which the graduate student conducts research on a project with a research advisor or works in industry with supervisors acting as research advisor. Prerequisite: Consent of Advisor. (Not for degree

credit).

**CMPS 587 OBJECT ORIENTED DESIGN PATTERN (Credit, 3 hours).** The concepts behind the patterns approach will be studied, followed by a detailed examination of a selection of the various patterns. Gamma et al. have categorized these patterns under Creational, Structural, and Behavioral. In this introductory course to design patterns, the following patterns will be studied and applied: Creational Patterns: Abstract Factory, Builder, Factory Method, and Singleton; Structural Patterns: Adapter, Composite, Decorator, and Proxy; Behavioral Patterns: Iterator, State, Strategy, and Template Method. Projects consist of software problems whose design and maintenance call for the application of these patterns.

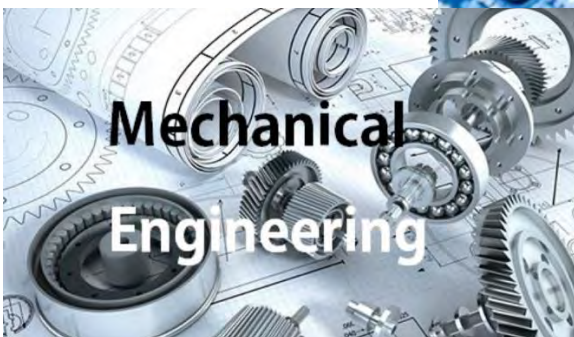
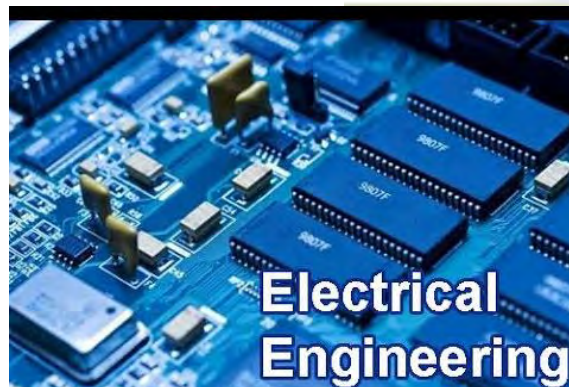
**CMPS 592 ADVANCED TOPICS IN COMPUTER SCIENCE (Credit, 3 hours).** Current topics in computer science research. Prerequisites: CMPS 525 and/or consent of instructor.

**CMPS 598 SUPERVISED RESEARCH (Credit, 3-6 hours).** Student selects a chair and research advisors to serve on committee for thesis or special project. Student presents research initiative to the committee for approval prior to midterm. Weekly meetings with chair and monthly meetings with full committee are required. A final grade other than "I" (Incomplete) will be given. Prerequisite: CMPS 574.

**CMPS 599 SPECIAL PROJECT (Credit, 3-15 hours).** Continuation of research on Special Project. Satisfactory oral defense of topic is required for graduation. (Prerequisite: CMPS 598).

**CMPS 600 THESIS (Credit, 3 hours).** Continuation of research on Thesis. Satisfactory oral defense of topic is required for graduation. (Prerequisite: CMPS 598.)

**CMPS 610 GRADUATE COMPREHENSIVE. (Credit, 0 hrs with grade of P/F).** Prerequisite: Student must have completed all Computer Science core courses





## College of Sciences and Engineering

Dean: Dr. Patrick Carriere

### Master of Engineering (ME/ENGR)

#### Coordinator of Master of Engineering Program:

##### Dr. Raife Smith

P.O. Box 9969  
Baton Rouge, LA 70813 Room 424  
Pinchback Engineering Building  
Phone: (225)771-5391  
Fax: (225) 771-9828  
E-Mail: [Raife\\_Smith@subr.edu](mailto:Raife_Smith@subr.edu)

#### GRADUATE FACULTY

##### *Professors:*

##### Stephen Akwaboa

PhD Mechanical Engineering  
North Carolina A&T University

##### Blevins, Edgar

Ph.D., Industrial and Systems Engineering  
University of Alabama

##### Belu, Radian

Ph.D., Electrical Engineering/Power  
Polytechnic University of Bucharest  
University of Western Ontario, Canada

##### Carriere, Patrick

Ph.D., Civil Engineering  
Texas A & M University

##### Crosby, Karen

Ph.D., Engineering Science  
Louisiana State University

##### Huang, Chun Ling

Ph.D., Mechanical Engineering  
University of Alabama

##### Ibekwe, Samuel

Ph.D., Materials Engineering and Science  
South Dakota School of Mines & Technology

##### Jana, Amitava

Ph.D., Mechanical Engineering  
New Jersey Institute of Technology

##### Fareed Dawan

Ph.D. Engineering Science  
Louisiana State University

##### Jerro, Dwayne

Ph.D., Mechanical Engineering  
Louisiana State University

##### Joshi, Ghanashyam

Ph.D., Mechanical Engineering  
Michigan Technological University

##### Joshua, Joseph

Ph.D., Civil and Environmental Engineering  
Massachusetts Institute of Technology

##### Lacy, Fred

Ph.D., Electrical Engineering  
Howard University

##### Luo, Jiecai

Ph.D., Electrical Engineering  
University of Minnesota

##### Majlesein, Hamid R.

D.E., Electrical Engineering  
Louisiana Tech University

##### Mensah, Patrick

Ph.D., Engineering Science  
Louisiana State University

##### Mohamadian, Habib P.

Ph.D., Mechanical Engineering  
Louisiana State University

##### Onu, Chukwu

Ph.D., Civil Engineering  
West Virginia University

##### Smith II, Raife

Ph.D., Electrical Engineering  
Tulane University

##### Yasser, Ismail

Ph.D., Electrical Engineering  
University of Louisiana, Lafayette

##### Ye, Zhengmao

Ph.D., Electrical Engineering  
Wayne State University

#### MASTER OF ENGINEERING

Southern University at Baton Rouge is offering the Master of Engineering program in the College of Sciences and Engineering. The objective of the Master of Engineering program is to prepare graduates for leadership positions in the engineering profession. Emphasis is placed on solving practical problems in industry and society, in general, for the advancement of technology and the benefit of mankind. Focus is on applied research with a strong tie to industry, federal agencies and economic development within the state. The program is interdepartmental and interdisciplinary with three specialty areas.

#### SPECIALTY AREAS

The Master of Engineering program is interdepartmental (Civil Engineering, Electrical Engineering, and Mechanical Engineering) and interdisciplinary. It has three specialty areas:

##### Specialty Area 1: Materials Science and Engineering

Track 1: Advanced Engineering Materials Track 2: Electronic Materials and Processing

##### Specialty Area 2: Sustainable Systems Engineering Track 1:

Environmental and Water Resources Engineering Track 2: Thermal Science and Engineering

Track 3: Telecommunication and Computer Network Engineering

##### Specialty Area 3: Engineering Management

#### ADMISSION REQUIREMENTS

All general admission requirements of the Graduate School at Southern University apply for admission to the Master of Engineering program. In addition, a minimum GPA of 2.7 on all undergraduate work, or 3.0 on all graduate work completed, based on a 4.0 scale, are



required. For the 4 + 1 option, a 3.0 GPA is required on all graduate work.

The GRE is optional for regular admission to all four Master of Engineering program options. For consideration for financial support (scholarships, fellowships, assistantships), the GRE is required, with a minimum composite score of 298.

### DEGREE OPTIONS/GRADUATION REQUIREMENTS

The Master of Engineering program offers four degree options:

1. Master of Engineering degree with a thesis.
2. Master of Engineering degree with an engineering project.
3. Master of Engineering degree coursework only.
4. Master of Engineering degree 4 + 1.

The number of semester credit hours for each degree option is presented in the Table below:

Degree Option	Number of Credit Hours for Core Courses	Number of Credit Hours For Electives	Number of Credit Hours For Thesis or Project	Total Credit Hours
Master of Engineering (with Thesis)	12	12	6	30
Master of Engineering (with Project)	12	15	3	30
Master of Engineering (Coursework Only)	12	18	--	30
Master of Engineering 4 + 1	12	18	--	30

#### Master of Engineering Degree Options

If the thesis option is chosen, a student must successfully complete a total of thirty (30) semester credit hours with twenty four (24) credit hours of course work and six (6) credit hours of thesis. If the engineering project option is chosen, a student must successfully complete a total of thirty (30) semester credit hours with twenty seven (27) credit hours of course work and three (3) semester credit hours of engineering project. A maximum of two 400-level undergraduate courses may be selected to meet the credit hours requirement provided these two courses meet the conditions set forth in the course numbering section of the graduate catalog.

If the coursework only option is chosen, a student must successfully complete thirty (30) semester hours of coursework. Regular graduate school rules for maintaining a 3.0 GPA apply to the coursework only option. If the 4+1 option is chosen, a student must successfully complete thirty (30) hours of coursework, twelve (12) of which may be taken during the senior year of undergraduate

study. The twelve (12) hours taken during the senior year will consist of 400 level courses that have been identified as "dual credit" courses that are suitable for either undergraduate or graduate credit depending on the level of rigor.

Engineering students may apply to the 4+1 option in the second semester of their junior year. Admission will be only be granted if all 300 level engineering courses have been completed and the student has an overall GPA of 3.0 and a GPA of 2.7 in all engineering courses. These GPA requirements must be met each semester an undergraduate student is in the 4+1 option, with the further stipulation that there must be a 3.0 GPA in the 12 dual credit graduate courses. After formal admission to the Master of Engineering program, the regular GPA requirement of 3.0 on all graduate work applies.

Financial support for coursework only and 4+1 students will only be in the form of laboratory assistantships or teaching assistantships. These assistantships will only be available after the first semester with a GPA of 3.3 or above.

Students in the coursework only and 4+1 options must take and pass the Fundamentals of Engineering (FE) exam, preferably by the end of their third semester. Passing this nationally standardized exam will enhance the students' competitive position for employment.

**All incoming students are required to take the one-hour graduate seminar (ENGR 577).**

The thesis option is recommended for those students wishing to conduct basic research and perhaps pursue a doctoral degree in the future. The student must write a thesis on the research and defend it. The project option requires an engineering project to be completed under the supervision of experienced engineers in industry and/or government and a graduate faculty advisor. The coursework only option is recommended as a professional development degree for working engineers. The 4+1 option is recommended for students who wish to enter the professional job market with an advanced level of technical knowledge and professional development.

Students are advised that the project, coursework only, and 4+1 options are non-research oriented, and that courses taken in these options might not transfer to a doctoral program without meeting additional requirements.

Students lacking an undergraduate degree in Engineering must show competency in math and science and will be required to take foundational engineering courses. These courses will be considered prerequisites and will not count toward the fulfillment of the core course requirement. General rules and policies by the Graduate School for thesis or non-thesis program will be applied to the Master of Engineering Program.

A student may change from one option to another. However, this could cause considerable delay in graduation because of the way the options are structured. Accordingly students must carefully choose a matriculation option. Students should also be aware that Financial support for coursework only and 4+1 students will only be in the form of laboratory assistantships or teaching assistantships. These assistantships will only be available after the first semester with a GPA of 3.3 or above.

#### ADVISORY COMMITTEE

For the thesis and project options, a student should define his/her specialty area with the approval of the advisory committee soon after admission to the program. The graduate faculty advisor, the graduate

committee, and the director of the graduate program must approve the student's plan of study. No more than six credits from a previous master degree program may be applied toward a second master degree. These credits are applied only with the written approval of the Dean of the Graduate School, the graduate faculty advisor, and the director of the graduate program in which the second master degree is pursued.

For the coursework only and 4+1 options, an advisory committee is not required. The student would choose an advisor based on the student's interests and the advisor's area(s) of expertise.

## PLAN OF STUDY

### Specialty Area 1: Materials Science and Engineering:

#### Track 1: Advanced Engineering Materials

Course No.	Course Title	Credit Hours
<b>Core Courses ( Select 9 Hours)</b>		
ENGR 500	Probability and Statistics for Engineers	3
ENGR 520	Mathematical Methods in Engineering	3
ENGR 530	Advanced Computer Applications for Engineers	3
ENGR 540	Fundamentals of Engineering Materials	3
ENGR 550	Numerical Methods for Engineering Applications	3
ENGR 560	Optimization Theory and Methods	3
<b>Core Course (Select 3 Hours)</b>		
ENGR 570	Engineering Management Methods	3
MBAP 538	Project Management	3
<b>Elective Courses (Select 12 to 18 Hours)</b>		
MEEN 430	Introduction to Finite Elements	3
MEEN 551	Fracture Mechanics and Fatigue in Materials	3
MEEN 552	Corrosion Science & Engineering	3
MEEN 563	Composite Materials	3
MEEN 565	Characterization of Materials	3
MEEN 588	Topics in Materials Science and Engineering	3
Elective(s)	(Other Specialty Areas)	3-6
<b>Degree Options (Select 3 or 6 Hours)</b>		
ENGR 599	Engineering Project (Non Thesis Option)	3
ENGR 600	Thesis	6
<b>TOTAL</b>		<b>30</b>
<b>Foundation Courses</b>		
A student lacking an undergraduate degree in engineering must show competency in the following courses		
MATH 264	Calculus I	4
MATH 265	Calculus II	4
MATH 395	Calculus III and Differential Equations	4

### Specialty Area 1: Materials Science and Engineering:

#### Track 2: Electronic Materials and Processing

Course No.	Course Title	Credit Hours
<b>Core Courses (Select 9 Hours)</b>		
ENGR 500	Probability and Statistics for Engineers	3
ENGR 520	Mathematical Methods in Engineering	3
ENGR 530	Advanced Computer Applications for Engineers	3
ENGR 540	Fundamentals of Engineering Materials	3
ENGR 550	Numerical Methods for Engineering Applications	3
ENGR 560	Optimization Theory and Methods	3
<b>Core Course (Select 3 Hours)</b>		
ENGR 570	Engineering Management Methods	3
MGMT 587	Project Management	3
<b>Elective Courses (Select 12 to 18 Hours)</b>		
ELEN 418	Theory and Fabrication of Solid-State Devices	3
ELEN 419	Integrated Circuit Analysis	3
ELEN 526	Solid State Physics	3
ELEN 536	Physics of Semiconductor Devices	3
ELEN 541	Integrated Circuit Processing & Fabrication and Lab	3
ELEN 544	Integrated and Fiber Optics	3
ELEN 546	VLSI Technology	3
ELEN 589	Topics in Electronic Materials and Processing	3
Elective(s)	(Other Specialty Areas)	3-6
<b>Degree Options (Select 3 or 6 Hours)</b>		
ENGR 599	Engineering Project (Non Thesis Option)	3
ENGR 600	Thesis	6
<b>TOTAL</b>		<b>30</b>
<b>Foundation Courses</b>		
A student lacking an undergraduate degree in engineering must show competency in the following courses:		
MATH 264	Calculus I	4

MATH 265	Calculus II	4
MATH 395	Calculus III and Differential Equations	4
CHEM 112	General Chemistry Lab	1
CHEM 132	General Chemistry	3
PHYS 221/223	General Physics/Lab	4
PHYS 222/224	General Physics II/Lab	4
ELEN 212	Electronic Properties of Matter	4

**Specialty Area 2: Sustainable Systems Engineering****Track 1: Environmental and Water Resources Engineering****Course No. Course Title Credit Hours****Core Courses (Select 9 Hours)**

ENGR 500	Probability and Statistics for Engineers	3
ENGR 520	Mathematical Methods in Engineering	3
ENGR 530	Advanced Computer Applications for Engineers	3
ENGR 540	Fundamentals of Engineering Materials	3
ENGR 550	Numerical Methods for Engineering Applications	3
ENGR 560	Optimization Theory and Methods	3

**Core Course (Select 3 Hours)**

ENGR 570	Engineering Management Methods	3
MBAP 538	Project Management	3

**Elective Courses (Select 12 to 18 Hours)**

CIEN 421	Water and Wastewater Analysis	3
CIEN 462	Design of Water & Sewage Treatment Plants	3
CIEN 475	Solid/Hazardous Waste Management	3
CIEN 511	Solid/Hazardous Waste Management	3
CIEN 512	Biological Waste Treatment	3
CIEN 515	Advanced Industrial Waste Treatment	3
CIEN 516	Groundwater Pollution Remediation	3
CIEN 588	Topics in Environmental Engineering	3
Elective(s)	(Other Specialty Areas)	3-6

**Degree Options (Select 3 or 6 Hours)**

ENGR 599	Engineering Project (Non Thesis Option)	3
ENGR 600	Thesis	6

**TOTAL 30****Foundation Courses**

A student lacking an undergraduate degree in engineering must show competency in the following courses:

MATH 264	Calculus I	4
MATH 265	Calculus II	4
MATH 395	Calculus III and Differential Equations	4
CHEM 112	General Chemistry Lab	1
CHEM 132	General Chemistry	3
PHYS 221/223	General Physics	4
PHYS 222/224	General Physics II	4
CIEN 325	Introduction to Environmental Engineering	3
CIEN 321 or MEEN 312	Fluid Mechanics	3

**Specialty Area 2: Sustainable Systems Engineering****Track 2: Thermal Science and Engineering****Course No. Course Title Credit Hours****Core Courses (Select 9 Hours)**

ENGR 500	Probability and Statistics for Engineers	3
ENGR 520	Mathematical Methods in Engineering	3
ENGR 530	Advanced Computer Applications for Engineers	3
ENGR 540	Fundamentals of Engineering Materials	3
ENGR 550	Numerical Methods for Engineering Applications	3
ENGR 560	Optimization Theory and Methods	3

**Core Course (Select 3 Hours)**

ENGR 570	Engineering Management Methods	3
MBAP 538	Project Management	3

**Elective Courses (Select 12 to 18 Hours)**

MEEN 421	Thermal Environmental Engineering	3
MEEN 574	Advanced Applied Heat Transfer	3
MEEN 578	Computational Fluid Dynamics	3
MEEN 579	Two-Phase Flow and Heat Transfer	3
MEEN 581	Energy Management and Applications	3
MEEN 589	Topics in Thermal Science and Engineering	3
Elective(s)	(Other Specialty Areas)	3-6

**Degree Options (Select 3 or 6 Hours)**

ENGR 599	Engineering Project (Non Thesis Option)	3
ENGR 600	Thesis	6

**TOTAL 30****Foundation Courses**

A student lacking an undergraduate degree in engineering must show competency in the following courses:

MATH 264	Calculus I	4
MATH 265	Calculus II	4
MATH 395	Calculus III and Differential Equations	4
CHEM 112	General Chemistry Lab	1
CHEM 132	General Chemistry	3
PHYS 221/223	General Physics	4
PHYS 222/224	General Physics II	4
MEEN 300	Thermodynamics	3
MEEN 442	Heat Transfer	3

**Specialty Area 2: Sustainable Systems Engineering****Track 3: Telecommunication and Computer Network Engineering**

Course No.	Course Title	Credit Hours
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**Core Courses (Select 9 Hours)**

ENGR 500	Probability and Statistics for Engineers	3
ENGR 520	Mathematical Methods in Engineering	3
ENGR 530	Advanced Computer Applications for Engineers	3
ENGR 540	Fundamentals of Engineering Materials	3
ENGR 550	Numerical Methods for Engineering Applications	3
ENGR 560	Optimization Theory and Methods	3

**Core Course\_(Select 3 Hours)**

ENGR 570	Engineering Management Methods	3
MBAP 538	Project Management	3

**Elective Courses (Select 12 to 18 Hours)**

ELEN 405	Digital Signal Processing	3
ELEN 475	Computer Networks	3
ELEN 521	Digital Transmission and Data Communications	3
ELEN 523	Communication Network Engineering	3
ELEN 533	Information Theory	3
ELEN 535	Systems Analysis and Management	3
ELEN 588	Topics in Telecommunications and Computer Network	3
Elective(s)	(Other Specialty Areas)	3-6

**Degree Options (Select 3 or 6 Hours)**

ENGR 599	Engineering Project (Non Thesis Option)	3
ENGR 600	Thesis	6

<b>TOTAL</b>	<b>30</b>
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**Foundation Courses**

A student lacking an undergraduate degree in engineering must show competency in the following courses:

MATH 264	Calculus I	4
MATH 265	Calculus II	4
MATH 395	Calculus III and Differential Equations	4
CHEM 112	General Chemistry Lab	1
CHEM 132	General Chemistry	3
PHYS 221/223	General Physics	4
PHYS 222/224	General Physics II	4

**Specialty Area 3: Engineering Management**

Course No.	Course Title	Credit Hours
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**Required Core Courses (3 Hours)**

MGMT 592	Business Strategic Decision Making	3
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**Core Courses (Select 6 Hours)**

ENGR 500	Probability and Statistics for Engineers	3
ENGR 520	Mathematical Methods in Engineering	3
ENGR 530	Advanced Computer Applications for Engineers	3
ENGR 540	Fundamentals of Engineering Materials	3
ENGR 550	Numerical Methods for Engineering Applications	3
ENGR 560	Optimization Theory and Methods	3

**Core Course (Select 3 Hours)**

ENGR 570	Engineering Management Methods	3
MBAP 538	Project Management	3

**Engineering Elective Courses\_(Select 9 Hours)**

Elective(s)	(Other Specialty Areas)	9
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**Business Elective Courses\_(Select 6 to 9 Hours)**

MBAP 512	Managerial Economics	3
MBAP 516	Organizational Behavior and Leadership	3
MBAP 517	Operations Management	3
MBAP 519	Marketing Management	3
MBAP 523	Entrepreneurship	3
MBAP 537	Global Supply Chain Management and ERP	3
MBAP 538	Project Management	3

**Engineering Project (3 Hours)**



ENGR 599	Engineering Project	3
<b>TOTAL</b>		<b>30</b>

### Foundation Courses

Engineering students lacking an undergraduate degree in Management must show competency in the following course

MGMT 300	Principles of Management	3
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### COURSE DESCRIPTIONS

#### Core Courses\_(For All Three Specialty Areas)

**ENGR 500. Probability and Statistics for Engineers (Credit, 3 hours).**Probability distributions, Statistical Inferences, Regression Analysis, Multiple Regression, Hypothesis testing, Design of Experiments and Analysis of Variance, Non-parametric Statistics, Statistical Quality Control, Stochastic Processes.

**ENGR 520. Mathematical Methods in Engineering. (Credit, 3 hours)** This course covers a variety of topics in applied mathematics including: vector differential calculus, Green, Gauss, and Stokes theorems, orthogonal series including Fourier, Bessel and Legendre series, Sturm-Liouville problems, boundary value problems for partial differential equations, discrete and continuous Fourier transforms including the mathematics of the Fast Fourier Transform. The course will stress the application of mathematical results and methods to solve engineering problems.

**ENGR 530. Advanced Computer Applications for Engineers (Credit, 3 hours).** This course provides students with an in-depth look at the capabilities and limitations of computers in engineering applications. Packed with examples, it shows how to use the computer as an analytical tool in the development, testing and documentation of a structured problem.

**ENGR 540. Fundamentals of Engineering Materials (Credit, 3 hours).** Study of structure and composition of engineering materials in relation to the properties. Topics include atomic structure and bonding damage flaw interactions, crystallography and relationship to electrical, mechanical, thermal, optical, and magnetic properties of solid materials including metals, alloys, polymers, composites, and ceramics.

**ENGR 550. Numerical Methods for Engineering Applications (Credit, 3 hours).** This course covers numerical methods for solution of engineering problems; system of linear equations, ordinary differential equations (ODEs) including one-dimensional initial value problems and boundary value problems; partial differential equations (PDEs) including elliptic, parabolic and hyperbolic PDEs.

**ENGR 560. Optimization Theory and Methods (Credit, 3 hours).**This course introduces mathematical modeling techniques as tools that support optimization and operations research in the solution of engineering systems problems. Topics include formulation and mathematical representation of engineering systems and their solution via linear programming (LP), non-linear programming (NLP), separable programming, dynamic programming (DP) and other evolving and traditional numerical techniques. Multi-objective optimization (especially multi-objective LP) is also presented.

**ENGR 570. Engineering Management (Credit 3 hours)** Introduction to broad field of engineering management with specific emphasis on subjects such as project management, value engineering, constrained optimization, maintenance management, and enterprise resource planning (ERP). Students will be required to perform projects in selected areas

### Specialty Area 1: Materials Science and Engineering Track 1: Advanced Engineering Materials Elective Courses

**MEEN 430. Introduction to Finite Elements (Credit, 3 hours).**Presents an introduction to the nature and capabilities of finite elements techniques, and methods in engineering science and practices. Prerequisites: MEEN 221, 227, 312, and MATH 395.

**MEEN 551. Fracture Mechanics & Fatigue in Materials (Credit, 3 hours).**Theory of ductile and brittle fracture, fracture mechanics and mechanism; fracture and design of components, effects of temperature; the S-N curve, cycle stress-strain, structural fracture of fatigue; effects of material variables on fracture, related topics.

**MEEN 552. Corrosion Science and Engineering (Credit, 3 hours).**Corrosion and degradation processes in materials, their mechanisms, theory and control of corrosion, corrosion testing and design of structural materials, current literature on oxidation behavior and corrosion.

**MEEN 563. Composite Materials (Credit, 3 hours).**Basic constituents of composites, and relationship between the physical parameters of each constituent, micromechanical and macromechanical analysis, and failure criteria.

**MEEN 565. Characterization of Materials (Credit, 3 hours).**Theory and principles of crystallography, Microstructural characterization techniques such as SEM, TEM, X-ray diffraction, microstructural analysis, fractography.

**MEEN 588. Topics in Materials Science and Engineering (Credit, 3 hours).**Individual or group study in one or more areas of Materials Science and Engineering or related topics.

### Specialty Area 1: Materials Science and Engineering Track 2: Electronic Materials and Processing Elective Courses

**ELEN 418. Theory and Fabrication of Solid-State Devices (Credit, 3 hours).** A study of the theory and fabrication of semiconductor devices including diodes, transistors, and integrated circuits. Prerequisite: ELEN 312. ELEN 419. Integrated Circuit Design and Analysis.

**ELEN 419. Integrated Circuit Analysis. (Credit, 3 hours).** A study of integrated circuit technology. The physics of various devices considered along with fabrication techniques to provide a basis for circuit modeling, circuit analysis, and the comparison of devices based on speed, reliability, power handling capability, economics, etc. Large-scale integrated logic circuits and linear integrated circuit design and application will be for integrated logic circuits and linear integrated circuits. Prerequisite: ELEN 313. ELEN 418 also recommended.

**ELEN 526. Solid State Physics (Credit, 3 hours).**This course analyzes the nature of solids and uses principles from physics to examine and explain the characteristics of solid materials. Topics such as crystal structure, quantum mechanics, energy bands, electron transport, and conductivity will be presented.

**ELEN 536. Physics of Semiconductor Devices (Credit, 3 hours).**Introduction to the physical principles underlying semiconductor device operation and the application of these principles to specific devices. Emphasis will be placed on

understanding device operation rather than circuit properties.

**ELEN 541. Integrated Circuit Processing and Fabrication and Lab (Credit, 3 hours).** This course provides students with the fundamentals needed for advanced semiconductor processing, particularly, basic processes common to all Integrated-Circuit technology and provides a base for understanding of what can and cannot be achieved through integrated-circuit fabrication.

**ELEN 544. Integrated Fiber Optics (Credit, 3 hours).** Propagation of waves in electric thin films and cylindrical guides. Bit limitation rate due to material dispersion and multimoding. Step index and graded index fibers. Switching and modulation by integrated optics techniques.

**ELEN 546. Very Large Scale Integration (VLSI) Technology (Credit, 3 hours).** Modern VLSI technologies, MOS and Bipolar device electrical characteristics are very sensitive to structural details and hence to fabrication techniques. This course concentrates on how VLSI devices and circuits are fabricated and on what future changes are likely.

**ELEN 589. Topics in Electronic Materials and Processing Engineering (Credit, 3 hours).**

Individual or group study in one or more areas of Electronic Materials and Processing Engineering or related topics.

**Specialty Area 2:**  
**Sustainable Systems Engineering**

**Track 1: Environmental and Water Resources Engineering Elective Courses**

**CIEN 421. Water and Wastewater Analysis (Credit, 3 hours).** Chemical kinetics and equilibrium, acid-base chemistry, oxidation reduction reactions, precipitation, dissolution and the application of the principles of gravimetric, volumetric, and colorimetric methods to the laboratory analysis of water and wastewater. Prerequisite: CIEN 325

**CIEN 462. Design of Water & Sewage Treatment Plants (Credit, 3 hours).** Design and operation of water and wastewater treatment systems including physical, chemical, and biological principles, and design of water and wastewater treatment plants. Prerequisites: CIEN 323 and 325.

**CIEN 475. Solid/Hazardous Waste Management (Credit, 3 hours).** Generation, onsite storage, collection, transfer and transport, processing and recovery, and disposal of solid/hazardous wastes. Prerequisite: CIEN 325.

**CIEN 511. Solid/ Hazardous Waste Management Engineering (Credit, 3 hours).** A comprehensive study of solid and hazardous waste management including identification, generation, transportation, risk assessment, and techniques and technologies for control and treatment; engineering design of control technologies and strategies for selecting them.

**CIEN 512. Biological Wastewater Treatment (Credit, 3 hours).** Overview of biological wastewater treatment; microbial metabolism; bacterial growth; biological treatment processes; aerobic and anaerobic suspended and attached growth treatment systems; biological nutrient removal; and design of biological unit processes.

**CIEN 515. Advanced Industrial Waste Treatment (Credit, 3 hours).** A comprehensive study of the industrial waste treatment processes and toxicity reduction in industrial effluents; physical, chemical, and biological treatment processes; wastewater reclamation and reuse and design of treatment systems.

**CIEN 516. Atmospheric Dispersion Modeling (Credit, 3 hours).** Fundamentals of air pollution meteorology and atmospheric dispersion of pollutants. Dispersion models, with emphasis on the Gaussian plume model, use of computer dispersion models to predict ambient concentrations of pollutants, regulatory aspects of modeling.

**CIEN 588 Topics in Environmental Engineering (Credit, 3 hours).** Individual or group study in one or more areas of environmental engineering or related topics.

**Specialty Area 2:**

**Sustainable Systems Engineering**

**Track 2: Thermal Science and Engineering Elective Courses**

**MEEN 421. Thermal Environmental Engineering (Credit, 3 hours).** Covers air and humidity calculations, heating and cooling loads, cooling systems, physiological reactions to the environment, air distribution systems, principles of refrigeration, and cryogenic systems. Prerequisite: MEEN 301

**MEEN 574. Advanced Applied Heat Transfer (Credit, 3 hours).** Fundamentals of conduction, convection, and radiation heat transfer. Practical engineering applications of heat exchangers, different design approaches. Boiling and condensation, convection fouling factors, mixed mode heat transfer. Topics from current applications such as heat transfer in electronic equipment.

**MEEN 578. Computational Fluid Dynamics (Credit, 3 hours).** Advanced numerical method for solving Navier-Stokes equations. Numerical solutions to boundary layer problems. Solutions to potential flows. Students will be required to perform projects in selected areas.

**MEEN 579. Two-Phase Flow and Heat Transfer (Credit, 3 hours).** Current status of multi-phase flow and heat transfer application to design; reviews of single-phase and two-phase flow heat transfer, principles of liquid cooling of electronic devices, basic one-dimensional treatment of two-phase pressure drop flows and current state of the art in liquid-vapor phase change heat transfer.

**MEEN 581 Energy Management and Applications (Credit, 3 hours).** Application of basic principles of energy management; case studies of energy conservation opportunities; energy audits; and building load computer simulation.

**MEEN 589. Topics in Thermal Science and Engineering (Credit, 3 hours).** Individual or group study in one or more areas of Thermal Science and Engineering or related topics.

**Specialty Area 2:**

**Sustainable Systems Engineering**

**Track 3: Telecommunication and Computer Network Engineering- Elective Courses**

**ELEN 405. Digital Signal Processing (Credit, 3 hours).**

Introductory course in digital signal processing. Topics include discrete-time description of signals, the  $f$ -transform, digital filter structures, infinite impulse response filter design techniques, finite impulse response design techniques, finite precision effects, and inverse filtering. Prerequisites: ELEN 340 and ELEN 390.

**ELEN 475. Computer Networks (Credit, 3 hours).** Presents the study and design of computer networks to include protocols, network interfacing, network performance, etc. Prerequisite: Senior standing or approval of instructor.

**ELEN 521. Digital Transmission and Data Communication Network Engineering (Credit, 3 hours).** Introduction to the fundamentals of digital transmission technology, topics include voice digitization using PCM, DPCM techniques, low bit rate coding of speech and data, time division, frequency division and statistical multiplexing, framing, synchronization, line coding, error detection and correction, data modulation, baseband and carrier transmission techniques, characterization of transmission media, data communication protocols and seven-layer ISO model, design, analysis, and implementation of local and wide area networks, circuit switching packet switching, contention protocols, collision detection, token passing, Ethernet, buses and rings.

**ELEN 523. Communication Network Engineering (Credit, 3 hours).** The design of transmission systems for voice, high-speed data, and mobile services using fiber optics, satellites, microwave, mobile radio, and cable. Emphasis will be placed on examining an application, determining traffic type and characteristics, and choosing the appropriate media and protocol to support transmission.

**ELEN 533. Information theory (Credit, 3 hours).** Introduction of discrete information sources and the fundamental concept of entropy and data compression codes. Introduction to application of information theory to cryptography. Introduction to Shannon's source coding theorems. An overview of digital communication systems and concept of information.

**ELEN 535. Systems Analysis and Management (Credit, 3 hours).** Introduces the student to basic systems analysis tools and the procedures for conducting a systems analysis. Topics will include the design of system requirements, feasibility studies and cost analysis, detailed design, implementation, system testing, and system life cycle management. The student will implement these concepts through studies and/or projects.

**ELEN 588. Topics in Telecommunication and Computer Network Engineering (Credit, 3 hours).** Individual or group study in one or more areas of Telecommunication and Computer Network engineering or related topics.

### Specialty Area 3: Engineering Management Engineering Elective Courses

*Select any electives from Specialty Area 1 or 2.*

### Business Elective Courses

**MBAP 512. Managerial Economics (Credit, 3 hours).** This course is a combination of intermediate microeconomic theory, statistics and econometrics, and some business management. It emphasizes the use of micro-economic analysis as a practical tool for decision making in consumption, management and public policy. The economic behavior of individuals (consumers and producers) in various types of markets as well as market themselves will be studied with intensive use of graphs,

computer/statistical applications and algebraic equations.

**MBAP 516. Organizational Behavior and Leadership (Credit, 3 hours).** A course in organization structure management process and technology as they affect human behavior, control processes, communication systems, and other dimensions of the organization. Emphasis is placed on the study of "classic" readings these fields, so that the student can understand both the state of art in theory, research, and practice, as well as gain insight into the historical development of ideas. Organization theory topics covered will include organization structure, strategy, conflict, politics, culture and design. Organization behavior topics covered will include individual-level phenomena such as employee attitudes, motivation and behaviors, and meso-level phenomena including group and team dynamics.

**MBAP 517. Operations Management (Credit, 3 hours).** This course focuses on the major managerial issues in manufacturing management and the statistical/analytical tools that can be used to manage them. The major operations management issues are quality management and control, capacity management, plant location, layout and design, production planning and scheduling, inventory management, and related topics. The analytical tools covered include queuing theory, statistical quality control, linear programming, and related topics.

**MBAP 519. Marketing Management (Credit, 3 hours).** An advanced applied course in marketing management and decision-making. This course focuses on the decisions that managers make and the tools that they use to support an effective marketing strategy. It provides a strategic way to think about the firm's products, services, and markets, including marketing strategy and implementation. Topics include the study of customer/buyer behavior, market segmentation, competitive analysis, product development and positioning, advertising and promotion, and pricing issues.

**MBAP 523. Entrepreneurship (Credit, 3 hours).** This course covers the entrepreneurial process from conception to birth of the new venture. It looks at both process and people involved in assessing ideas, exploiting opportunities, gathering resources and converting concepts into businesses. It explores the practical tools which students can use to further their careers in business, both in entrepreneurship and in more "traditional" corporate environments. A key aspect of the course is working in teams to write business plan for a new or dramatically expanded venture.

**MBAP 537. Global Supply Chain Management and ERP (Credit, 3 hours).** This course examines contemporary issues in the management and integration of raw material procurement, inventory management, and finished goods delivery. In addition, students will have hands-on experience of using ERP software such as SAP. The topics covered include planning and managing inventories, transportation, network design, and financial factors influencing supply chain decisions.

### Degree Options

**ENGR 599. Engineering Project (Credit, 3-15 hours).** Continuation of research on Engineering Project. Satisfactory oral defense of topic is required for graduation.

**ENGR 600. Thesis (Credit, 3-15 hours).** Continuation of research on Thesis. Satisfactory oral defense of topic is required for graduation.



poisons  
toxicology  
investigation  
Toxicology  
determining  
alcohol  
legal  
crime  
forensic  
analysis  
Read  
levels  
laboratories  
drugs  
applications  
toxology  
medicine



## PhD in Environmental Toxicology



## College of Sciences and Engineering

Dean: Dr. Patrick Carriere

### PhD in Environmental Toxicology (PhD/ENTX)

#### Department of Environmental Toxicology

##### Sanjay Batra, PhD

Chair  
P. O. Box 9264  
Baton Rouge, LA 70813 Fisher Hall – Room 108  
Phone: 225-771-3200  
Fax: 225-771-5350

##### Program Coordinator: Doris T. Patterson

Phone: 225-771-3846  
Fax: 225-771-5350  
E-mail: doristpat@aol.com

#### FACULTY

##### Professors

##### Gray, Wesley

PhD - Biochemistry  
University of Maryland, Baltimore, MD

##### Uppu, Rao

PhD - Biochemistry  
Osmania University/NIN, Hyderabad, India

##### Batra, Sanjay

PhD - Biochemistry  
Kanupur University/CDRI, Lucknow, India

##### Murthy, Subramanyam

PhD - Biochemistry  
Osmania University/NIN, Hyderabad, India

##### Adjunct Professors

##### Babu, Bassa

PhD – Biochemistry  
University of Delhi/VPCI, New Delhi, India

##### Biju, Vasudevan

PhD – Chemistry  
University of Kerala, Thiruvananthapuram, India

##### Claville, Michelle

PhD – Organic Chemistry  
University of Florida, Gainesville, FL

##### Hines, James

MD - Meharry Medical College, Nashville, TN JD - Southern University, Baton Rouge, LA

##### Kousoulas, Konstatin

PhD - Biotechnology  
Fairleigh Dickinson University, Teaneck, NJ

##### Lacy, Fred

PhD - Electrical Engineering  
Howard University, Washington, DC

##### Martinez-Ceballos, Eduardo

PhD - Cell and Molecular Biology  
Tulane University, New Orleans, LA

##### Medicherla, Satyanarayana

PhD - Physiology and Pharmacology  
Andhra University/AMC, Waltair, India

##### Mensah, Patrick

PhD – Engineering Science  
Louisiana State University

##### Onu, Chukwu

PhD - Civil and Environmental Engineering  
West Virginia University, Morgantown, WV

##### Qi, Yadong

PhD - Urban Forestry  
Stephen F. Austin State University, Nacogdoches, TX

##### Raghavamenon, Achuthan

PhD - Biochemistry  
Mahatma Gandhi University, Kottayam, India

##### Samkutty, Pushpa

PhD - Dairy Microbiology  
Louisiana State University, Baton Rouge, LA

##### Stubblefield, Michael

PhD -Engineering Science  
Louisiana State University, Baton Rouge, LA

##### Washington, Samuel

PhD - Analytical Chemistry  
Louisiana State University, Baton Rouge, LA

#### Introduction

The Environmental Toxicology Program offers a Doctor of Philosophy degree in environmental toxicology. There are four study options of which a student could choose one to work towards the degree. This has to be approved by the graduate committee. The study options are

1. Molecular and Reproductive Toxicology and Cell Biology
2. Toxicological Effects of Priority Toxic Chemicals
3. Chemical Detection and Evaluation of Toxicological Substances in the Environment
4. Microbial Treatment and Detection of Hazardous Materials and Environment Contaminants

As of 2017, the PhD Program in Environmental Toxicology has produced over 20 PhD graduates. With this experience, it is possible for making changes in the program including course listings and option areas as described. Students will be notified of all the changes that are made in a timely manner, and will be made available on <http://www.subr.edu/entox>.

#### Mission Statement

The faculty of the program strive hard to train eligible individuals to

conduct basic and applied research on (i) the potential adverse effects of chemicals and complex mixtures of environmental contaminants on biological systems and environment, (ii) to conduct research on the molecular mechanisms of chemically induced toxicity, (iii) to communicate the concepts and findings of toxicological research and evaluations, and (iv) to serve as an information resource on toxicological matters to the state and the general public. The overall goal is to advance the science of environmental toxicology and its relevance to the well-being of human, animal, and plant life.

## GRADUATE DEGREES OFFERED

### PhD in Environmental Toxicology

## ADMISSION REQUIREMENTS

- ✓ An earned BS or MS degree from an accredited university in the areas of toxicology, biology, chemistry, or toxicology-related subject as considered appropriate by the Environmental Toxicology Graduate Committee.
- ✓ A graduate grade point average (GPA) of 3.0/4.0 and an undergraduate GPA of 3.0/4.0 (exceptions will be made where deemed necessary).
- ✓ Undergraduate or graduate course credits of at least three semester hours from an accredited university in each of the following: cell biology, genetics, biochemistry, and organic chemistry. Students who have not completed these prerequisite courses may be admitted to the program on a conditional basis but will not receive full admission until completion of these courses.
- ✓ A Graduate Record Examination score of  $\geq 1000$  (verbal and quantitative; old scale) or 290 (new scale). Students with exceptional GPAs who do not meet the minimum GRE requirement may be considered on an individual basis.
- ✓ A 600-word essay on the student's career goals and interest in the toxicology program.
- ✓ Three letters of reference with at least two from former instructors.
- ✓ Recommendation by the Graduate Admission Committee of the program.

## GRADUATION REQUIREMENTS

For students entering the program with a MS degree, the minimum coursework requirement is 36 hours, typically comprising 21 hours of core courses, 9 hours of toxicology electives, and 6 hours of general electives, exclusive of the thesis, doctoral dissertation and research. Students entering the program with a BS degree are required to complete an additional 18 hours of MS-level foundation courses in biology, chemistry, or toxicology.

Upon completion of the core courses, students must pass the Graduate Comprehensive Exam (GCE) to become a candidate for the PhD degree. After passing the GCE, students may register for dissertation research credit hours.

Students who earn more than two grades of C or below shall be automatically dismissed from the program. In consultation with the advisory committee, each student must develop a plan of study no later than the beginning of the second year in residence. Based on the committee's recommendation, the minimum requirements may be modified to better prepare the student towards graduation. To remain in

good standing, each student must maintain a minimum GPA of 3.0.

## POLICY AND GUIDELINES FOR ASSISTANT-SHIP/SCHOLARSHIPS

A limited number of assistantships are available for full-time students with regular admission and who enroll for minimum of 9 credit hours in both Fall and Spring semesters. Further, a student receiving financial assistance is required to work in the laboratory of a designated faculty for a minimum 20 hours/week. Initial award and continuation will be based on academic performance and the recommendation of the Graduate Student Advisory Committee. Where funds become limiting, GPA and research productivity will be used to determine the allocation.

Graduate assistants dropping to less than 9 credit hours in Fall and Spring semesters or less than 6 credit hours in summer shall have their assistantships revoked. Students who fail to qualify and subsequently improve will be required to wait for one semester before applying for reconsideration.

Since the PhD program is a desegregation program mandating diversity, special consideration shall be given to students coming from minorities for the award of assistantships, tuition waivers and tuition scholarships.

### General Tuition Waiver/Scholarships

Students who are enrolled full-time but do not have assistantship shall be considered for tuition scholarship subject to

1. Availability of funds
2. Have a full-time load of 9 or more credit hours till the end of the semester.

Any student who is employed full time elsewhere will not be eligible for receiving financial support.

## GRADUATE ADVISORY COMMITTEE

Each student with the help of the major advisor and the Chairman should have an advisory committee before the beginning of the second year. The advisory committee should consist of no fewer than four members of the graduate faculty. At least two members, including the Program Leader will be from the Environmental Toxicology Program recommending the degree, and at least one member drawn from a different educational discipline.

## COURSE OF STUDY

Core Courses (twenty-two hours are required) \*\*\*

ENTX 700	Bioethics .....	3 credits
ENTX 710	Environmental Toxicology Seminar .....	1 credit*
ENTX 721	Principles of Environmental Toxicology I .....	3 credits
ENTX 722	Principles of Environmental Toxicology II .....	3 credits
ENTX 723	Advanced Biochemistry I .....	3 credits
ENTX 725	Biochemical and Molecular Toxicology .....	3 credits
ENTX 731	Animal Physiology .....	3 credits
ENTX 737	Biochemical Method .....	3 credits**

\* must be taken once, may be repeated up to four times

**\*\* 3 credits are required may be repeated up to 6 credits**

**\*\*\* B or better is required for all the core courses**

### Toxicology Electives (nine hours are required)

ENTX 724	Advanced Biochemistry II .....	3 credits
ENTX 732	Aquatic Toxicology .....	3 credits
ENTX 733	Cell Physiology .....	3 credits
ENTX 736	Special Topics in Toxicology.....	3 credits
ENTX 740	Environmental Microbiology .....	3 credits
CHEM 560	Toxic Substances, Effects, and Controls .....	3 credits
PPOL 750	Environmental Regulations and Law .....	3 credits
ENTX 750	Organ System Toxicology .....	3 credits
ENTX 757	Bioinformatics .....	3 credits

### General Electives\* (six hours are required)

BIOL 506	Biostatistics: Experimental Design and Analysis (or SMED739 Applied Statistics).....	3 credits
ENTX 744	Risk Assessment .....	3 credits
ENTX 753	Recent Advances in Virology.....	3 credits
ENTX 755	Molecular Immunology .....	3 credits

*\*These courses could be selected from existing courses in other PhD programs, other master's programs, including Chemistry, Biology, Nursing, Urban Forestry, or Public Policy.*

### Research Courses\*\*\*

ENTX 799	Environmental Toxicology Research Practicum .....	3-6 Credits
ENTX 800	Dissertation Research .....	3-9 Credits

**\*\*\*may be repeated for a minimum of fifteen hours each.**

**A MINIMUM TOTAL OF THIRTY-SIX HOURS ARE REQUIRED TO COMPLETE THE CURRICULUM**

## COURSE DESCRIPTIONS

### Core Courses

**ENTX 700 BIOETHICS (Credit, 3 hours).** Topics include the bioethical considerations and concerns that confront the conduct of research and its perceptions by the general public. Special attention is given to the ethics of environmentally related research, journalism, human experimentation, genetic research, professional role responsibility, and conflicts of interests. The course also covers Institutional Review Board policies as well as Institutional Animal Care and Use Committees as mandated by the National Institutes of Health. The course will be taught from a multi-disciplinary approach to provide opportunities for the full participation of students.

**ENTX 710 ENVIRONMENTAL TOXICOLOGY SEMINAR (Credit, 1 hour).** This course must be taken once, but may be repeated for a maximum of 4 hours. Requirements include reports by students, resident faculty and distinguished visiting faculty on topics of current interest in Environmental Toxicology.

### ENTX 721-722 PRINCIPLES OF ENVIRONMENTAL

**TOXICOLOGY I & II (Credit, 3 hours each).** Introduction to the basic principles of environmental toxicology; applications of these principles in industrial and other job related environments; regulatory perspectives; spills; anthropogenic pollution problems; human risk management; overview of classes of toxic agents, routes of exposure, target tissues (human and other mammalian species); testing and screening agents for genotoxic activities; molecular genetic approaches to environmental biomonitoring.

**ENTX 723 ADVANCED BIOCHEMISTRY I (Credit, 3 hours).** An advanced biochemistry course concerned with major metabolic pathways and their control. The metabolism of carbohydrates, proteins, lipids, and nucleic acids is discussed. Bioenergetics is also featured and details the production and utilization of energy by the cell. Other topics include metabolic diseases with emphasis on molecular control, response to toxins, and adaptation of cells to pollutants.

**ENTX 725 BIOCHEMICAL AND MOLECULAR TOXICOLOGY (Credit, 3 hours).** The effects of chemicals on biochemical pathways, target organelles (e.g., mitochondria, lysosomes), and specific enzymes are the central theme of the course. Selected topics include, phase I and II xenobiotic metabolism, generation of reactive intermediates of chemicals, genotoxicology and principles of chemical carcinogenesis.

**ENTX 731 ANIMAL PHYSIOLOGY (Credit, 3 hours).** A comprehensive and integrated course designed to cover the principles and fundamental concepts associated with the functional activities and mechanisms of action involved with the coordination and maintenance of homeostasis, bioenergetics, biocatalysis and metabolic processes. Clinical and toxicological relationships will also be covered.

**ENTX 737 BIOCHEMICAL METHODS (Credit, 3 hours).** Must be repeated for a maximum of 4 hours degree credit. This is a laboratory rotation course where students are exposed to current methodology in the environmental and biochemical sciences. This course will involve theoretical and practical applications of quantitative and qualitative measurement in biological systems. Students enrolled in this course will do nine-week rotations in selected research laboratories and give an oral presentation on methods learned during the rotation.

### Toxicology Electives

**ENTX 724 ADVANCED BIOCHEMISTRY II (Credit, 3 hours).** This course features a study of the effects of environmental contaminants on aquatic and marine organisms. The relationships between impact on individual organisms, populations, communities and ecosystems, relative effects of chemicals on larvae and embryo development, biomarkers of pollutant exposure for early-warning detection of deleterious effects of chemicals, bioaccumulation and bioavailability of effluents, sediment and other particulate adsorption models, ecological risk assessment for aquatic toxicants and comparative biochemical mechanisms, including metabolism, adaptation and toxicity.

**ENTX 732 AQUATIC TOXICOLOGY (Credit, 3 hours).** This course features a study of the effects of environmental contaminants on aquatic and marine organisms. The relationships between impact on individual organisms, populations, communities and ecosystems, relative effects of chemicals on larvae and embryo development, biomarkers of pollutant exposure for early-warning detection of deleterious effects of chemicals, bioaccumulation and bioavailability of effluents, sediment

and other particulate adsorption models, ecological risk assessment for aquatic toxicants and comparative biochemical mechanisms, including metabolism, adaptation and toxicity.

**ENTX 733 CELL PHYSIOLOGY (Credit, 3 hours).** A study of the fundamental cellular functions with emphasis on molecular and biochemical principles, enzyme catalysis, metabolic pathways, the flow of information and energy, and energy transformation and mobilization.

**ENTX 736 SPECIAL TOPICS IN TOXICOLOGY (Credit, 1-3 hours).** May be repeated for a maximum of 9 hours degree credit. This course will cover current topics pertaining to Environmental Toxicology. Issues relating to method development and application, toxin and analysis, disease prevention, environmental issues and new environmental law are possible topics.

**ENTX 740 ENVIRONMENTAL MICROBIOLOGY (Credit, 3 hours).** This course will involve an advanced study of the practices of biodegradation and bioremediation with emphasis on microbial ecology. Specific topics include the basic concepts of

**ENTX 741 AIR POLLUTANTS AND HEALTH (Credit, 3 hours).** The science and technology of air pollution and its control, effects of air pollutants on plant and animal life and on inanimate objects and materials, and methods of detecting and measuring air pollutants and their effects on the environment

**ENTX 750 ORGAN SYSTEMS TOXICOLOGY (Credit, 3 hours).** The course features topics related to the effects of chemical toxicants and toxins on the various major organ systems of mammalian and other vertebrate models. Topics include systematic study of the toxicity of chemicals on hepatic, neural, endocrine, renal, circulatory, and immune systems. A central theme is the nature of the organ systems and its relationship to organ-specific toxicity of chemicals.

**ENTX 757 Bioinformatics (Credit, 3 hours).** This is an introductory web-based course that focuses on the assessment of Bioinformatics in Environmental Toxicology. Principles, techniques, and applications in the fields of genetic engineering, sequence alignment, substitution methods, phylogenetics, genomics, and gene recognition, are emphasized. The course also offers hands-on experience with subject related computer programs and algorithms.

### **General Electives**

The listed and additional general electives that are consistent with the student's program of study may be taken with the approval of the student's advisory committee. General electives are designed to enrich the individual student's graduate degree program.

**ENTX 726 ADVANCED BIOSTATISTICS (Credit, 3 hours).**

This course is designed to acquaint advanced toxicology students with research designs for biological experimentations. Emphasis is on parametric and nonparametric statistical analysis and their applications to more advanced experiments.

**ENTX 744 RISK ASSESSMENT (Credit, 3 hours).** This course focuses on the risk of hazardous chemicals to plants and animals. Methods of identification for hazardous chemicals are discussed, as well as the possible adverse health effects associated with these chemicals. The course also focuses on chemical dose-response in humans, chemical exposure assessment in various environmental conditions, and the characterization of risk to a given population.

**ENTX 753 RECENT ADVANCES IN VIROLOGY (Credit, 3 hours).**

This course offers an advanced analysis of the biology and pathogenic effects of animal viruses. Recent advances and discoveries in the field of virology are discussed. The latest methods of virus detection and treatment are also discussed.

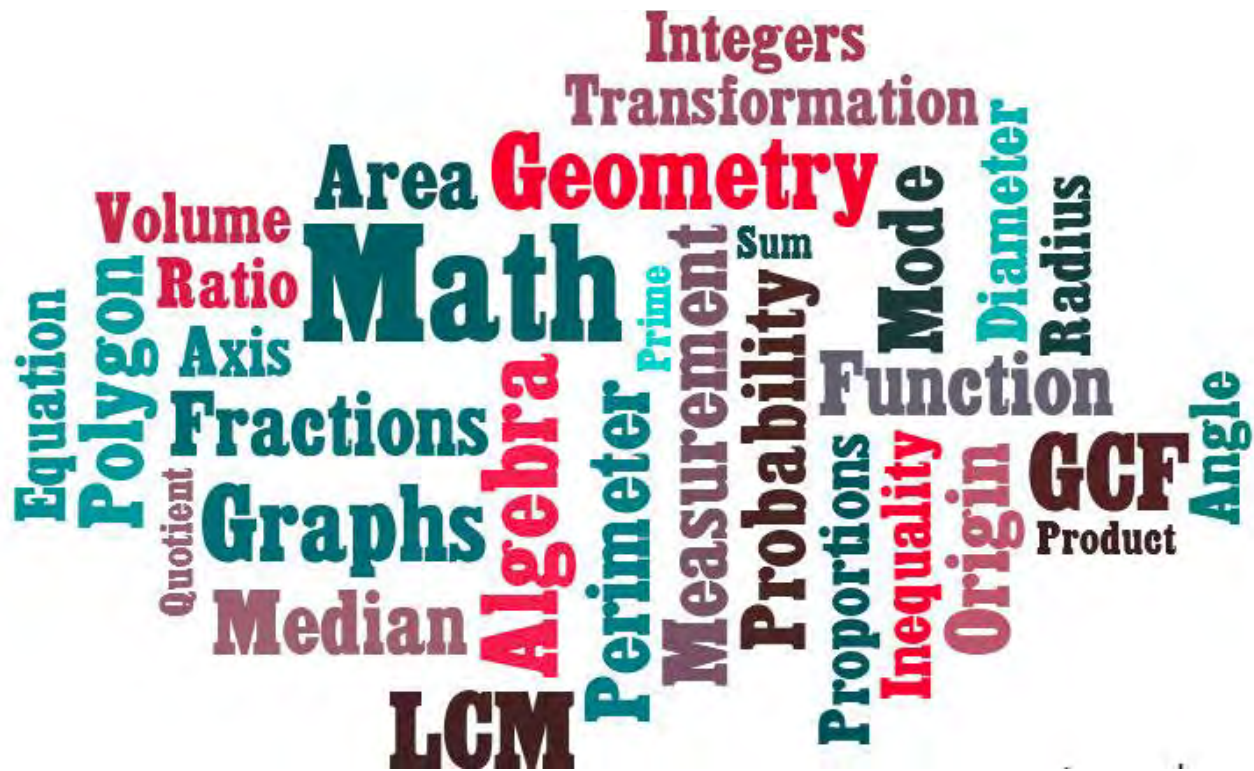
**ENTX 755 MOLECULAR IMMUNOLOGY (Credit, 3 hours).** This course focuses on cell-mediated immune responses. Special emphasis is given to the formation of the immune system at the molecular level, as well as the antigen-antibody relationship, the molecular structure of immunoglobulins, autoimmunity, and immune deficiency diseases and treatment.

### **Research**

**ENTX 799 TOXICOLOGY RESEARCH PRACTICUM (Credit, 3-6 hours).** This course provides the opportunity for students to conduct basic and applied research under the direction of an Environmental Toxicology faculty member. Students will develop questions related to toxicological research and conduct practical research aimed at answering the question. Emphasis will be placed on the use of "the scientific method", making scientific observations, and recording data. Further, data analysis, interpretation and data presentation in the form of abstracts, scientific papers, and research proposals will be covered. This course is only open to students who have not yet qualified for PhD candidacy.

**ENTX 800 DISSERTATION RESEARCH (Credit, 3-9 hours).** Each student is required to conduct research that is aimed at producing a dissertation. The student and supervising faculty will choose a research topic related to toxicological research and conduct the research in a cooperative manner. This course is only open to students who have qualified for PhD candidacy. Each student must perform dissertation research in a timely manner and submit the dissertation





## Master of Mathematics and Physics

- Mathematics Concentration
- Physics Concentration

## College of Sciences and Engineering

Dean: Dr. Patrick Carriere

### Department of Mathematics and Physics

### Master of Mathematics and Physics (MS/MAPH)

#### Mathematics Concentration

Program Leader: Dr. Katrina Cunningham

P.O. Box 9759

Baton Rouge, LA 70813-9759

T. T. Allain Bldg. – Room 345

Phone: (225) 771-5180

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E-mail: [katrina\\_cunningham@subr.edu](mailto:katrina_cunningham@subr.edu)

The Department of Mathematics and Physics offers a Master of Science degree in Mathematics and Physics, with a concentration in Mathematics. The curriculum of study must be chosen by the student and approved by the Graduate Committee of the Mathematics program. Emphasis of study will reflect the student's choice.

#### Graduate Faculty:

*Professors:*

##### Javier, Walfredo

Ph.D., Bowling Green State

Specialty: Mathematical Statistics

##### Barona, Humberto Munoz

Ph.D., University of Louisiana at Lafayette

Specialty: Numerical Analysis and Applied Mathematics

*Associate Professor:*

##### Vincent-Finley, Rachel

Ph.D., Rice University

Specialty: Computational and Applied Mathematics

*Assistant Professor:*

##### Cunningham, Katrina

Ph.D., Saint Louis University

Specialty: Algebra

#### Introduction

The graduate program in mathematics began in 1960. For the first five years of the program's existence, the students were in-service teachers who were participants in summer institutes sponsored by the National Science Foundation. Students not in this category, i.e. full-time graduate students, began to enroll in the late 1960s. The content of the program was focused on classical mathematics: Algebra, Analysis, Geometry, and Topology.

In 1985, the program added two more dimensions, namely Applied Mathematics and Mathematics for Teachers. These three

programs were called Option I (Classical), Option II (Applied) and Option III (Teaching). Later, Options I and II were combined and renamed Program I, Option III was renamed Program II.

In 2006, the Teacher Option (Option II) was combined with the Option I Program. This redesigned program has the flexibility to meet the needs of the three options created in 1985, depending on the choices made by the student in choosing from the list of approved electives.

#### GRADUATE DEGREES OFFERED:

##### Master of Science in Mathematics

#### ADMISSION REQUIREMENTS

In addition to meeting the general admission requirements of the Graduate School, applicants holding B.S. degrees in related fields, or having deficiencies in mathematics, may apply for provisional admission. In these cases, the Graduate Committee within the program, with the approval of the Chair, may recommend that the student enrolls in a mixed program of graduate and undergraduate courses approved by the graduate committee for the purpose of removing deficiencies in undergraduate mathematics. All deficiencies must be removed before a student can become a candidate for a graduate degree. Students admitted on the provisional basis cited above will receive credit toward the Master of Science degree for all graduate work successfully completed during this provisional period upon admission to the program.

#### DEGREE REQUIREMENTS

The number of credits required for the thesis option is 33 semester hours including six hours for thesis. Students who write a thesis must defend the thesis. Students who do not write a thesis must complete a capstone project and pass a comprehensive examination administered by the Mathematics Graduate Committee.

All students must pass a core program consisting of the following courses: MATH 500, 530, 531, 533, 565, and 566.

In addition to the core, all students must pass a minimum of 9 credit hours from the list of approved electives.

#### OBJECTIVES OF THE PROGRAM

This program is designed for persons interested in teaching post-secondary mathematics, pursuing further studies in mathematics or mathematics education, or working in industry.

Objectives:

- ✓ To offer intensive study in the areas of Classical and Applied Mathematics.
- ✓ To provide insights into the structure of mathematics and its importance.
- ✓ To strengthen the background of those persons who are interested in pursuing further studies in mathematics or mathematics education.
- ✓ To provide a stimulating environment for graduate students in mathematics.
- ✓ To provide a sufficiently flexible program that allows students

to engage in meaningful mathematical experiences which will enhance their career opportunities.

## THE PROGRAM OF STUDIES

### Core Courses (18 Credits)

MATH 500	Foundations of Math and of Physics ...	3 Credits
MATH 530	Abstract Algebra I.....	3 Credits
MATH 531	Abstract Algebra II.....	3 Credits
MATH 533	Computational Linear Algebra I .....	3 Credits
MATH 565	Real Analysis I.....	3 Credits
MATH 566	Real Analysis II.....	3 Credits

### Approved Electives (9 Credits)

MATH 432	Elementary Number Theory .....	3 Credits
MATH 492	Introduction to Point-Set Topology.....	3 Credits
MATH 501	History of Mathematics .....	3 Credits
MATH 534	Computational Linear Algebra II.....	3 Credits
MATH 551	Higher Geometry.....	3 Credits
MATH 571, 572	Numerical Analysis .....	3, 3 Credits
MATH 577, 578	Operational Mathematics I, II .....	3, 3 Credits
MATH 585, 586	Computers, Statistics and Probability.....	3, 3 Credits
MATH 579	Discrete Math.....	3 Credits
MATH 595	Topics in Applied Mathematics .....	3 Credits

### Thesis or Capstone Project (6 Credits)

MATH 599	Special Project/Capstone .....	3-6 Credits
MATH 600	Master's Thesis.....	3-6 Credits
MATH 601	Comprehensive.....	0 Credit

## TOTAL 33 CREDITS

### COURSES CARRYING GRADUATE CREDIT (400 LEVEL).

The following courses carry graduate credit and may be used to service various students needing additional mathematics experiences. It should be noted that only Mathematics 432 and 492 are on the list of approved electives for purposes of meeting the 33-hour Graduate Mathematics program requirements.

Please consult the undergraduate Catalog for these course descriptions.

MATH: 432, 433, 435, 445, 446, 450, 462, 463, 470, 472, 474, 475, 470, 480, 481, 482, 483, 492, 499.

### GRADUATE MATHEMATICS COURSES (500 LEVEL)

**MATH 500. FOUNDATIONS OF MATHEMATICS AND PHYSICS (Credit, 3 hours).** Introduces students to basic techniques of writing proofs and acquaints them with some fundamental ideas that are used throughout mathematics. Topics include: sets, cardinality and ordinality, first and second order predicate calculus, mathematical induction, relations, and orders. Foundations of Physics include formal logic, mathematics (i.e., theory), and experimentation, with the latter two in a symbiotic relation.

Theoretical or experimental research is enabled by a universally adopted scientific method that rests on ethical conduct. Explorations of these foundations utilize the fundamental forces of nature, matter-energy, space-time, the Standard Model of particles, and the sought unification between Quantum Mechanics and General Relativity. Outstanding unknowns to be noted include black holes, dark matter, and dark energy. (Prerequisite: Consent of the instructor.)

### MATH 501. HISTORY OF MATHEMATICS (Credit, 3 hours).

This course traces the historical evolution of key concepts in the following stands: number and numeration, number theory, computation, algebra, geometry, calculus, and probability and statistics. The emphasis is placed on the processes used by mathematicians, the nature of mathematics, and the modern K-14 curriculum as the culmination of the evolution of the concepts in history.

### MATH 530. ABSTRACT ALGEBRA I (Credit, 3 hours).

Topics covered in this course include equivalence relations, mappings, integers, and groups. Emphasis is placed on properties and examples.

### MATH 531. ABSTRACT ALGEBRA II (Credit, 3 hours).

Topics covered in this course include rings, integral domains, fields, polynomials over a field, and factorization. Emphasis is placed on properties and examples. (Prerequisite: Math 530.)

### MATH 533-534. COMPUTATIONAL LINEAR ALGEBRA I, II (Credit, 6 hours).

Complex numbers, theory of equations, linear equations, matrices, determinants, vector spaces, linear transformations, matrix norms, the Gram-Schmidt orthogonalization process, orthogonal polynomials, eigenvalues and eigenvectors, diagonalization, quadratic forms, positive definite matrices, non-negative matrices, applications: least square problems, differential equations; numerical linear algebra: Gaussian elimination, pivoting strategies, iterative methods, and the eigenvalue problem are covered. (Prerequisite: Math 364.)

### MATH 551. HIGHER GEOMETRY (Credit, 3 hours).

This course covers absolute geometry, elements of Euclidean, hyperbolic, and projective geometries. Also includes a discussion of the consistency of Euclid's fifth postulate. (Prerequisite: Consent of instructor.)

### MATH 565-566. REAL ANALYSIS I, II (Credit, 6 hours).

Axioms of the real numbers, supremum, infimum, upper limits, lower limits, open and closed sets in  $\mathbb{R}^p$ , compactness, the Bolzano-Weierstrass and Heine-Borel Theorems, the Cantor Theorem, uniform continuity, uniform convergence, Riemann and Riemann-Stieltjes integration, and metric spaces.

### MATH 571-572. NUMERICAL ANALYSIS I, II (Credit, 6 hours).

Some general principles of numerical calculation, estimating accuracy in numerical calculations, numerical uses of series, approximation of functions, numerical integration, differentiation and interpretation, differential equations, Fourier methods, optimization, Monte Carlo method, and stimulation. (Prerequisite: Math 370.)

### MATH 577-578. OPERATIONAL MATHEMATICS I, II (Credit, 3 hours).

The Laplace transformation, elementary applications, problems in partial differential equations, functions of a complex variable, the inversion integral, problems in heat conduction,



problems in mechanical vibrations, generalized Fourier series, general integral transfers, Fourier transforms on the half line, Hankel transforms, Legendre, and other integral transforms. (Prerequisite: Math 370.)

**MATH 579. TOPICS IN DISCRETE MATHEMATICAL MODULES (Credit, 3 hours).** Offers serious method of attacking discrete mathematical problems with emphasis on enumerative analysis, graph theory, modern and Boolean algebra. Develops both practical and theoretical topics systematically. (Prerequisite: Math 364.)

**MATH 580. MATHEMATICS AND CRITICAL THINKING (Credit, 3 hours).** Various paradigms for the study of critical thinking and problem solving will be covered. Mathematical processes such as abstraction, generalization, modeling and proof will be included together with an analysis of the development of a deductive system.

**MATH 581. PRINCIPLES OF ALGEBRA II (Credit, 3 hours).** An investigation of the algebraic structure of arithmetic (in the Real Number System) in which proofs of some elementary properties are covered. Other abstract algebraic structures such as groups, rings, and fields, and issues of transitional mathematics (from arithmetic to algebra), are also discussed.

**MATH 582. PRINCIPLES OF GEOMETRY II (Credit, 3 hours).** Basic experiences include an understanding of the techniques used to validate and organize geometry into a deductive system. The Hilbert-Birkoff axioms will augment Euclid's geometry. Non-Euclidian geometries will follow from a study of the parallel postulate controversy. Transformational and projective geometries will be briefly discussed.

**MATH 583. PRINCIPLES OF ANALYSIS II (Credit, 3 hours).** An introduction to differential and integral calculus. A review of algebraic and numerous experiences which are prerequisites for success in calculus will be included. The use of graphing calculators will be integrated into the course.

**MATH 584. PRINCIPLES OF LINEAR ALGEBRA (Credit, 3 hours).** Certain experiences are designed to relate vector spaces, systems of equations, matrices, determinants, and transformations from  $R_m$  to  $R_n$ . Other experiences that show how conic sections are related to quadratic forms.

**MATH 585-586. COMPUTERS, STATISTICS AND PROBABILITY. (Credit, 3 hours).** This sequence provides experiences in statistics, probability, computer literacy, and the use of descriptive and inferential statistics and computers in mathematics education research and in the classroom.

**MATH 595. TOPICS IN APPLIED MATHEMATICS (Credit, 1-6 hours).** Formerly MATH 598. Selected topics in mathematics from probability and statistics, differential equations, linear programming, mathematical modeling, modern algebra, applied algebra, graph theory, number theory, or analysis. Credit up to six hours for the course under different headings. Course used only for an extension of topics beyond the scope of the courses already in the catalog. Courses offered under this number will appear on the transcripts under a heading, which specifies the topic to be discussed.

**MATH 596. GRADUATE SEMINAR (Credit, 3 hours).** Selected (Credit, 3-6 hours). This course may include experiences in any one of the following: number theory, algebra, geometry, calculus, analysis, linear algebra, theory of problem-solving, curriculum materials to supplement the teaching and learning of mathematics in grades 5-12 (in line with NCTM Standards). Mathematics 597 is to be used by the students as a primer to a research project. Credit for this course under different headings.

**MATH 599. SPECIAL PROJECT/CAPSTONE PROJECT (Credit, 3-6 hours).** Research under the guidance of a graduate faculty member. Designed for a Master's student who elects the non-thesis program option and whose project proposal has been approved and registered. The student selects a faculty advisor to guide and oversee the work done on the special project. Weekly meetings with the faculty advisor are required. A final project report and successful completion of MATH 601 are required for graduation. Six hours of credit are awarded upon completion of an approved project.

**MATH 600. RESEARCH FOR MASTER'S THESIS (Credit, 3-6 hours).** Research under the guidance of a graduate faculty member. Designed for a Master's student who elects the thesis program option and whose thesis proposal has been approved and registered. The student selects chair and research advisors to serve on the Thesis Committee. Satisfactory oral defense of topic is required for graduation. Six hours of credit are awarded upon completion of an approved thesis.

**MATH 601. COMPREHENSIVE (Credit, 0 hours).** Must be completed and passed by all persons applying for the M. S. degree who do not write a thesis.

\* Non-Thesis option

\*\* Thesis option



## College of Sciences and Engineering

### Master of Mathematics and Physics (MS/MAPH)

#### *Physics Concentration*

**Program Leader: Dr. Laurence L. Henry**

Room 157 William James Hall

Baton Rouge, LA 70813

Phone: (225) 771-4130

Fax: (225) 771-2310

E-mail: [Laurence\\_henry@subr.edu](mailto:Laurence_henry@subr.edu)

The Department of Mathematics and Physics offers a Master of Science degree in Mathematics and Physics, with a concentration in Physics. The curriculum of study must be chosen by the student and approved by the graduate committee of the Physics program. The emphasis of study will be reflected by the student's choice of courses in his program of study.

**Dr. Laurence L. Henry**

Chair and Professor

Department of Mathematics and Physics

Phone: (225) 771-4490

**Contact person: Dr. Diola Bagayoko**

M.S. Program Director

Email: [diola\\_bagayoko@subr.edu](mailto:diola_bagayoko@subr.edu)

Phone: (225) 771-2730

Fax: (225) 771-4341

#### FACULTY

*Professors:*

**Bagayoko, Diola**

Ph.D., Physics

Louisiana State University

**Bobba, Rambabu**

Ph.D., Physics

Indian Institute of Technology

**Henry, Laurence L.**

Ph.D., Physics

Wayne State University

**Lam, Pui-Man**

Ph.D., Physics

Washington University

**McGuire, Stephen C.**

Ph.D., Physics

Cornell University

**Reese, Terrence**

Ph.D., Physics

Texas Christian University

**Zhao, G. L.**

Ph.D., Physics

Iowa State University

*Assistant Professor:*

**Stewart, Anthony**

Ph.D., Physics

University of Florida

Professor Emeritus:

**Yang, Chia Hsiung**

Ph.D., Physics

Washington University

#### PROGRAM OF STUDY

##### Introduction

The Bachelor's degree program in Physics was established in the fall of 1959. The Master of Science (MS) degree program in physics started in the fall of 1996. The MS program provides high quality educational and research opportunities for students interested in high demand fields of physics, applied physics, materials science, and related disciplines. In the fall of 2012, The Board of Regents consolidated the BS degrees in Mathematics and in Physics and the MS degrees in Mathematics and in Physics. The resulting degrees are the BS and MS degrees in

"Mathematics and Physics," with a concentration in Mathematics and in "Mathematics and Physics," with a concentration in Physics.

##### Objectives

The objectives of the graduate program in Physics are to:

- ✓ Prepare students for hi-tech fields
- ✓ Prepare students for doctoral studies in physics and related fields
- ✓ Extend the physics training/research skills of high school teachers and of other professionals

#### GRADUATE DEGREES OFFERED

##### M.S. Master of Science, with a physics concentration

The basic core graduate courses are taken by each student: Classical Mechanics, Mathematical Physics I, Classical Electrodynamics I, Quantum Mechanics, and Statistical Mechanics – plus MATH 500 and MATH 533 (I). At least one semester of Graduate Seminar is required. Students who have a particular interest in pursuing a Ph.D. degree will take the second courses in most of these sequences. While applied physics students will take the first courses of the above sequences, they will concentrate on topical areas relevant to their programs in subsequent courses. Another set of reform guided, technology imbued, and concept intensive core courses is available for teachers and professionals who want to earn a master's degree in Physics.

Illustrative areas of ongoing research are: Condensed Matter Physics (Theory and Experiments); Magnetic Materials; Computational Physics; Atomic, Molecular, and Nuclear Physics and Applications; Surface Physics; Materials Science; High-Temperature Superconductivity; Astronomy; High Energy and Astro-Particle Physics; and Teaching and Learning Physics.

#### ADMISSIONS REQUIREMENTS

Admission to the Southern University Graduate School

- ✓ A Bachelor's Degree in physics or related areas with at least 27 credit hours of physics courses or equivalent
- ✓ Three letters of recommendation; one of which must be from a faculty advisor

- ✓ A brief essay describing the applicant's career plans
- ✓ TOEFL scores (for International Students only)

### DEGREE/GRADUATION REQUIREMENTS

- ✓ Completion of a program of at least 24 hours of graduate coursework [include all core courses] with an overall "B" average or better and six hours of thesis research
- ✓ A passing score on the Physics Concentration Comprehensive Examination (PCCE)
- ✓ Successful defense of a thesis

In satisfying the above requirements, the student must adhere to the residency criteria of the Graduate School.

### PLAN OF STUDY

Master of Science in Mathematics and Physics (with a Physics Concentration)

(Please see the website for updates)Core Courses

PHYS 500	Classical Mechanics .....	3 credits
PHYS 510	Mathematical Physics I.....	3 credits
PHYS 520	Quantum Mechanics I .....	3 credits
PHYS 530	Statistical Mechanics.....	3 credits
PHYS 540	Classical Electrodynamics I .....	3 credits
PHYS 590	Graduate Seminar .....	1 credit
MATH 500	Foundations of Math. & Phys. ....	3 credits
MATH 533	Computational Linear Algebra I .....	3 credits

### Electives

PHYS 505	Solid State Physics I.....	3 credits
PHYS 525	Solid State Physics II .....	3 credits
PHYS 560	Quantum Optics.....	3 credits
PHYS 580	Particle Physics .....	3 credits
PHYS 515	Experimental Methods .....	3 credits
PHYS 526	Solid State Physics III.....	3 credits
PHYS 535	Defects in Solids .....	3 credits
PHYS 541	Classical Electrodynamics II.....	3 credits
PHYS 542	Computational Physics.....	3 credits
PHYS 543	Physics and Technology of Thin Films.....	3 credits
PHYS 544	X-ray Physics and Synchrotron Radiation Techniques .....	3 credits
PHYS 545	Electronics.....	3 credits
PHYS 550	Spectroscopy .....	3 credits
PHYS 555	Coherent Optics and Holography.....	3 credits
PHYS 565	Optical and Electronic Materials .....	3 credits
PHYS 570	Electro-optics.....	3 credits

### Research

PHYS 589	Special Topics	3 credits
PHYS 598	Graduate Research	1-6 credits
PHYS 600	Thesis	1-6 credits

### COURSE DESCRIPTION

(Please see website for details; <http://www.phys.subr.edu>)

**PHYS 500. CLASSICAL MECHANICS (Credit, 3 hours).** Survey of basic concepts; variational derivation of the Lagrange equations;

central forces, conservation laws, symmetry, and applications; kinematics and dynamics of rigid body motion; survey of special relativity; Hamilton equations; canonical transformations; Hamilton-Jacobi theory, small oscillations.

**PHYS 505. SOLID STATE PHYSICS I (Credit, 3 hours).** Survey of Solid State physics; basic concepts and applications; Bravais lattices, free electron systems, lattice vibrations, electronic energy bands, band structure computational methods; basic properties: thermal, electrical, and magnetic properties; magnetic resonance, masers; semiconductors; defects, dislocations; BCS theory of superconductivity, survey of high T<sub>c</sub> superconductors.

**PHYS 510. MATHEMATICAL PHYSICS I (Credit, 3 hours).** Mathematical methods for Physics; review of advanced vector calculus; review of key matrix algebra methods; calculus of residues, conformal mapping, Fourier and Laplace transformations; ordinary differential equations, the Frobenius series method and Fuchs theorem; complete solutions of key partial differential equations of physics, Poisson, Laplace, Bessel, Legendre, Laguerre, diffusion, and other equations; separation of variables and integral transform methods for some of the preceding solutions; special and orthogonal polynomials; variational and numerical solutions of differential equations

**PHYS 515. EXPERIMENTAL METHODS (Credit, 3 hours).** Experimental methods in solid-state physics. Selection of modern techniques for investigating properties of solids; basic instrumentation in condensed matter experiments, photoemission and inverse photoemission.

**PHYS 516. EDUCATIONAL REFORMS AND GLOBAL LEARNING AND OBSERVATIONS TO BENEFIT THE ENVIRONMENT (GLOBE) (Credit, 3 hours).** Lecture (1/3rd of the time) and Laboratory (2/3rd of the time). Interactive survey of key, contemporary, educational reforms with emphasis on the cognitive and behavioral basis of learning and applications in the classroom. The power law of human performance and its extension are applied to the process of teaching and particularly of learning. The execution of GLOBE protocols and related learning activities constitutes the laboratory component of the course. At a minimum, the atmosphere, hydrology, soil, and land cover/biology protocols will be practiced.

**PHYS 520. QUANTUM MECHANICS I (Credit, 3 hours).** Foundations, principles, and applications of quantum mechanics; origin of quantum mechanics; Schrodinger equations for one dimensional potentials; general formulation of wave mechanics and statistical interpretations, WKB and other approximations; the hydrogen atom; rotational spin, and addition of angular momenta, transitions and their probabilities.

**PHYS 525. SOLID STATE PHYSICS II (Credit, 3 hours).** Advanced theory of the condensed matter; computational methods for the quantitative description of the electronic structures of molecules, clusters, and solids; LCAO, APW, and other methods; applications of the Monte Carlo method; the dielectric functions and the electrical, optical, and magnetic properties of solids; magnetic moment formation in solids; quantum theory of superconductivity; the BCS theory and extensions. (Prerequisite: PHYS 505 and 520)

**PHYS 526. SOLID STATE PHYSICS III (Credit, 3 hours; Lecture and Laboratory).** Characterization of Magnetic Materials. Magnetic ordering and models of magnetic systems:

paramagnetism, ferromagnetism, diamagnetism, antiferromagnetism, ferrimagnetism and spin-glass; laboratory techniques: magnetization measurements using a SQUID magnetometer, and electron transport (current-voltage) measurements; determination of important parameters, which are related to the various kinds of magnetic ordering, from laboratory data. This course is intended for graduate students who have completed the first course in solid-state physics. (Prerequisites: PHYS 472 or PHYS 505, or equivalents)

**PHYS 530. STATISTICAL MECHANICS (Credit, 3 hours).** Laws of thermodynamics and applications; kinetic theory; Boltzmann transport equation and Boltzmann H theorem; principles of statistical mechanics, statistical origin of thermodynamic quantities; canonical and grand canonical ensembles; quantum statistical mechanics; the ideal Fermi gas, and the ideal Bose-Einstein gas. (Prerequisite: PHYS 500)

**PHYS 535. DEFECTS IN SOLIDS (Credit, 3 hours).** Introduction to the physical properties of crystals, experimental methods in color center research, trapped electron color centers in alkali halides, trapped hole centers in alkali halides, coloration and impurities in alkali halides, coloration and mechanical properties of alkali halides, mechanism of production of color centers, photoelectric emission and ultraviolet absorption spectra of the alkali halides, coloration of colloidal centers, color centers in materials other than alkali halides, applications of color center. (Prerequisite: PHYS 505 and 520)

**PHYS 540. CLASSICAL ELECTRODYNAMICS I (Credit, 3 hours).** Microscopic and macroscopic Maxwell's equations, interpretation of the terms, related laws and wave equations with or without source terms; applications to electrostatics with the full treatment of specific problems; multipole expansion; magnetostatics; plane waves, reflection; wave guides and cavities; emission of electromagnetic radiation. (Prerequisite: PHYS 510)

**PHYS 541. CLASSICAL ELECTRODYNAMICS II (Credit, 3 hours).** Relativistic electrodynamics; review of the special theory of relativity and applications to Maxwell's equations; relativistic Lagrangian and Hamiltonian for a charged particle; collisions of charged particles; emissions of radiation, the Cherenkov radiation; relativistic Bremsstrahlung, radiative Beta processes; multipole fields, radiation emission, scattering and radiation damping processes; numerical representations of solutions to selected problems. (Prerequisite: PHYS 540)

**PHYS 542. COMPUTATIONAL PHYSICS (Credit, 3 hours; Lecture & Computational Laboratory).** Numerical methods and their applications in physics; numerical solutions of selected differential equations; Monte Carlo method and applications to modeling; molecular dynamics and other simulations; electronic structure calculations for multi-electron systems. Prerequisite: Mathematical Physics I, PHYS 510, and a working knowledge of FORTRAN or C++, or an equivalent programming language.

**PHYS 543. PHYSICS AND TECHNOLOGY OF THIN FILMS (Credit, 3 hrs; Lecture 2 hrs, Lab. 2 hours).** Preparation methods; thickness measurements and monitoring; analytical techniques of characterization, growth and structure of films; mechanical properties of films; electrical and magneto transport properties of films; magnetism of films; thin film devices, fabrication of thin film microelectronic devices.

**PHYS 544. X-RAY PHYSICS AND SYNCHROTRON**

**RADIATION TECHNIQUES (Credit, 3 hours; Lecture 2 hours, Lab. 2 hrs).** X-rays and early atomic physics, synchrotron radiation; physics of hot and dense plasmas; X-Ray lasers, brightness and coherence of X-Ray sources; scattering and refractive index of X-ray wavelengths; diffractive optics and zone plate microscopy; diffraction grating for monochromators and spectrometers; biological microscopy, reflective X-ray imaging, multilayer interference coatings; application of X-ray microprobes, chemical applications of synchrotron radiation; components of wiggler and other beam lines

**PHYS 545. ELECTRONICS (Credit, 3 hours; Lecture 2 hours, Lab 3 hours).** Introduction to integrated circuits, transistors, operational amplifiers and analog computer. Introduction to number systems and codes. Boolean algebra, logic circuits, TTLNIM, CANAC, FASTBUS, and VME logic. Arithmetic circuits, binary adders and subtractors. Sequential logic, flip-flop circuit and triggering. Solving logic equations using multiplexers, encoders and decoders, and parity checkers. Analog to digital conversion, data processing and collections.

**PHYS 550. SPECTROSCOPY (Credit, 3 hours).** Review of classical electrodynamics, review of quantum mechanics, fine structure of hydrogenic atoms, two-electron atoms. Zeeman and Paschen-Back effect, diatomic molecules, coupling of vibration and rotation, electronic spectra and diatomic molecules, spontaneous emission of radiation, selection rules for electric dipole transitions, measurement of radioactive life times of atoms and molecules, forbidden transitions and metastable atoms, width and shape of spectral lines, absorption and stimulated emission of radiation. (Prerequisites: PHYS 520 and 540)

**PHYS 555. COHERENT OPTICS AND HOLOGRAPHY (Credit, 3 hours).** Introduction to modern optics, mathematical methods of modern optics, image formation in non-coherent light, coherence characteristics of light, image formation in coherent light, theoretical and experimental foundations of optical holography, Fourier transforms, convolutions, correlations, spectral analysis and theory of distributions, coherent and incoherent imaging. (Prerequisite: PHYS 540)

**PHYS 560. QUANTUM OPTICS (Credit, 3 hours).** Foundation of quantum optics; optical Bloch equation; maser system and laser system; quantum field theory of light; coherent effects; applications to solid state physics; current research topics in optics. (Prerequisites: PHYS 510 and 520)

**PHYS 565. OPTICAL AND ELECTRONIC MATERIALS (Credit, 3 hours).** Development of new materials for photonic devices; improvement of existing optical materials; role of glasses in optical sciences; optical properties such as refractive index, the transmittance, and dispersion; optical quality; thermal, mechanical, and chemical properties; crystalline optical materials for polarization control and for laser applications; rare earth doped glasses; oxide fiber fabrication; halide glasses; chalcogenide glasses; crystalline fibers; crystalline fiber for UV, VIS, and IR applications; III-V semiconductors for photonic integrated circuits and devices such as LED, laser diodes and photodiodes, advances with a selection of experimental InP based PICs. (Prerequisite: PHYS 505)

**PHYS 570. ELECTRO-OPTICS (Credit, 3 hours).** Introduction to electro-optics, optical radiation, geometric and physical optics.

Lasers and electro-optical modulation, optical radiation detection, analysis methods for electro-optical systems, detector arrays and imaging tubes, electro-optical sensors, optical signal processing,

optical path characteristics, optical communications.  
(Prerequisites: modern optics and PHYS 540)

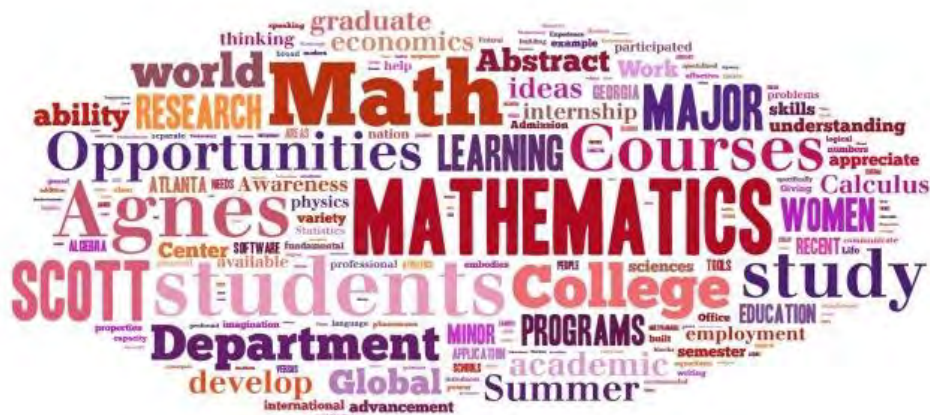
**PHYS 580. PARTICLE PHYSICS (Credit, 3 hours).** Description of elementary particles and their interactions; particle accelerators, colliding-beam machines, particle detection; invariance and conservation laws spin, parity, isospin, strangeness; static quark model, quark spin and color. SU (3); weak interaction and beta decay, neutrino interaction, nonconservation of parity, Weinberg-Salam theory; quark-quark interaction, QCD, deep inelastic scattering; unification of electroweak with other interactions, grand unification, supersymmetry. (Prerequisite: PHYS 520)

**PHYS 589. SPECIAL TOPICS (Credit, 3 hours).** Independent studies under the supervision of a graduate faculty member. The standards for the content, supervision, and outcome assessment are provided by the graduate program

**PHYS 598. GRADUATE RESEARCH (Credit, 1-6 hours).** Formal, documented research to be conducted under the supervision of a graduate faculty member. Topics are selected by the affected graduate student and faculty supervisor(s) taking into account the standards of M.S. level research, the interest of the student, and the recent developments in knowledge, skills, and technology bases. An abstract and a listing of projected tasks have to be submitted to the M.S. program. A final report also has to be submitted to the M.S. Program Director.

**PHYS 600. THESIS (Credit, 1-6 hours).** Six hours credit will be given only upon completion of an acceptable thesis.





# PhD in Science/Mathematics Education (SMED)

## College of Sciences and Engineering

Dean: Dr. Patrick Carriere

### Ph.D. in Science /Mathematics Education (PHD/SMED)

#### Program Chair: Dr. Albertha Lawson

S.U. Post Office Box 9256  
P. B. S. Pinchback Hall- Suite 321  
Baton Rouge, LA 70813-9256  
Phone: (225) 771-2085; Fax: (225) 771-3250

#### GRADUATE FACULTY Professors:

##### Guillory, Christopher

Ph.D., Educational Research  
Louisiana State University

##### Jones, Nastassia

Ph.D. Molecular Biology, Microbiology and Biochemistry  
Southern Illinois University

##### Mellion-William, Francesca

Ph.D. Curriculum and Instruction  
Louisiana State University

##### Lawson, Albertha

Ph.D. Higher Education Research and Administration  
University of New Orleans

##### Bagayoko, Diola \*

Ph.D., Physics  
Louisiana State University

##### Cunningham, Katrina\*

Ph.D. Math  
St. Louis University

##### Craig, Susannah\*

Ph.D. Curriculum and Instruction  
Louisiana Board of Regents

##### Diack, Moustapha\*

Ph.D., Analytical Chemistry  
University of Metz/Franc

##### Mensah Patrick\*

PhD Engineering Science  
Louisiana State University

##### Munoz, Humberto\*

PH.D in Numerical optimization methods  
University of Louisiana at Lafayette.

##### Jackson, Lynette\*

Ph.D. Science and Mathematics Education  
Southern University and A&M College

##### Okwan, Phyllis\*

Ph.D. Science and Mathematics Education  
Southern University and A&M College

##### Salam, Md Abdus\*

Ph.D. Electrical and Electronics Engineering  
Fuki University, Japan

##### Samkutty, Pushpa\*

PhD in Dairy Microbiology from  
Louisiana State University, Ph.D. Public Administration  
from Tennessee State

##### Vincent Finley, Rachel \*

PH.D. Computational Mathematics,  
Rice University

##### Young, Luria\*

Ph.D., Educational Leadership and Research  
Louisiana State University

*\* Graduate faculty who serve this program from the Departments of Biology, Chemistry, Computer & Information Science, Curriculum and Instruction, Engineering, Mathematics, Physics and Louisiana Board of Regents*

### Graduate Degree Offered

#### Ph.D. In Science/Mathematics Education

##### Overview

Southern University and A&M College Science and Mathematics Education Doctoral (SMED) program is an interdisciplinary doctoral program designed for individuals who have completed a bachelor's or master's degree in mathematics, computer science, a natural science, or engineering. Students accepted in the program who have not completed the master's degree in one of the content areas will earn a M.S. degree or complete a master's equivalency in mathematics, a natural science, computer science or engineering during their course of study. This program is designed to develop research skills that will lead to improvements in teaching and learning in science, technology, engineering, and mathematics (STEM), in environments ranging from the primary to postsecondary levels; and preparing researchers for a changing and growing STEM economy.

This program prepares graduates for a wide variety of careers, including:

- ✓ University-level teaching and research in science or mathematics education
- ✓ Teaching in the content area at undergraduate or community colleges
- ✓ School district science/mathematics curriculum administration
- ✓ Program development and exhibit design at informal science sites
- ✓ Leadership in science or mathematics' education professional organizations
- ✓ Instructional program development in industry
- ✓ Scientific writing and/or software development for science/mathematics education
- ✓ Independent consulting

#### Science/Mathematics Education

Graduates of the Ph.D. program in Science/Mathematics Education are qualified to teach in colleges and universities but do not automatically qualify for K-12 teacher certification. Students lacking but wishing to secure K-12 certification must conform to additional

requirements. This will necessarily lengthen their program of study. The applicant should further note that employers in several of the career options may expect several years of prior successful teaching experience. Accordingly, it is essential that the applicant clearly describe his/her long-range goals in the initial application, so the Department can provide appropriate advisement and mentoring.

### ADMISSION REQUIREMENTS

In addition to the general requirements for admission to the Graduate School, the applicant must:

- ✓ Hold a minimum of a bachelor's degree in one of the following fields: mathematics, computer science, a natural science, engineering, or curriculum and instruction with a science or mathematics concentration.
- ✓ Provide a curriculum vitae and any written evidence of research potential (publications, research reports, master's thesis, etc.)
- ✓ Submit official transcripts from all schools attended
- ✓ Prior classroom teaching experience, or completion of a practicum of such experience during the program.
- ✓ Successful completion of a comprehensive examination for admission to doctoral candidacy
- ✓ Successful defense of proposed research
- ✓ Completion of 12 credits of directed dissertation research.
- ✓ Completion and successful oral defense of the dissertation

### PLAN OF STUDY

#### DOCTOR OF PHILOSOPHY (Ph.D.) IN SCIENCE/ MATHEMATICS EDUCATION Content Area (24 semester hours)

Master's Degree in Biology, Chemistry, Physics, Mathematics, or Computer Science

OR

24 credit hours of coursework numbered 500 or higher in one of the above disciplines

#### Foundations (6 semester hours)

SMED 702 Cognitive Foundations of  
Learning Science/Mathematics .....3 credits

AND

SMED 705 Foundations of Science/  
Mathematics Education.....3 credits

Submit TOEFL scores (for international students, as required by the Graduate School.

In addition, applicants are encouraged to schedule a personal interview through the Department of Science/Mathematics Education. (International students, and others for whom travel would be a hardship, may arrange a phone or e-mail interview.

### GRADUATION REQUIREMENTS

Following is the minimum graduation requirements. In all cases, the student must complete an individualized program of study, which must be filed and approved during the first semester of study.

A minimum of 24 credit hours of graduate coursework in the content field (master's equivalency)

A minimum of 36 credits of graduate coursework beyond the master's degree or equivalency and 60 credits beyond the bachelor's degree, exclusive of dissertation research

Completion of core courses specified by the department OR

SMED 710 History and Structure of  
Science and Mathematics.....3 credits

#### Research (15 semester hours)

SMED 739 Applied Statistics and Data Analysis.....3 credits

SMED 740 Quantitative Research in  
Science/ Mathematics Education.....3 credits

SMED 741 Qualitative Research in  
Science/ Mathematics Education.....3 credits

SMED 743 Science/Math Research design .....3 credits

Approved Research Elective .....3 credits

#### Curriculum (6 semester hours)

SMED 716 Science/Mathematics Curriculum  
(Secondary).....3 credits

AND

SMED 715 Science/Mathematics Curriculum  
(Elementary).....3 credits

OR

SMED 717 Science/Mathematics Curriculum (College) .....3 credits

Technology (3 semester hours)

SMED 720 Technology in  
Science/ Mathematics Education .....3 credits

#### Doctoral Seminar

**0 credit**

Required attendance at departmental seminars and relevant professional meetings.

#### Electives (9 semester hours)

Nine semester credit hours of graduate level courses taken while enrolled in the doctoral program, and approved by the Department

#### Dissertation (12 semester hours minimum)

SMED 799 Advanced Research ..... 3–15 credits

SMED 800 Dissertation Research ..... 3–15 credits

Minimum coursework requirements for the Ph.D. in Science/  
Mathematics Education:

60 credits beyond the bachelor's degree, exclusive of dissertation

36 credits beyond the master's degree, exclusive of dissertation



**COURSE DESCRIPTION**

**SMED 701. Developmental Psychology and Science/Mathematics Education (Credit, 3 hours).** An in-depth coverage of the fundamentals and recent developments in developmental psychology, and their implications for Science/Mathematics Education.

**SMED 702. COGNITIVE FOUNDATIONS OF LEARNING SCIENCE/MATHEMATICS (Credit, 3 hours).** An in-depth coverage of the fundamentals of cognitive psychology and recent developments in cognitive psychology, and implications for Science/Mathematics Education; the cognitive domain, memory and cognition, cognitive models of learning, applications to the design of computer/multimedia assisted delivery systems.

**705. FOUNDATIONS OF SCIENCE/ MATHEMATICS EDUCATION (Credit, 3 hours).** A graduate level survey of the history and basic foundations of educational paradigms in general, and those of science and mathematics education in particular; the evolution of modern theories of teaching and learning; and the various paradigms of research in Science/Mathematics Education.

**SMED 710. HISTORY AND STRUCTURE OF SCIENCE AND MATHEMATICS (Credit, 3 hours).** Basic history and philosophy of the applicable Science/Mathematics discipline; structure, sub-branches and their recent developments; implications of current topics in a discipline on the curriculum (content, delivery, feedback) at various levels of the educational pipeline; introductory survey of related trends in research on teaching and learning in the discipline.

**SMED 715. Science/Mathematics Curriculum (Elementary) (Credit, 3 hours).** A macroscopic and microscopic examination of elementary science and mathematics curriculum. General structure, strands, and themes; analysis of sample classroom activities, delivery methods and media; related assessment of learning outcomes; cognitive and behavioral bases for the general curriculum; contemporary trends for the elementary science/mathematics curriculum; concepts and process maps applied to the curriculum and to specific activities. The elementary level is covered as a part of a continuum.

**SMED 716. Science/Mathematics Curriculum (Secondary) (Credit, 3 hours).** A macroscopic and microscopic examination of secondary science and mathematics curriculum. General structure, strands, and themes; analysis of sample classroom activities, delivery methods and media; related assessment of learning outcomes; cognitive and behavioral bases for the general curriculum; contemporary trends for the secondary science/mathematics curriculum; concepts and process maps applied to the curriculum and to specific activities. The secondary level is covered as a part of a continuum.

**SMED 717. SCIENCE/MATHEMATICS CURRICULUM (College) (Credit, 3 hours).** A macroscopic and microscopic examination of college curriculum in the affected science/ mathematics disciplines; general structure, strands, and themes, and analysis of sample classroom activities, delivery methods and media, and related assessment of learning outcomes; cognitive and behavioral bases for the general curriculum; contemporary trends for the college science/mathematics curriculum; concepts and process maps applied to the curriculum and to specific activities. The college level is covered as a part of a continuum.

**SMED 720. Technology in Science/Mathematics Education (Credit, 3 hours).** A survey of current educational technologies and their integration into teaching, learning, assessment, and instructional materials development; specific use of selected technologies (computers, multimedia, telecourses, interactive systems);

identification of selected technologies; outcome assessments congruent with the technological integration into the content, delivery, feedback, and related research issues. This course, depending on a student's background, may require extensive supplemental work in thoroughly going through the delivery of instruction with selected technologies. Consultations with the instructor prior to enrollment are recommended. Basic computer literacy is mandatory.

**SMED 721. Design in Science/Mathematics Education: Instruction and Outcome Assessment (Credit, 3 hours).** This course focuses on the design of instruction (subject and skill content, organization, delivery methods, and related assessment of outcomes and effectiveness), taking into account, explicitly, the relevant cognitive and affective parameters and objectives; and the applications of concept and process mapping, for various grade levels. The integration of recent assessment techniques and of applicable technologies into the instructional delivery and assessment processes are an integral part of this course. Implications for research are explicitly addressed.

**SMED 722. Instructional Design and Multimedia Technology (Credit, 3 hours).** This course focuses on the use of interactive multimedia in teaching and learning and the development of multimedia learning objects for Science/Mathematics Education, targeting K-16 settings. It will provide students with a strong theoretical, experiential, and critical perspective of instructional design as it is applied in a variety of educational contexts and learning environments.

**SMED 725: Critical Thinking in the Sciences and Mathematics (Credit, 3 hrs.).** This course will address how critical thinking skills can be taught and acquired in the sciences and mathematics PK-16 classroom. Students will examine the type of thinking that takes place within a discipline, identify ways to raise questions using intellectual standards, evaluate knowledge through reasoning, and discuss the role of questions in thinking and learning. Current research on critical thinking in the sciences and mathematics will be studied.

**SMED 726. Evolution and Science Education (Credit, 3 hours).** This course is designed for students already knowledgeable about the theory of evolution. The course explores the history and philosophy of evolutionary thought, its impact on science and society, and particularly how the topic of 'biological evolution' is inculcated into the National Science Education Standards.

**SMED 732. Topics in Number Theory (Credit, 3 hours).** This course will briefly review fundamental concepts from Number Theory, with emphasis on intuition, proof, history, applications to modern algebra, discrete mathematics, coding, and the role of number theory in the school curriculum. Topics will include divisibility, the fundamental theorem of arithmetic, the Euclidean algorithm, congruence, number theoretic functions, Diophantine equations, systems of linear congruencies, topics in algebraic number theory, induction and well-ordering.

**SMED 735. Practicum in Mathematics Teaching at the Elementary, Secondary or College Levels (Credit, 3-6 hours).** This practicum is "taught" or more accurately, guided and supervised, by a team of faculty members, at least one of whom is a graduate education faculty member and one of whom is a mathematics graduate faculty member. (*Prerequisites: SMED 705 or equivalent, 715, or 716, and 721.*)

**SMED 736. Practicum in Science Teaching at the Elementary, Secondary or College Levels (Credit, 3-6 hours).** This practicum is taught, or more accurately, guided and supervised, by a team of faculty members, at least one of whom is a



graduate education faculty member and one of whom is a graduate faculty member in the affected science discipline. (*Prerequisites: SMED 705 or equivalent, 715, or 716, and 721.*)

**SMED 737. Practicum with emphasis on Writing for Publication, (Credit, 3-6 hours).** SMED 737 is designed for graduate students who have made significant progress in their degree programs and are thinking about larger, ongoing writing projects such as a prospectus; conference papers and presentations; and/or articles for publication. The course targets projects that are essential to a graduate student's success. While these projects are not part of the student's dissertation, they could possibly be used to enhance the dissertation experience.

**SMED 739. APPLIED STATISTICS (Credit, 3 hours).** This course is designed to promote conceptual understanding of advanced statistical procedures used in the educational and behavioral sciences, and to enhance the computational skills necessary to carry out these procedures. Both theoretical and practical issues will be addressed. Including statistical reasoning, statistical methods for computerized data analysis; understanding, evaluating and interpreting research findings in professional literature and the selection of appropriate statistical methods. (*Prerequisites: Math 586 or an equivalent statistics course, or by permission of the instructor.*)

**SMED 740. QUANTITATIVE RESEARCH IN SCIENCE/MATHEMATICS EDUCATION (Credit, 3 hours).** This course surveys the quantitative methods in Science/Mathematics Education research. Emphasis is placed on applications of basic statistical methods to the design and conduct of research. The validity of basic statistical inferences and related confidence levels are rigorously treated. Linear models and their implementation using the computer are operationally treated. (*Prerequisite: SMED 739*)

**SMED 741. QUALITATIVE RESEARCH IN SCIENCE/MATHEMATICS EDUCATION (Credit, 3 hours).** This course is designed to expose every graduate student to the qualitative dimensions of research in science/mathematics education. Limitations of the quantitative approaches in research on conceptual understanding and on the interplay of the cognitive and affective domains are initially discussed. This is followed by the fundamentals of qualitative research in science/mathematics education and the different and complementary natures of quantitative and qualitative approaches.

**SMED 743. Science/Mathematics Research Design (Credit, 3 hours).** The first half of this course is devoted to fundamentals of research design for qualitative and quantitative research. The second half of the course entails actual practicum in designing specific research projects. (*Prerequisites: SMED 740 and 741.*)

**SMED 750. Advanced Quantitative Methods in Science/ Mathematics Education Research (Credit, 3 hours).** Theories, models, and methods for the analysis of quantitative data; advanced experimental design and statistical inference; correlation and regression methods; factor analysis; survey of multivariate methods. Explicit applications to research in science/mathematics education. (*Prerequisites: SMED 740 and 741*)

**SMED 755. Advanced Qualitative Methods in Science/ Mathematics Education Research (Credit, 3 hours).** Intended mainly for students whose dissertation research entails significant qualitative research, this course explores in detail contemporary methods of qualitative research in science/mathematics education, with applications to realistic cases. (*Prerequisites: SMED 740 and 741.*)

**SMED 760: Informal Science Education (Credit, 3 hrs.).** The principles and practice of structuring and assessing science learning activities outside of the traditional classroom and formal curriculum. Included are analyses of the enrichment experiences available through science museums, zoos, planetaria, aquaria, nature trails, science fairs, television, science-related websites, youth groups, and summer camps. The challenges of accommodating individuals with special needs and a spectrum of personal interests and learning styles are addressed.

**SMED 770: SPECIALTOPICS IN SCIENCE/MATHEMATICS EDUCATION (Credit, 3 hours; may be repeated).** An in depth treatment of topics of timely interest in science and/or mathematics education. Specific topics will be announced in advance and will be described in a focused syllabus.

**SMED 780. Research in Mathematics Education (Credit, 3 hours).** This course includes a brief historical survey of educational research, with a focus on factors leading to the development of modern research in mathematics education. Topics include the factors affecting internal and external validity, the structure of research designs and methods considered appropriate for research in mathematics education, the factors affecting curricular and research activities in mathematics education prior to 1975, and a careful study of two documents from NCTM's Research Agenda: Effective Mathematical Teaching and Setting a Research Agenda.

**SMED 790: Independent Study in Science Education (Credit, 3 hours).** This course provides an opportunity for students to independently examine a topic of relevance under the direction of a faculty member. The student and faculty member meet prior to the beginning of the course to develop a contract describing the specific work to be done and the performance standards to be met. (*Prerequisite: only by permission of the SMED department.*)

**SMED 791: Independent Study in Mathematics Education (Credit, 3 hours).** This course provides an opportunity for students to independently examine a topic of relevance under the direction of a faculty member. The student and faculty member meet prior to the beginning of the course to develop a contract describing the specific work to be done and the performance standards to be met. (*Prerequisite: only by permission of the SMED department.*)

**SMED 799. ADVANCED RESEARCH. (Credit, 3–15 hours).** Research for doctoral students before admission to candidacy. Designed for students in the doctoral program who have successfully completed 80 percent of the doctoral level courses. Students will develop a proposal and focus on the scholarly investigation of a research and/or dissertation topic. Not open to students who have already been admitted conditionally.

**SMED 800. DISSERTATION RESEARCH (Variable credits, 3–15 hours; may be repeated).** Directed development of the written dissertation and preparation for the oral defense. (*Prerequisite SMED 799.*)

*Note: With departmental approval as part of the filed course of study, up to two courses taken outside the department may be used to fulfill the requirements for the Ph.D. degree in Science/ Mathematics Education.*



## Facilities and Programs



## FACILITIES AND PROGRAMS

### Mission Statement and University Commitment to Research

"The University is committed to a broad program of research, both basic and applied, and creative work to stimulate the faculty and students in quest for knowledge and to aid society in resolving its scientific, technological, socioeconomic, and cultural problems".

As Southern University and A&M College moves to achieve Doctoral University II Status (Doctoral Research University Intensive), it is more committed to diligently promote, enhance, and sustain an infrastructure (internal research and development support structures) to facilitate the successful integration of research, instruction, public service, economic development, and related activities (creative activities, strategic initiatives, technology transfer, partnerships). Further, it makes research and creative activity components of instruments used in evaluating faculty for promotion, tenure, and merit raises.

### Institutional Research Vision (Goal) Statement

The vision for research at Southern University and A&M College is to build and sustain an infrastructure that encourages greater participation by faculty in sponsored and elective research, creative pursuits, and related activities. The ultimate measurable outcomes of achieving this vision are that such research efforts would result in an increased number of publications in refereed journals; greater and more significant opportunities for its graduate and undergraduate students to participate in creative pursuits, research, and other scholarly activities with their professors; and building nationally reputable and competitive academic department, colleges, schools, and centers.

### Physical Facilities

The Southern University and A&M College campus is one of the most beautiful campuses in the South. Lake Kerner flows through the center of the campus and the Mississippi River forms its western boundary.

Since 1960, buildings containing more than 2,000,000 square feet of floor area have been constructed. These buildings include the F. G. Clark Activity Center, J. S. Clark Administration Building, E. N. Mayberry Dining Hall, Music Recital Hall, Band Building, John B. Cade Library, School of Nursing Building, Health Research Wing of Lee Hall, Rodney G. Higgins Hall for Social Science, Augustus C. Blanks Hall for Special Education and Psychology, Baranco-Hill Student Health Center, and the College of Engineering Building, P.B.S. Pinchback.

The Smith-Brown Memorial Union, a 66,200-square feet multipurpose building which serves as a major center for extracurricular activities, is known as the campus "living room." The recently renovated Union features a food court with popular food outlets; barber and beauty shops; television rooms; 12 bowling lanes; a game room for billiards, video games, and quiet games; an art gallery; a browsing room; a ballroom, meeting and conference rooms; and a U.S. Post Office. The building also houses offices for student organizations.

The F. G. Clark Activity Center has accommodations for theater, athletic events, conferences, convocations, and recreational activities. The building houses the Athletic Department.

The J. S. Clark Administration Building houses the offices of the Southern University Board of Supervisors, the Southern

University System officers, the Chancellor of the Baton Rouge campus, and other campus administrative officers.

E. N. Mayberry Dining Hall contains the Magnolia Room, the Cypress Room, and the Oak Room, which is for student dining. Dunn Cafeteria is located in the Freshman Complex.

### OFFICE OF RESEARCH AND STRATEGIC INITIATIVES (ORSI)

Location: 730 Harding Blvd. Baton Rouge, LA 70807 8:00 a.m. to 5:00 p.m. Monday through Friday Phone: (225) 771-3890 Fax: (225) 771-5231

The Vice Chancellor for Research serves as head of the Office of Research and Strategic Initiatives (ORSI) and has the authority to recommend research policy and procedure on a campus-wide basis. The ORSI provides administrative management and supervision in planning, coordinating, and implementing all aspects of research and development programs, institutes, and centers at the University. This office is the channel through which the University interacts with the external research sector to share its aspirations, achievements and expertise. It offers services to faculty, staff, and administration in identifying funding opportunities and in facilitating their efforts in securing and managing sponsored and elective research and creative activities. It also promotes technology transfer; faculty development activities; strengthening curricula, courses, and laboratories through incorporation of advances in research-based teaching and learning; and partnerships and collaboration with other academic institutions, industrial laboratories, and federally supported research centers to ensure research experiences that complement undergraduate and graduate studies. This office also gives administrative oversight management to those sponsored programs (strategic initiatives) on the campus that deal primarily with research experiences for undergraduates and other mentoring activities. The Office of Research and Strategic Initiatives (ORSI) was established in August 1996.

### Office of Sponsored Programs (OSP)

Location: 730 Harding Blvd. Baton Rouge, LA 70807 8:00 a.m. to 5:00 p.m. Monday through Friday Phone: (225) 771-2890 Fax: (225) 771-5231

Under the administrative oversight of the Office of Research and Strategic Initiatives (ORSI), a director supervises the Office of Sponsored Programs (OSP). The OSP is the central unit responsible for serving faculty, administrators, and community, by coordinating pre and post-award functions related to sponsored and elective programs. This service includes coordinating the acquisition, monitoring, modification, and close-out of grants, contracts, and cooperative agreements. This office, within the policy of ORSI, has the authority to decide the manner in which pre-award and post-award activities are conducted campus-wide. It supports the efforts of the Office of Research by assisting faculty and others in obtaining external funds and by serving as an additional link between the University and public and private funding sources. The OSP was established in 1987.

### RESEARCH CENTERS and INSTITUTE CAPITAL SMALL BUSINESS DEVELOPMENT CENTER (Est. 1986)

The Capitol Small Business Development Center (Capital SBDC) is a public service unit of the College of Business at Southern University at Baton Rouge. The Capital SBDC is one of twelve (12) university sub-centers and is affiliated with the Louisiana Small Business Development Consortium (LSBC). The purpose of the Capital SBDC is to provide basic counseling services, training programs and seminars, and

information assistance to potential and existing small businesses in a nine (9) parish area of South Louisiana. The counseling services include, but are not limited to: business transfer, minority business development, productivity improvement analysis, economic and financial analysis, and business management acumen. The workshops and seminars, offered by the center, cover a myriad of business owners and managers. In addition to the counseling and training services, the Capital SBDC maintains a resource library that contains business publications and general readings on starting and managing a small business.

### **CREST CENTER FOR NEXT GENERATION MULTIFUNCTIONAL COMPOSITES (Est. 2009)**

The Centers of Research Excellence in Science and Technology (CREST) program supports the enhancement of research capabilities of minority-serving institutions through the establishment of centers that effectively integrate education and research. CREST promotes the development of new knowledge, enhancements of the research productivity of individual faculty, and an expanded presence of students historically underrepresented in science, technology, engineering, and mathematics disciplines. With CREST program support, Southern University and A&M College in Baton Rouge will continue development of its Next Generation Multifunctional Composites Center in collaboration with Louisiana State University, Baton Rouge Community College and industrial partners. This work will have a significant impact on the design and synthesis of polymer based materials for biological and technical applications. The increased use of composites in applications, such as automotive, naval, aerospace, energy generation, and transportation vehicles, where light weight, damage tolerance, and multifunctionality are major factors, highlights the need for materials research. The Center will promote advancements in polymer matrix composite materials synthesis and characterization, modeling and simulation, and manufacturing for structural and environmental applications. Center research is divided into three subprojects. Subproject 1 will contribute to the understanding of 1) Design, synthesis, and characterization of high stiffness shape memory thermoset polymer with dynamic covalent bond exchange network for intrinsic crack healing; 2) Modeling and manufacturing of polymeric artificial muscles made of chemically cross-linked two-way shape memory polymers; and 3) Healing efficiency evaluation of composite panels. In Subproject 2, knowledge of a new and highly energy efficient method for large scale synthesis of carbon nanotubes will be created. The new synthesis method can be used for mass production of carbon nanotubes at much lower production cost than production by prevailing methods such as chemical vapor deposition. In Subproject 3, the focus is on creating knowledge via computational material design for the study of additive manufacturing of smart conductive polymer nanocomposites with multi-scale porosity. The development of cutting edge interdisciplinary research based on next generation composites and educational activities through this Center will provide students traditionally underrepresented in the STEM disciplines with meaningful research experiences at a readily accessible advanced research facility and a pathway to Ph.D. programs. The Center will provide education and research integration and exposure to students from K-16 to the doctoral level, and to the general public, including persons with disabilities. Overall, each year the Center will directly support 3 postdoctoral fellows, 3 Ph.D. students, 9 Master's students, and 18 undergraduate students. The CREST Center for Next generation multifunctional composites is funded by the National Science.

### **CENTER FOR INTERNATIONAL DEVELOPMENT PROGRAMS (Est. 1982)**

The mission of the Center for International Development Programs is to provide a system wide programmatic mechanism for promoting, initiating, and implementing international programs, consistent with Southern University's interest and capabilities as an autonomous entity, or in concert with other institutions or agencies. Ongoing projects include the Tertiary Education Linkage Project with Vista University in South Africa (capability building, staff development, public administration, history/sociology and mathematics), University of Zulu Land in South Africa Linkage (Institutional Building-Agricultural), and Democracy in Africa (Rule of Law, Constitutional reform, legal systems).

Involvement in international development and research for over thirty years with operations totaling over \$70 million; a leading center in applied research and technology transfer to small-scale farmers; technical assistance in institution building; a variety of short-term training courses; and several national and international linkages for faculty and student exchange.

### **HEALTH RESEARCH CENTER (Est. 1960)**

The Health Research Center (HRC) is designed to advance biomedical knowledge through scientific research. Activities of the center are designed to strengthen, enrich, and promote the academic programs of participating departments of the University through scholarly and productive research efforts, seminars, presentations, symposia and community services. The HRC was established at Southern University, Baton Rouge through a matching grant from the Health Research Facilities of the Division of Research Resources of the National Institutes of Health (NIH). This particular NIH grant covers the cost of construction and equipping health research centers at public and non-public institutions that have demonstrated the capability to perform health research or research in the basic sciences related to health. The major purpose of the center is to conduct basic and applied research in biomedical sciences and to promote and encourage productive research. The center also assists faculty members in securing financial support for research, provides facilities for the same, and provides research training in the basic biomedical sciences for both graduate and undergraduate students. The Health Research Center is University-wide in its origin and interdepartmental in its roles and functions. Its faculty members are research investigators drawn from different research-oriented departments of the University with special emphasis on biomedical and/or related research projects. The Health Research Center also sponsors seminars and workshops on subjects of special interest to the University community and general public.

### **CENTER FOR RURAL and SMALL BUSINESS DEVELOPMENT**

The Center for Rural and Small Business Development operates as the result of a contractual agreement between Southern University and A&M College and the U.S. Department of Agriculture Rural Business-Cooperative Service. The center provides management and technical assistance to persons in the parishes of East (northern section) and West Baton Rouge, East and West Feliciana, Point Coupee, St. Helena and Iberville. The scope of work at the center, in general, is to provide business counseling and assistance to rural businesses and persons interested in expanding and/or starting a business venture. Specifically, the center provides assistance in areas such as: personnel, management, fiscal management, loan packaging, procurement, certification, construction, bonding, marketing, public relations, etc. Additionally, BISNet (Business Information System Network) is an electronic telecommunications initiative that allows rural areas access to the Internet and is jointly sponsored by Rural Development and Southern University. BISNet allows community leaders to share



successful business development concepts. It also links leaders to a network of corporate, government, and private entities. Visit the website at: <http://bisnet.cmps.subr.edu>.

### **CENTER FOR SOCIAL RESEARCH (Est. 1969)**

The Center for Social Research was established to conduct interdisciplinary research and to implement programs that address needs of African Americans. Studies are conducted on experiences and conditions of Blacks in the Southern region with emphasis on Blacks in the State of Louisiana. The goals of the center include: conducting research on the attitudes and behaviors of African Americans; developing and implementing interdisciplinary applied research programs; targeting social problems in minority and disadvantaged communities; providing a mechanism by which students and faculty have increased participation in developing strategies and implementing programs which address the problems and concerns of the community. The center's research focuses on social, economic and demographic analysis, as well as, comparative studies of political behavior and attitudes of African Americans. Research areas include studies on drug abuse, gang activity, teenage pregnancy, welfare dependency, housing conditions, crime and delinquency, school dropout and literacy concerns, problems of the elderly and health related issues.

### **NATIONAL PLANT DATA CENTER (Est. 1994)**

The National Plant Data Center (NPDC) was established by the United States Department of Agriculture, Natural Resources Conservation Service (NRCS). The NPDC focuses resources on acquiring and integrating standard plant data required for field office activities and automated conservation tools.

The data support natural resources information exchange throughout the NRCS and across Federal and State agencies. The center develops and maintains the PLANTS Web site <[plants.usda.gov](http://plants.usda.gov)>, which serves to disseminate much of the developed information. The center ensures efficient development of plant data and non-duplication of effort. The center maintains a staff at the University of California-Davis and the Montana Plant Materials Center-Bridger. Automation support is provided by the NRCS-Information Technology Center, Ft. Collins, Colorado. The mission of the NPDC is to provide leadership for the design, prioritization, collection, quality control, development, management, access, dissemination, interpretation, and marketing of plant information for the agency. The center also participates in national and international projects to develop, standardize, and disseminate plant information. One project is the International Organization for Plant Information's Global Plant Checklist <[iopi.csu.edu.au/iopi/](http://iopi.csu.edu.au/iopi/)>. Some agencies and organizations involved in partnering projects include the following: Alcorn State University, Biota of North America Program, Bishop Museum-Honolulu, Botanischer Garten and Botanisches Museum-Berlin, Integrated Taxonomic Information System <[www.itis.usda.gov](http://www.itis.usda.gov)>, Santa Barbara Botanic Garden, Smithsonian Institution, Southern University, University of Guam, University of Texas, University of Wyoming, USDA-Animal and Plant Health Inspection Service, USDA- Forest Service, and Utah State University.

### **RESEARCH INSTITUTE OF PURE AND APPLIED SCIENCES**

The Southern University Research Institute of Pure and Applied Sciences (SURIPAS) was recently approved. SURIPAS mostly coordinates the University's research efforts in applied areas and is a cooperative effort with Louisiana State University in the spirit of the Consent Decree. The SURIPAS program, however, also has collaborative links with the University of New Orleans and Florida State University. Scholars of proven research capabilities will be associated in

increasing numbers with SURIPAS. They will initiate projects, provide lectures and short courses, engender group discussions, and host meetings, to further promote an atmosphere conducive to quality research at Southern University and other participating institutions. Current project areas are Magnetic Materials, Molecular Electronic Structure and Spectroscopy, Optogalvanic Analysis, and Nuclear Research. The primary source of funding is the U.S. Department of Energy.

### **SMALL FARM FAMILY RESOURCE DEVELOPMENT CENTER (Est. 1986)**

The mission of the Small Farm Family Resource Development Center is to improve the status of its clientele by providing educational and technical assistance aimed at increasing the productivity and profitability of Louisiana's small scale farms and addressing related clientele needs. A major part of the Center's thrust involves the evaluation and development of ecologically and economically sound sustainable agricultural production systems. Current and future research efforts include an array of agricultural commodities such as vegetables, small fruits, herbs, small animals and the economics potential of value-added processing. The center's programs are multi-disciplinary with collaboration among plant and soil scientists, economists and other social scientists, nutritionists, food scientists and animal scientists. The center works closely with the Cooperative Extension Program (CEP) in developing the outreach educational and technical assistance infrastructure for program delivery. CEP's outreach efforts are organized and intensified to reflect the strengths of the center and the College of Agricultural, Family and Consumer Sciences (CAFCS) and to address the needs of the identified clientele. Some of the research projects include the use of prostaglandins to improve the reproductive efficiency in rabbits; the use of the Boer goat genome to enhance the growth and carcass characteristics of goats; the evaluation of cultural practices for herb (dill, basil, etc.) production in the southeast; kenaf and crayfish waste as potential protein supplements for livestock feed; obesity in African-American women; drip irrigation and soil fertility; photoperiod effect on millions; and the development of sustainable vegetable production systems.

## **Strategic Initiatives**

### **Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP)**

The Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP) Senior Alliance is a comprehensive, statewide, coordinated program aimed at substantially increasing the number and quality of minority students enrolling in and completing baccalaureate degrees in science, technology, engineering, and mathematics (STEM) and subsequently going on to pursue graduate studies in STEM disciplines. This Alliance is composed of twelve (12) public and private college and University partners and the Louisiana Universities Marine Consortium (LUMCON), a research facility. These institutions include Dillard University, Grambling State University, Louisiana State University, McNeese State University, Nunez Community College, Southern University and A&M College, Southern University at New Orleans, Southern University at Shreveport, Tulane University, University of New Orleans, University of Southwestern Louisiana, and Xavier University. LS-LAMP utilizes the US Presidential Award Winning Ten-Strand Systemic Mentoring Model for achieving its goals. This model has been adopted by all partner campuses. It forms the foundation of the Strategic Implementation Plan that is utilized by all partner campuses of the alliance.

The annual minority degree production target is to achieve 900

minority STEM degrees per year by the end of the year 2020. The goal to achieve the transition of at least 25% of these graduates to graduate school, and beyond, by the year 2020 remains unchanged. The achievement of these numeric objectives is to be accompanied by the enhancement of the quality of these graduates through a continued building of the STEM infrastructure of LS-LAMP member institutions and the continued institutionalization of LS-LAMP operations. The Louisiana Alliance is led by Southern University and A&M College with the active input and advice of an array of collaborating public and private sector entities including the LAMP Governing Board, chaired by the Commissioner of Higher Education.

### Timbuktu Academy

Established in 1990-91, the purpose of the Timbuktu Academy is to contribute significantly to the closing or avoiding of academic achievement gaps between groups of students, at the pre-college and college level, while making tangible contributions to the enhancement of national human resources in science, technology, engineering, and mathematics (STEM). *Our scholars are immersed in the US Presidential Award Winning Ten-Strand Systemic Mentoring model of the Timbuktu Academy throughout the year (including summer).* This model ensures that their full time job is studying, enriching themselves professionally, and conducting research. It enables their total academic, professional, and social integrations as per the prevailing student retention models. In addition to the financial support, the scientific advisement, the research participation, the communication skills enhancement, and the monitoring, our systemic mentoring also entails guidance to graduate schools or the high technology work place.

The Academy's objectives are to produce well-trained science, technology, engineering and mathematics (STEM) BS degree holders, a large percentage of whom are expected to pursue the Ph.D. degree; it enrolled 50 or more scholars per year, from 1990 to 2004 and 15-30 per year from 2005 to present; to produce and to disseminate, through presentations and publications, new knowledge through research performed by Academy personnel and undergraduate scholars; and to reach out to pre-college and college communities with fail-safe approaches to teaching, mentoring, and learning (TML).

### RESEARCH LABORATORIES (College of Sciences and Engineering)

The College of Engineering has six computer research laboratories. Computer equipment includes a medium-size mainframe computer system. The college has four microcomputer labs installed within the complex. Two of these labs are already linked by a local area network. The entire college will be linked via a fiber optics dual ring FDDI network with the mainframe computer serving as an outside link to national networks such as Internet, Suranet, MuSpin, etc. The present computer facilities provide UNIX, CMS and McGill University System for Interactive Computing (MUSIC) operating system environments. Languages such as FORTRAN, PASCAL, C, and ADA are all available for student usage. Additionally, other design tools such as MATHCAD, AUTOCAD, ORCAD, and Micrologic are currently available.

Collaboration with the Engineering Education Coalition, sponsored by the National Science Foundation, has enhanced capability to the College of Engineering through additional computers, such as Sun, IBM R/S 6000, and Apple Workstations.

The Department of Civil Engineering has equipment to perform most fundamental laboratory experiments in environmental and water resources engineering. Equipment also is available for experiments in fluid flow in open channels and closed conduits. The department's environmental laboratories support research and instructions in water and wastewater analysis, solid and hazardous waste, air quality and bioremediation. Civil Engineering has a comprehensive wet chemistry laboratory with gas chromatographs, mass spectrophotometers and atomic absorption spectrophotometers. Faculty and students have access to a full complement of mainframe, workstation, and microcomputer hardware and software for theoretical research in environmental and water resources engineering. A fully equipped geo-technical laboratory also supports work performed by faculty and students.

The Department of Electrical Engineering currently operates five laboratories. A telecommunication lab contains modular communications components from which students currently build and study IS & FM transmitters and receivers and data modems. Oscilloscopes, spectrum analyzers, and other test equipment provides the capability to measure performance and signal characteristics. The lab also houses Analog/Digital conversion hardware and a set of workstations running Digital Signal Processing software for modeling and study of digital filtering techniques. Solid-state Devices and VLSI Laboratory houses equipment such as water probing station and transistor parametric tester. They are used for characterization and testing of devices and integrated circuits. A High Performance Computing Multi-Media Laboratory is used extensively in government and industry supported research of high-speed data interfaces and protocols.

The Department of Biology has several laboratories that are equipped with state-of-the-art instrumentation and animal quarters for health and biological science research. A new two-story building with five additional research labs was recently built for biological and biochemical research. A transmission electron microscope and a biotechnology lab are used in educational and research activities.

### John B. Cade Library

[www.subr.edu/library](http://www.subr.edu/library)

The John B. Cade Library has over one million volumes with four floors and a seating capacity of 1,400. The Library subscribes to over 2,380 electronic journals and has an extensive documents and video collection. Special collections include the Camille Shade African American Collection, Archives, and Music Listening. Over 100 databases are available from the library's website. More than 200 computers are available throughout the Library for staff and patron use. The Library is also a member of the Louisiana Online University Information System (LOUIS). The Library Learning Resource Center and the new Information Technology Center are the two most heavily used areas of the Library which provide word processing, desktop publishing, spread sheet application software, Internet access, multimedia graphic workstations/scanners, color laser, B/W laser printers and access to other electronic resources and information. For technology innovations and especially the Electronic Reserve Library, the Library received the 1999 Imaging Solution of the Year Award in Document Imaging and Electronic Image Management, the 1999 Process Innovation Award in Education and a commendation from the Southern Association of Colleges and Schools (SACS). The Board of Regents has recognized the Library for its innovations and access to technology during their accreditation visits. The Library has successfully obtained nearly a million dollars' worth of grants for technology improvements.

The John B. Cade Library offers a host of services to the Southern University community. The library is the focal point of the university where one can go to obtain various types of information ranging from reference services, access service, electronic resources, online databases, and the use of the World Wide Web/Internet. The list of services includes:

#### **ONLINE**

**CATALOG SIRSI** – is an integrated online library system. Patrons are able to locate materials (books, journals, videos, etc.) owned by the Library and other libraries in the state.

**ELECTRONIC JOURNALS AND BOOKS** -The Library has journals and books online. The journals provide full-text as well as the feature to purchase articles.

#### **INSTRUCTIONAL GUIDES**

Resource Guides – LibGuides have been compiled by library liaisons for each discipline. These guides contain primary library and reference resources that are pertinent for each specific discipline, and are available on the library's website.

**INTERLIBRARY LOAN (ILL) ILLiad** – ILL is a means to obtain materials that the library does not have in the collection for graduate students and faculty. Users can access the system remotely via the Internet.

**LALINC (Louisiana Academic Library Information Consortium)** - is a service that allows graduate students to check-out books not owned by John B. Cade Library from other Louisiana university libraries.

**Electronic Theses and Dissertations (ETDs)** - Southern University and A&M College theses and dissertations, 2009-Present, are available through ProQuest Theses and Dissertations Database.

**Apple iPads, Amazon Kindles, and laptops** – are available for check-out at the 1st floor ASK HERE DESK. You will need a current Southern University ID Card for check-out. For more information on checking-out electronic devices please feel free to contact the ASK HERE DESK at (225)771-2841.

***Individual and group study rooms are available for students to use.***





## GRADUATE FACULTY

### Criteria for Faculty Appointments

#### Criteria for Appointment to Levels I and II

The graduate faculty includes only those members of the Southern University faculty appointed by the Dean of the Graduate School, by authorization of the Chancellor of the Baton Rouge campus, and upon the approval of the Graduate Council. Members of the faculty who hold the rank of assistant professor or above at Southern University- Baton Rouge may qualify for appointment to the graduate faculty upon the submission of an application with appropriate documentation of credentials and scholarly accomplishments attached. All applicants must meet the required established criteria in order to receive appointment in either category.

Faculty may receive appointment in two categories:

**Graduate Studies Faculty Level I** – eligible to serve as a member on theses and/or dissertation supervisory committees and direct (chair) master's theses.

**Graduate Studies Faculty Level II** – eligible to serve and direct (chair) master's theses and doctoral dissertations.

### Maintenance of Graduate Faculty Status

Appointment to the graduate faculty may be made provisional or permanent. Provisional appointment is normally given to non-tenured faculty with the rank of Assistant Professor. Provisional appointment is for a maximum period of two years and requires a review of scholarly activity at the end of the provisional period by the Graduate Council for approval of permanent status.

Faculty granted permanent graduate faculty status must submit to the graduate council updated curriculum vita every five years. After review of the vita, the Council may revoke graduate faculty status if it is determined that there is insufficient scholarly activity.

\* Faculty holding Graduate Studies Faculty I status, with an active record of research and scholarship, may petition the Graduate Council for permission to chair dissertation committees. The petition must include the following: current curriculum vita detailing research activity; endorsement letter from department's GSF Level II faculty; endorsement of Department Chair and College Dean. The Graduate Council, upon review of the petition, may approve the petition for a specific dissertation ONLY, or a temporary period until such time as the faculty member qualifies for GSF Level II status. No faculty shall teach graduate courses without receiving a graduate faculty status appointment.

### Adjunct Graduate Faculty

Adjunct graduate status may be granted to individuals hired to teach graduate courses on a temporary and/or part-time basis and faculty from other accredited institutions seeking to serve on supervisory committees for master's theses and/or doctoral dissertations. Faculty from other institutions must submit evidence of graduate faculty status at their home institution.

Individuals hired by academic units as adjunct faculty to teach graduate courses must submit their credentials to the Graduate Council for approval prior to the start of the semester in which they will be instructing.



## GRAGUATE FACULTY LIST



**Abdollahi, Kamran K.**, 1992, Professor  
**Urban Forestry**

B.S. The Pennsylvania State University  
M.S. The Pennsylvania State University  
Ph.D. S. F. Austin State University

**Amini, Abolfazi M.**, 1994, Professor  
**Electronic Engineering Technology**

B.S. Southern University  
M.S. University of New Orleans  
Ph.D. Tulane University

**Anadi, Allison**, 2004, Associate Professor  
**Public Policy–Criminal Justice**

B.S. Eastern Michigan University  
M.S. Eastern Michigan University  
Ph.D. Michigan State University

**Anderson, Donald Wayne, Sr.**, 1997, Associate Professor

**Educational Theory, Policy and Practice**  
Ed.D. Texas A&M University

**Andrews, Donald, R.**, 1974, Professor  
**College of Business**

Ph.D. Texas A&M University

**Atkins-Ball, Deidra**, 2004, Assistant Professor  
**Biological Sciences**

B.S. Louisiana State University  
M.S. Louisiana State University  
Ph.D. Meharry Medical College



**Bagayoko, Diola**, 1984, Professor  
**Physics**

B.S. Ecole Normale Supérieure de Bamako  
M.S. Lehigh University  
Ph.D. Louisiana State University

**Bai, Shuju**, 2003, Assistant Professor  
**Computer Science**

B.S. Beijing Forestry University  
M.S. Academy of Science  
M.S. Southern University  
Ph.D. Purdue University

**Belu, Radian**, 2001, Associate Professor  
**Electrical Engineering**

Ph.D. Polytechnic University, Romania  
Ph.D. University of Western Ontario, Canada

**Braima, Mahmoud**, 1997, Professor  
**Mass Communication**

B.A. King Saud University, Saudi Arabia  
M.A. Murray State University  
Ph.D. Southern Illinois University

**Brown, Sandra Chaisson**, 1995, Professor  
**School of Nursing**

B.S.N. University of Southwestern Louisiana  
M.N. Louisiana State University  
D.N.S. Louisiana State University  
Post-Doctoral, University of Tennessee, Memphis



**Carriere, Patrick**, 1998, Professor  
**College of Sciences and Engineering**

B.S. Faulte des Sciences Appliquees  
M.S. Texas A&M University  
Ph.D. Texas A&M University

**Chappell, Christopher**, 2012, Assistant Professor  
**Urban Forestry**

B.S. Southern University  
M.S. Southern University  
Ph.D. Southern University

**Chin, Kit L.**, 1976, Professor  
**Plant & Soil Sciences**

Ph.D. Louisiana State University

**Christian, Ollie G.**, 1994, Professor  
**Sociology**

M.S. Louisiana State University  
M.A. Louisiana State University  
Ph.D. Louisiana State University

**Clark, Deborah L.**, Associate Professor  
**Mathematics**

B.A. Grambling College  
M.S. Oklahoma State University  
Ph.D. Southern University and A&M College

**Comminey, Shawn C.**, 1990, Professor  
**History**

B.A. Southern University  
M.A. Southern University  
Ph.D. Florida State University

**Craig, Susannah F.**, 2007, Associate Professor  
**Mathematics and Science Education**

B.A. Louisiana State University  
M.A. Louisiana State University  
Ph.D. Louisiana State University

**Crosby, Karen**, 2000, Professor  
**Mechanical Engineering**  
 B.S. Southern University  
 M.S. Louisiana State University  
 Ph.D. Louisiana State University

**Cunningham, Katrina**, 1992, Assistant Professor  
**Mathematics**  
 B.S. Louisiana State University  
 M.A. University of Georgia,  
 Ph.D. Saint Louis University

## D

**D'Auvergne, Oswald**, 1994, Professor  
**Biological Sciences**  
 B. S. Southern University  
 M. P. H. University of California  
 M. S. University of Michigan

**Davidson, Roxanne**, 2000, Associate Professor  
**Counseling and Educational Leadership**  
 B.S. University of New Orleans  
 M.A. Xavier University of Louisiana  
 Ph.D. Southern Illinois University

**Dawan, Fareed**, 2015, Assistant Professor  
**Mechanical Engineering**  
 B.S. Albany State University  
 M.S. Southern Illinois University  
 Ph.D. Southern Illinois University

**Dawkins, Russell**, 1999, Professor  
**Criminal Justice**  
 B. S. Rutgers University  
 M. S. University of Southern California,  
 Ph. D. University of Maryland

**Diack, Moustapha**, 1995, Professor  
**SMED**  
 M. S. University Charleroi  
 M. S. University of Nancy  
 Ph. D. University of Metz

## E

**Ejigiri, Damien D.**, 1987, Professor  
**Nelson Mandela College of Government and Social Sciences**  
 B. A. George Washington University  
 MURP Virginia Polytechnic Institute  
 Ph. D. Texas A&M University

**Enwefa, Regina**, 2005, Professor  
**Speech-Language Pathology**

B. S. Grambling State University,  
 M. A. University of Illinois Urbana-Champaign  
 Ph. D. Howard University

**Enwefa, Stephen C.**, 2006, Professor  
**Speech-Language Pathology**  
 B. S. Grambling State University  
 M. A. University of Illinois Urbana-Champaign  
 Ph. D. Howard University

**Esedo, Kingsley**, 1990, Professor  
**Political Science**  
 B. A. University of Massachusetts  
 M. A. Northern University of Boston  
 Ph. D. Boston University

## F

**Fitzgerald-Dejean, Donna M.**, 2008, Associate Professor  
**Speech-Language Pathology**  
 B.S. Louisiana State University  
 M.A. Louisiana State University  
 Ph.D. Louisiana State University

**Fomby, Betty**, 1996, Associate Professor  
**Graduate Nursing**  
 BSN University of Maryland  
 MPH John Hopkins University  
 MSN Northwest State University  
 Ph. D. Texas Women's University

**Fuller, Lorraine**, 2003, Professor  
**Mass Communication**  
 B. S. Southern Illinois University  
 M. S. Southern Illinois University  
 Ph. D. Southern Illinois University

## G

**Ghebreiyessus, Yemane**, 1991, Professor  
**Urban Forestry**  
 Ph. D. University of Missouri

**Ghose, Chanda**, 1995, Associate Professor  
 B. A. University of Delhi  
 M. A. Jersey City State College  
 Ph. D. Southern University

**Gebrelul, Sebhatu**, 1984, Professor  
**Agricultural Science**  
 B.S. University of Ethiopia  
 M.S. Utah State University  
 Ph.D. Utah State University

**Gray, Wesley**, 1997, Professor  
**Environmental Toxicology**

Ph. D University of Maryland

**Guillory, Christopher**, 2016, Associate Professor  
**SMED**

B.S. University of Louisiana at Lafayette  
M.S. Louisiana State University  
Ph.D. Louisiana State University

**Gwee, Nigel**, 2004, Professor  
**Computer Science**

Mus. B. University of Western Australia  
M. S. Louisiana State University  
Ph. D Louisiana State University

## H

**Henderson, Charlotte**, 1987, Assistant University  
Librarian

**Library**

B.S., M.S. Howard University,  
M.L.I.S. Louisiana State University,  
Ed.D. Nova Southeastern University

**Henry, Laurence L.**, 1995, Professor  
**Physics**

B. S. Andrews University  
M.S. Northern Illinois University  
Ph. D Wayne State University

**Henson, James F.**, 1978, Senior Research Scientist  
B.S. University of Missouri  
M.S. North Dakota State University  
Ph.D. North Dakota State University

**Hernandez, Don J.**, 2010 Assistant Professor  
**History**

B.A. Southern University  
M.A. Southern University  
J.D. Thurgood Marshall School of Law  
Ph.D. Louisiana State University

**Hill, Jacqueline**, 1994, Associate Professor  
**School of Nursing**

BSN Southern University  
MSN Southern University  
Ph.D. Louisiana State University

**Hines, Revathi**, 1998, Professor  
**Political Science**

B. S. Bombay University, India  
M.P.A Southern University  
Ph. D Howard University

**Huang, Chun Ling**, 1997, Professor  
**Mechanical Engineering**

B. S. Chung Yuan University  
M. S. Chung Yuan University  
Ph. D. University of Alabama

## I

**Ibekwe, Samuel**, 1991, Professor  
**Mechanical Engineering**

B. S. University of Nigeria  
M. S. South Dakota School of Mines  
Ph. D. South Dakota School of Mines

## J

**Jackson, Wanda F.**, 2000, Associate Professor  
**History**

B. A. Grambling State University  
M. A. Bowling Green State University  
Ph. D University of Kentucky

**Jackson-Osagie, Emily**, 2018, Assistant Professor  
**Curriculum & Instruction**

BS Louisiana State University  
MS Louisiana State University  
Ph.D. Southern University

**Jana, Amitava**, 1987, Professor  
**Mechanical Engineering**

B. S. Calcutta University  
M. S. Calcutta University  
M. S. New Jersey Institute of Technology  
Ph. D New Jersey Institute of Technology

**Jaros, Stephen J.**, 1995, Professor  
**Marketing and Management**

B. S. University of South Florida  
M. B. A. University of South Florida  
Ph. D. University of South Florida

**Javier, Walfredo**, 2000, Professor  
**Mathematics**

B. S. University of Philippines, Philippines  
M. S. University of Philippines, Philippines  
Ph. D. Bowling Green State University

**Jerro Dwayne**, 2002, Professor  
**Mechanical Engineering**

B. S. Southern University  
Ph. D Louisiana State University

**Johnson-Ward, Alice**, 1995, Associate Professor  
**Biological Sciences**

B. S. Alabama A&M University  
Ph. D. Iowa State University

**Johnson, Andra**, 2002, Associate Professor  
**Urban Forest Management**

B. S. Southern University  
M. S. Pennsylvania State University,  
Ph. D. Pennsylvania State University

**Johnson, Melanie**, 2006, Assistant Professor  
**Political Science**

B.S. Southern University  
M.S. Southern University  
Ph.D. Louisiana State University

**Jones, Kathryn C.**, 2006, Assistant Professor  
**Recreation Therapy**

B. S. Southern University  
M. S. Southern University  
Ph. D Capella University

**Jones, Nastassia**, 2018, Associate Professor  
**SMED**

B.S. Albany State University  
M.S. Southern Illinois University  
Ph.D. Southern Illinois University

## K

**Kambhampati, Murty S.**, 1988, Professor  
**Environmental Toxicology**

B.S. Andhra University, India  
M.S. Andra University, India  
Ph.D. Andra University, India  
Ph.D. Jackson State University

**Kandara, Osman**, 2004, Associate Professor  
**Computer Science**

B. S. Marmara University, Turkey  
M. S. Louisiana State University  
Ph. D. Louisiana State University

**Khosravi Ebrahim**, 1997, Professor  
**Computer Science**

Ph. D. Louisiana State University

**Kourouma, Matheiu**, 2006, Associate Professor  
**Computer Science**

B. E. University of Conakry  
M. S University of Louisiana  
Ph. D. University of Louisiana

**Kundu, Madan M.**, 1984, Professor  
**Rehabilitation**

B. S. University of Calcutta,  
M. A. Michigan State University  
Ph. D. Michigan State University

## L

**Lacy, Fred**, 2002, Professor

**Electrical Engineering**

B. S. E. E. Howard University  
M. S. E. John Hopkins University  
Ph. D. Howard University

**Lam, Pui-Man**, 1992, Professor

**Physics**

Ph. D Washington University

**Landor, Jarrett**, 2009, Associate Professor  
**Educational Leadership**

B.S. Southern University  
M.P.A. Southern University  
Ph.D. University of Southern Mississippi

**Larson, James**, 2005, Professor

**Public Administration**

B.A Colgate University  
M. A. Southern Methodist University  
Ph.D. Southern Illinois University

**Lewnau, Elaine Bremer**, 1985, Professor

**Speech-Language Pathology**

B. S. Southern University  
M. A. Columbia University  
Ph. D Columbia University

**Lukongo, O. Enumbe**, 201, Assistant Prof.

**Agricultural Economics**

B.A. University of Kinsasha  
M.A. William College  
Ph.D. Mississippi State University

**Luo, Jiecal**, 2001, Professor

**Electrical Engineering**

B. S. Tongji University of China  
M. S Huangzhong University of Science and Technology of China,  
Ph. D. University of Minnesota

## M

**Majlesein, Hamid**, 1992, Professor

**Electrical Engineering**

B.S. Southern University  
M.S. Louisiana Tech University  
D. Eng. Louisiana Tech University

**Marshal, Renita**, 2007, Professor

**Agricultural Sciences**

B.S. Southern University  
M.S. University of Missouri  
D.V.M. Tuskegee

**Mbarika, Victor**, 2004, Professor

**E-Business**



B. S. University of Michigan  
Ph. D. University of Wisconsin-Madison

**McGee, Bernestine**, 1979, Professor  
**Family and Consumer Sciences**

B.S. Southern University  
M.S. University of Iowa  
Ph.D. University of Iowa

**McGuire, Stephen**, 1999, Professor  
**Physics**

B.S. Southern University  
M.S. University of Rochester  
Ph.D. Cornell University

**Mellion Patin, Dawn**, 1995, Assistant professor  
**Agricultural Science/ Urban Forestry**

B.A. Southern University  
M. Ed. Southern University  
MBA Jones International University  
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