

## College of Arts and Sciences

### ADMINISTRATIVE OFFICER

Gerard Rambally, *Dean*

### ADMINISTRATIVE STAFF

Anil Kumar, *Associate Dean*

### INSTRUCTIONAL ORGANIZATION

The College of Arts and Sciences offers graduate programs leading to the Master's degree in the areas of Biology, Chemistry, English, Mathematics, and Sociology. Students admitted to the graduate programs as degree candidates in the College of Arts and Sciences must follow a degree program as outlined by the specific department. A degree plan will be designed according to the student's academic background, personal needs and interests.

<b>Department</b>	<b>Program</b>	<b>Degree Offered</b>
<b><i>Biology</i></b>	Biology	M.S.
	Environmental Toxicology	M.S.
<b><i>Chemistry</i></b>	Chemistry	M.S.
<b><i>Languages and Communications</i></b>	English	M.A.
<b><i>Mathematics</i></b>	Mathematics	M.S.
<b><i>Division of Social Work, Behavioral and Political Science</i></b>	Sociology	M.A.

Graduate coursework in biology, chemistry, English, and mathematics may also be applied to a master's degree program in education with a concentration in these areas. Students seeking this option should apply for admission to graduate study in the College of Education.

### ADMISSION REQUIREMENTS

The student seeking admission to the graduate program is required to:

1. Submit a formal application for admission to the Graduate School. See Admissions Section for deadline dates and requirements.
2. Applicants admitted to the university Graduate School must also be admitted by the college or department in which the student plans to pursue a degree. Students should consult the catalog section covering the specific discipline for departmental requirements for admission.

## **Department of Biology**

### **ADMINISTRATIVE OFFICER**

George E. Brown, *Department Head, Microbiology*

### **FACULTY**

Lee E. Henderson, *Anatomy and Physiology*

Harriette Howard-Lee, *Molecular Biology*

Alphonso Keaton, *Physiology*

Edward W. Martin, *Embryology*

Gloria Regisford, *Reproductive Physiology*

Seab A. Smith, *Botany*

Halcyon Watkins, *Anatomy and Physiology*

### **PURPOSE AND GOALS**

The graduate program in Biology is designed to provide training at the master's degree level for students who wish to pursue the doctorate; teach biology in high schools, junior, community and liberal arts colleges; or seek employment in various fields of biology, which include research, and aspects of applied biology.

Graduate study provides students with an opportunity to develop their knowledge and creativity in biology to the maximum of their capabilities.

### **ADMISSION REQUIREMENTS**

A student entering graduate study in biology must present a minimum of 24 semester hours in undergraduate biology, which include courses in General Biology, Zoology, and Botany. In addition to the minimum biology course requirement, at least eight semester credit hours in inorganic chemistry and eight semester credit hours in organic chemistry are required. The grade point average in biology courses should be at least 2.75 based upon the 4.00 grading system.

Students who do not meet the minimal prerequisites must do so before being admitted to graduate status unconditionally. Admission to graduate school does not imply admission to candidacy for the Master's degree.

### **ADVANCEMENT TO CANDIDACY**

Admission to candidacy for the Master of Science (M.S.) degree is granted after the student completes a minimum of twelve (12) semester hours of resident graduate credit in biology. Only two courses with "C" grades, regardless of credit hours, will be accepted toward credit for the master's degree. The overall grade point average in biology of a student seeking the Master of Science degree must be a "B" or better.

Persons failing to meet candidacy requirements are placed on probation for a semester or a summer. In the event candidacy requirements are not met at this time, it will be understood that no further graduate credits by the student will be applicable to the M.S. degree in biology.

## **MASTER OF SCIENCE IN BIOLOGY DEGREE PROGRAM**

Courses for which graduate credit may be obtained are numbered 5000 and above. Upon successful completion of the course work and thesis, the student must pass (1) a written comprehensive examination in biology and (2) an oral examination in defense of the thesis and fundamentals of biology.

### **DEGREE PROGRAM REQUIREMENTS**

#### **Program A**

A minimum of 30 hours of graduate biology courses and a thesis.

#### **Program B**

A minimum of 30 hours of graduate biology courses and a minor in some other area (preferably in the sciences) and a thesis.

#### **Graduate Minor in Biology**

A minor in biology at the graduate level includes 12 semester hours of graduate biology.

## Department of Chemistry

### ADMINISTRATIVE OFFICER

Antoine F. Carty, Interim Head, *Organic Chemistry*

### FACULTY

Larry L. Cole, *Organic Chemistry*

Vasant M. Doctor, *Biochemistry*

Hylton G. McWhinney, *Analytical Chemistry*

John R. Williams, *Physical Chemistry*

### PURPOSE AND GOALS

The Department of Chemistry offers a program of advanced study that prepares graduate students for careers in research, teaching, or industry. Graduate training in the department is multifaceted and flexible, depending on the interests and needs of the student. The program includes coursework, seminars, teaching and/or research, experience, and writing of a thesis.

### ADMISSION REQUIREMENTS

Students who plan to work toward the M.S. degree in chemistry must fulfill the following undergraduate requirements: two semesters of inorganic chemistry, one semester of analytical chemistry, two semesters of organic chemistry, and two semesters of physical chemistry. It is expected that the average grades in these chemistry courses and in related courses will not be less than a grade of "C". A student whose overall GPA in graduate coursework falls below 3.0 on a 4.0 scale will be required to demonstrate improvement during the next enrollment or be discontinued in the program. The Department reserves the right to administer a qualifying examination to these students and to advise them on courses they can take to successfully complete the graduate degree.

### ADVANCEMENT TO CANDIDACY

The Application for Candidacy Form must be approved by the department head, Dean of Arts and Sciences, and submitted to the Dean of the Graduate School for approval. Research projects for the thesis will be assigned before the student has been approved as a candidate.

### MASTER OF SCIENCE IN CHEMISTRY DEGREE PROGRAM

It is recommended that students who plan to qualify for the M.S. Degree in Chemistry spend at least one year in residence and that those who plan to study during the summer periods plan to devote at least one summer to research. Below is a suggested outline of study for the various fields of chemistry. The outlines represent only the minimum requirements:

### DEGREE PROGRAM REQUIREMENTS

Each candidate is expected to successfully complete a minimum of 24 semester hours of course work exclusive of research.

- A. Core Classes: twenty (20) SCH  
CHEM 5313, 5322, 5323, 5402, 5534, 5613, 5783
- B. Electives: four (4) SCH  
Selected from any graduate chemistry courses
- C. Thesis: six (6) SCH

## **Department of Languages and Communications**

### **ADMINISTRATIVE OFFICER**

Dejun Liu, *Department Head*

### **FACULTY**

Diljit K. Chatha, *English*  
Blondell J. Freeman, *English*  
John Harty, *English*  
Ymitri Jayasundera, *English*  
Antonio Jocson, *English*  
Robert Kirschten, *English*  
Melinda McBee, *English*  
James Palmer, *English*  
E. Joahanne Thomas-Smith, *English and Education*  
Stella Thompson, *English*  
Sarah Wakefield, *English*

### **PURPOSE AND GOALS**

Graduate study in English leads to the Master of Arts degree. It aims to increase capabilities in comprehending and analyzing literature and language. While graduate students have traditionally entered law school or become teachers following completion of the degree requirements, the exposure to American and British literature as well as to linguistics and grammar provides students with the foundation on which various technical, educational, and administrative careers can be built.

### **ADMISSION REQUIREMENTS**

For admission to the program, a student should present a minimum of 18 semester hours of undergraduate English coursework and a minimum grade of “B” in that work. Prerequisite courses not taken at the undergraduate level, such as the English Language, must be taken before the student advances beyond 12 semester hours of graduate coursework. A student is expected to pass an English qualifying examination before admission to candidacy is approved.

Action on admission to candidacy for a Master of Arts degree in English will be taken after the student has been in residence for at least one semester or summer session; earned at least 12 semester hours of graduate course credits; maintained a “B” average or better; and satisfactorily passed a comprehensive examination in English language and literature.

The student failing to meet the above requirements will be continued on probation for a second semester. In the event the requirements for candidacy remain unmet, it will be understood that no further graduate credits earned by the student will be applicable to a master’s degree.

### **MASTER OF ARTS IN ENGLISH DEGREE PROGRAM**

Of the 33 semester hours required for graduation with the M.A. in English, 27 must be taken at this university. Students can select all of their coursework within English, or take 24 SCH of English courses and 9 SCH in an approved minor program.

**SUGGESTED DEGREE PROGRAM – ENGLISH WITH NO MINOR**

**English Language** ..... **3 SCH**  
ENGL 5113 Linguistics and Grammar

**Literature** ..... **24 SCH**  
ENGL 5243 Shakespeare  
ENGL 5233 Medieval Literature  
ENGL 5213 A Study of the Short Story  
ENGL 5223 The Novel  
ENGL 5263 Seminar in Masterpieces of Literature  
ENGL 5313 Literary Criticism  
ENGL 5143 English Workshop  
ENGL 5273 Chaucer

**Research** ..... **6 SCH**  
ENGL 5123 Research  
ENGL 5133 Seminar in Thesis Writing

**SUGGESTED DEGREE PROGRAM – MINOR OPTION**

**English Language** ..... **3 SCH**  
ENGL 5113 Linguistics and Grammar

**Literature** ..... **15 SCH**  
ENGL 5243 Shakespeare  
ENGL 5213 A Study of the Short Story  
ENGL 5223 The Novel  
ENGL 5263 Seminar in Masterpieces of Literature  
ENGL 5143 English Workshop

**Research** ..... **6 SCH**  
ENGL 5123 Research  
ENGL 5133 Seminar in Thesis Writing

**Minor** ..... **9 SCH**

**REQUIREMENTS FOR THE MINOR IN ENGLISH**

ENGL 5113, and 6 semester hours of 5000 level courses

## Department of Mathematics

### ADMINISTRATIVE OFFICER

Aliakbar M. Haghighi, Professor & Department Head, *Probability & Statistics, Queuing Theory*

### FACULTY

Neslon Butuk, *Applied Mathematics*  
Arouna R. Davies, *Operation Research*  
Frank T. Hawkins, *Mathematics Education*  
Vera C. King, *Mathematics Education*  
Jian-ao Lian, *Wavelet Analysis and Applications*  
Dimitar P. Michev, *Differential and Difference Equations*  
n'Ekwunife Muoneke, *Computational Linear Algebra*  
George A. Roberts, *Complex Analysis and Approximation Theory*  
Evelyn E. Thornton, *Algebraic Topology and Fractals*  
Johnson K. Wetiba, *Statistics*

### PURPOSE AND GOALS

The Department of Mathematics offers innovative and flexible graduate programs in Mathematics. Students are encouraged to be creative in putting together a course of study that will lead to the fulfillment of individual professional goals in Statistics, Pure Mathematics, Applied Mathematics or Mathematics Education Teaching. Faculty advisors are available to assist students on a continual basis to ensure proper course selection towards graduation and career goals. The department graduate coordinator will assist students in obtaining graduate assistantships and in the final preparations for graduation, such as thesis submission, presentation for non-thesis option, and transcript audit. All applicants seeking the master degree in mathematics should plan a degree program with a graduate advisor.

~~A faculty advisor and/or the Coordinator of graduate mathematics will assist each graduate student on a continual basis to ensure proper course selection relative to career objectives and goals.~~

### DEGREE PROGRAM

The Department of Mathematics offers a Master of Science degree program with thesis and non-thesis options. The Department also provides graduate support courses for degree programs in science and engineering.

### ADMISSION REQUIREMENTS

Application for admission to graduate study is made through the Office of Graduate Programs. Applicants seeking a Master of Science degree in mathematics should have the equivalent of an undergraduate major in mathematics from an accredited institution. Applicants who do not hold the equivalent of an undergraduate major in mathematics should request an approved deficiency plan in order to meet this requirement.

#### MASTER OF SCIENCE IN MATHEMATICS DEGREE PROGRAM REQUIREMENTS – THESIS OPTION

A minimum of 36 semester hours (including thesis) is required for this M.S. degree in mathematics. These courses must be selected from approved 5000 level courses and a grade point average of 3.00 or better must be maintained with no grade below a “C”.

Twelve (12) credit hours of the 36 semester credit hours must include:

MATH 5003 The Real Number System

MATH 5013 Introduction To Point-Set Theory

MATH 5023 Complex Analysis I  
MATH 5123 General Topology I

Twelve (12) semester credit hours of the 36 semester credit hours must be selected from one of the following areas:

Statistics	Pure Mathematics	Applied Mathematics
MATH 5233	MATH 5033	MATH 5173
MATH 5473	MATH 5133	MATH 5343
MATH 5753	MATH 5773	MATH 5723
MATH 5773	MATH 5913	MATH 5823

Thesis: 6 SCH

The student must prepare and defend an approved thesis following the Graduate School guidelines.

The remaining 6 semester credit hours must be selected from any of the other 5000 level mathematics courses.

**MASTER OF SCIENCE IN MATHEMATICS DEGREE PROGRAM REQUIREMENTS –  
NON-THESIS OPTION**

A minimum of 36 semester hours is required for this M.S. degree in mathematics. These courses must be selected from approved 5000 level courses and a grade point average of 3.00 or better must be maintained with no grade below a “C”. In addition, all applicants seeking this degree option must pass a comprehensive written exit exam and give an oral presentation on an approved topic in mathematics.

Twelve (12) credit hours of the 36 semester credit hours must include:

MATH 5003 The Real Number System  
MATH 5013 Introduction To Point-Set Theory  
MATH 5023 Complex Analysis I  
MATH 5123 General Topology I

Eighteen (18) semester credit hours of the 36 SCH must be selected from the following:

MATH 5303, Modern techniques in Secondary Math  
MATH 5443, Statistics for High School Teachers  
MATH 5003, The Real Number System  
MATH 5013, Introduction to Point-Set Theory  
MATH 5103, Special Problems  
MATH 5113, Elementary Functions  
MATH 5173, Computer Programming  
MATH 5203, Calculus for High School Teachers  
MATH 5233, Selected Topics in Mathematics  
MATH 5283, Structure of Arithmetic  
MATH 5293, Logic and Geometry  
MATH 5413, Seminar  
MATH 5543, Integrated Introduction to  
MATH 5991, Independent Study  
MATH 5992, Independent Study  
MATH 5993, Independent Study

Six (6) semester credit hours of Curriculum and Instruction:

CURR 5003, Theory & Dynamics of Curriculum & Instruction  
EDEN 5103, Foundations of Educational Research

## **Division of Social Work, Behavioral and Political Science**

### **ADMINISTRATIVE OFFICERS**

Walle Engedayehu, *Interim Division Head*

### **FACULTY**

Allison Cotton, *Sociology*  
Karen Douglas, *Sociology*  
Robert P. Jones, *Sociology*  
Sarah Williams, *Sociology*

### **PURPOSE AND GOALS**

The mission of the graduate program in Sociology at Prairie View A&M University is to develop professional sociologists who are broadly educated in substantive areas of sociology and well trained in theory and methods.

The Master of Arts degree program in sociology offers a curriculum that enables students to analyze, critically evaluate and engage in the planning of solutions to problems that evolve from patterns of human social interaction. The graduate program prepares students for advanced study (e.g., Ph.D.) in sociology, criminology, law, and social welfare.

### **ADMISSION REQUIREMENTS**

In addition to the regular application requirements of the university, applicants to the M.A. program must have the following:

- 1) A minimum of fifteen hours of undergraduate sociology courses is required, including one course in sociological theory, a basic statistics course, and a course in research methods. Students who apply without this background may be admitted under the condition that they must make up the undergraduate deficiency before starting the MA degree program courses. None of the courses used to correct the deficiency may be counted toward the MA degree.
- 2) Applicants must present evidence that they are capable of successfully completing a rigorous graduate program. Such evidence must include completion of a department application,, and three letters of recommendation from persons in a position to evaluate the student's academic potential.

### **MASTER OF ARTS IN SOCIOLOGY DEGREE PROGRAM**

A total of 37 semester hours of graduate course work must be completed in graduate status. For those opting to do a thesis, the requirements include 31 hours of course work and 6 hours devoted to the M.A. thesis. Upon the decision to undertake a thesis, the student will form a committee consisting of two sociology faculty, one of whom will serve as the principle advisor, and one additional faculty member from the Division of Social Work, Behavioral and Political Sciences. The topic of the thesis will be determined by the student and the advisor. The format will follow ASA thesis guidelines in conjunction with established criteria by the Sociology Program. The thesis must be orally defended and approved by all members of the faculty thesis committee before the degree is conferred. The student must register for thesis each semester until satisfactorily completed. No graduate credit will be given for undergraduate courses.

For students selecting the thesis option, 31 hours of course work must be completed and 6 hours of supervised thesis hours. Of the 31 hours of course work, 10 hours are core requirements and the remaining 21 are sociology support/elective requirements no more than 6 hours of which can be taken from outside the program.

For students selecting the non-thesis option, 37 hours of course work must be completed: 10 hours of core courses, 21 hours of support area requirements, and 6 hours taken outside the program.

Admission to candidacy will be granted upon completion of 12 semester hours of graduate work in sociology with an average grade of B or better. These hours must be completed in residence. The student must complete the Application for Admission to Candidacy form, through the Division of Social Work, Behavioral and Political Sciences, to the Dean of the Graduate School for approval.

Students must maintain an average GPA of 3.0. Only two courses with a “C” grade, regardless of credit hours, will be accepted toward credit for the Master’s degree.

**DEGREE PROGRAM REQUIREMENTS**

**Common Core**..... **10 SCH**

All of the following must be taken within the student’s first two semesters of enrollment:

- SOCG 5021 Professional Seminar in Sociology
- SOCG 5123 Social Statistics
- SOCG 5213 Classical Sociological Theory
- SOCG 5223 Research Methods

**Non-Thesis Option**

21 SCH Selected From:

- SOCG 5243 Urban Sociology
- SOCG 5263 Sociology of Education
- SOCG 5333 Criminology
- SOCG 5353 Seminar in Race Relations
- SOCG 5413 Contemporary Sociological Theory
- SOCG 5423 Social Stratification
- SOCG 5433 Theory of Criminal Justice System
- SOCG 5443 Social Movements
- SOCG 5453 Complex Organizations
- SOCG 5553 Sociology of Gender and Sex Roles

6 SCH Selected From:

- Related fields approved by advisor

**Thesis Option**

15 SCH Selected From:

- SOCG 5243 Urban Sociology
- SOCG 5263 Sociology of Education
- SOCG 5333 Criminology
- SOCG 5353 Seminar in Race Relations
- SOCG 5413 Contemporary Sociological Theory
- SOCG 5423 Social Stratification
- SOCG 5433 Theory of Criminal Justice System
- SOCG 5443 Social Movements
- SOCG 5453 Complex Organizations
- SOCG 5553 Sociology of Gender and Sex Roles

6 SCH Selected From:

- Related fields approved by advisor

6 SCH Thesis

- SOCG 5613 Thesis
- SOCG 5623 Thesis

Total Degree Requirements 37 SCH

Total Degree Requirements 37 SCH

## **Army Reserve Officers Training Corps**

### **FACULTY**

LTC Dexter Q. Henson, Professor of Military Science  
MAJ Vonna Baxter, Assistant Professor of Military Science  
LTC Robert R. Clarke, Assistant Professor of Military Science  
MAJ Anita Roberts, Assistant Professor of Military Science  
CPT James Larry, Assistant Professor of Military Science  
MSG Bruce Veals, Senior Military Instructor  
SFC Jeffry P. Graves, Military Instructor

### **PURPOSE AND GOALS**

The mission of the Army ROTC program is to prepare college students for professional careers as United States Army Officers. The faculty and staff in the department are dedicated military and civilian personnel committed to producing the highest caliber leaders for the nation.

The experience and training provided by Army ROTC separates ROTC graduates from their peers. Army ROTC Cadets are taught to be leaders and are provided hands-on experience in managing physical, financial, and human resources. Our cadets often possess a higher level of self-confidence and superior decision-making skills. The challenge of developing leaders to manage resources and command units equipped with state-of-the-art equipment forms the basic foundation of the military science curriculum.

Graduate students interested in earning a commission are encouraged to apply for an Army ROTC Scholarship. Besides tuition, the scholarship pays educational fees, provides \$600 for books per year, and provides the cadet a \$350-\$400 stipend for each month of the school year.

The Army ROTC course for graduate students allows for a student to complete all requirements in two years. Students with no prior military may be eligible to attend the Leaders Training Course (see below). Students with Prior Service or JROTC experience may be allowed to enroll directly in the advanced course (see below). The advanced course covers the final two years of the ROTC program and includes a five-week camp held during the summer between the first and second year of graduate school. While enrolled in the advanced course, a cadet receives a stipend ranging from \$350-\$400 per month for up to 10 months of the school year and approximately \$700 for attending the National Advanced Leadership Camp.

### **COMMISSIONING PROGRAM**

Completion of Army ROTC qualifies graduate students in all fields for a commission as a Second Lieutenant in the United States Army.

#### **Prior Service**

Students with a good record of prior military may be allowed to enroll directly in the advanced course. Students with such experience should contact the Professor of Military Science.

#### **Internship: Leader's Training Course**

Graduate students without any prior military service may be allowed to enroll in the advanced course after successfully completing the summer Leader's Training Course internship, at Fort Knox, Kentucky. The internship is a four-week training program conducted during the summer months, and it is designed to orient students to the U.S. Army. The training develops and evaluates their officer leadership potential and qualifies them for enrollment in the ROTC Advanced Course program. The student graduates from this program with increased confidence, self-discipline, and decisiveness developed through physical and academic challenges. Participants will receive approximately \$700 for the internship. Students who successfully complete the training may also qualify for an Army ROTC two-year scholarship.

**ADVANCED COURSE ADMISSION REQUIREMENTS**

<b>Course</b>	<b>Prerequisites</b>
ARMY 3313	Completion of the summer internship or prior service, or have completed four years of junior ROTC in high school.
ARMY 4413	ARMY 3313, 3371, 3323, 3381

**COMMISSIONING PROGRAM REQUIREMENTS**

A cadet must satisfy the following requirements in order to be commissioned:

1. Complete or receive constructive credit for 16 hours of Military Science courses.
2. Satisfactorily complete National Advanced Leadership Camp.
3. Receive a minimum grade of C in all Military Science courses.

**SUGGESTED COMMISSIONING REQUIREMENT COMPLETION SEQUENCE**

**FIRST YEAR, ADVANCED COURSE**

<i>First Semester</i>	<i>Hours</i>	<i>Second Semester</i>	<i>Hours</i>
ARMY 3313 Small Unit Tactics	3	ARMY 3323 Prin. and Techniques of Command	3
ARMY 3371 Leadership Lab V	1	ARMY 3381 Leadership Lab VI	1
<b>Total</b>	<b>4</b>	<b>Total</b>	<b>4</b>

**SECOND YEAR, ADVANCED COURSE**

<i>First Semester</i>	<i>Hours</i>	<i>Second Semester</i>	<i>Hours</i>
ARMY 4413 Army Management and Leadership	3	ARMY 4423 Army Admin. and Professionalism	3
ARMY 4471 Leadership Lab VII	1	ARMY 4481 Leadership Lab VIII	1
<b>Total</b>	<b>4</b>	<b>Total</b>	<b>4</b>