

## 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*

Ronald D. Humphrey, *Microbiology*

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 programs in Biology and Environmental Toxicology of the Biology Department are designed to provide training at the master's degree level for those persons 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, including 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, including courses in General Biology or in 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 plus a thesis.

#### **Program B**

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

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

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

#### **Master of Science in Biology with Option in Environmental Toxicology**

The Environmental Toxicology Program is designed to prepare individuals to work with governmental agencies including the Environmental Protection Agency, Department of Agriculture, Food and Drug Administration, and with a variety of industries which produce chemicals and toxic substances or other pollutants. Individuals pursuing a degree in environmental toxicology must satisfy undergraduate prerequisites in biology and chemistry.

## Department of Chemistry

### ADMINISTRATIVE OFFICER

Hylton G. McWhinney, *Interim Head, Analytical Chemistry*

### FACULTY

Laura Carson-Isabelle, *Polymer Science*

Antoine F. Carty, *Organic Chemistry*

Larry L. Cole, *Organic Chemistry*

Vasant M. Doctor, *Biochemistry*

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

Persons 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 students and to advise students on courses they can take to improve their chances of success in completing a graduate degree.

Students who plan to minor in chemistry on the graduate level must have fulfilled all requirements for a minor in chemistry on the undergraduate level as stipulated in the catalog.

### ADVANCEMENT TO CANDIDACY

The Application for Candidacy Form must be approved by the heads of both the major and minor departments 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.

The student is required to pass a written preliminary examination in the major fields of analytical, organic, inorganic, physical and biochemistry before scheduling of the final oral examination which will cover subject materials dealing with the thesis and course work.

### MASTER OF SCIENCE IN CHEMISTRY DEGREE PROGRAM

It is recommended that persons 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. It is required that the thesis be of such quality that it may be published in an accepted scientific journal. 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. These courses must include: CHEM 5313, 5322, 5323, 5402, 5534, 5613, 5783, and sufficient graduate electives in Chemistry to satisfy the semester-hour requirement. Only six (6) semester hours of credit for courses designed especially for summer institutes may be applied toward a M.S. degree in Chemistry.

### **Graduate Minor in Chemistry**

The minimum number of hours required for a minor in Chemistry is (12) hours of graduate course work exclusive of research. Only three (3) semester hours of credit for courses designed especially for summer institutes may be applied toward a minor in Chemistry.

## **Department of Languages and Communications**

### **ADMINISTRATIVE OFFICER**

Dejun Liu, *Department Head*

### **FACULTY**

Ozzie Banicki, *Communication*

William H. Chapman, *English*

Diljit K. Chatha, *English*

Alfredo Fernandez, *Spanish*

Blondell J. Freeman, *English*

John Harty, *English*

Ymitri Jayasundera, *English*

Sukhada Kilambi, *Spanish*

Robert Kirschten, *English*

Melinda McBee, *English*

Mehl Penrose, *Spanish*

Robert Rodriguez, *Spanish and French*

Derek Royal, *English*

Lewis Smith, *Communication*

John P. Sullivan, *Spanish*

Molly Swiger, *Communication*

E. Joahanne Thomas-Smith, *English and Education*

Stella Thompson, *English*

Charles Wukash, *English*

Eun-Ho Yeo, *Communication*

### **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

### FACULTY

Neslon Butuk, *Applied Mathematics*

Arouna R. Davies, *Operation Research*

Frank T. Hawkins, *Mathematics Education*

Vera C. King, *Mathematics Education*

Nader Kouhestani, *Differential and Difference Equations*

Demitar Michev, *Differential and Difference Equations*

n'Ekwunife Muoneke, *Computational Linear Algebra*

Jean-Paul Pemba, *Functional Analysis*

George A. Roberts, *Coordinator, Complex Analysis and Approximation Theory*

Evelyn E. Thornton, *Algebraic Topology and Fractals*

Johnson 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 Pure Mathematics, Applied Mathematics or Mathematics Education. 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". All applicants seeking this degree option should plan a degree program with a graduate advisor. Twelve (12) credit hours of the 36 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

**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”. All applicants seeking this degree option should plan a degree program with a graduate advisor. Twelve (12) credit hours of the 36 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) credit hours of the 36 credit hours must be from one of the special emphases in specific areas of professional interests.

Statistics	Pure Mathematics	Applied Mathematics	Mathematics Teaching
MATH 5233	MATH 5033	MATH 5173	MATH 5303
MATH 5473	MATH 5133	MATH 5343	MATH 5443
MATH 5753	MATH 5773	MATH 5723	CURR 5003
MATH 5773	MATH 5913	MATH 5823	EDEN 5103

The remaining 12 credit hours must be selected from all the other approved 5000 level mathematics courses in the current graduate catalog. In addition, all applicants seeking this degree option should take a comprehensive exit exam in written and oral presentation in some approved topics of mathematics.

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

### **ADMINISTRATIVE OFFICERS**

Walle Engedayehu, *Interim Division Head*

### **ADMINISTRATIVE STAFF**

Karen Manges Douglas, *Coordinator, Sociology*

### **FACULTY**

Abdoulaye Bah, *Sociology*

Bernita Berry, *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, an essay giving a history of the candidate's intellectual development, and no fewer than 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 and Thesis Degree Concentration Options ..... 21-27 SCH**

Select from:

- SOCG 5243 Urban Sociology .....3 SCH
- SOCG 5263 Sociology of Education.....3 SCH
- SOCG 5333 Criminology .....3 SCH
- SOCG 5353 Seminar in Race Relations .....3 SCH
- SOCG 5413 Contemporary Sociological Theory .....3 SCH
- SOCG 5423 Social Stratification .....3 SCH
- SOCG 5433 Theory of Criminal Justice System.....3 SCH
- SOCG 5443 Social Movements .....3 SCH
- SOCG 5453 Complex Organizations .....3 SCH
- SOCG 5463 Special Topics .....3 SCH
- SOCG 5553 Sociology of Gender and Sex Roles .....3 SCH

**Thesis Option Requirements .....6 SCH**

- SOCG 5613 Thesis
- SOCG 5623 Thesis

**Total Degree Requirements ..... 37 SCH**

## Army Reserve Officers Training Corps

### FACULTY

LTC Dexter Q. Henson, Professor of Military Science  
LTC Robert R. Clarke, APMS/Executive Officer  
CPT Rodney Penny, APMS/Enrollment Officer  
MSG Keith R. Johnson, Senior Military Instructor  
SFC Jeffery 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 thrust 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 or JROTC experience may be eligible to attend the Leaders Training Course (see below). Students with Prior Service or JROTC experience may be allowed to enroll directly into the advanced course (see below). The advanced course covers the final two years of college 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 the student for a commission as a Second Lieutenant in the United States Army.

#### **Prior Service or JROTC experience**

Students with a good record of prior military service or with four years of Junior ROTC experience may receive constructive credit for the basic course and may be allowed to enroll in the advanced course. Students with such experience and who are interested in enrolling 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 by attending and successfully completing a summer internship called the Leader's Training Course at Fort Knox, Kentucky. The internship is a four-week training program conducted during the summer months and 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 the summer internship 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 qualify for an Army ROTC two-year scholarship.

The Panther battalion has its own Ranger Challenge Team, which is a varsity-level team that competes against other universities in military skills events. The battalion also has a competition drill team and ceremonial detachment.

The department periodically sponsors other activities including; rappelling demonstrations, ranger weekends, road marches, leadership exercises, adventure training, land navigation exercises, patrolling and survival skills training.

**ADVANCED COURSE ADMISSION REQUIREMENTS**

<i>Course</i>	<i>Prerequisites</i>
ARMY 3313	ARMY 1111, 1121, 1171-1181, 2212, 2222, and 2271-2281, 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 20 hours of Military Science.
2. Satisfactorily complete National Advanced Leadership Camp.
3. Complete nine (9) hours of approved three-semester hour courses in communication skills, military history, and computer literacy. These requirements may be included as a part of the students' degree program.

<b>Communication Skills</b> .....	<b>3 SCH</b>
ENGL 2143, MISY 3303, COMM 2313, or COMM 3803	
<b>Military History</b> .....	<b>3 SCH</b>
(Any U.S. History course)	
<b>Computer Literacy</b> .....	<b>3 SCH</b>
(Any computer course)	
<b>Total Hours Required</b> .....	<b>9 SCH</b>
<b>Summer Internship Program</b> .....	<b>29 SCH</b>
Military Science Courses.....	20 SCH
Professional Development Courses .....	9 SCH
<b>Prior Service or Junior ROTC Program</b> .....	<b>25 SCH</b>
Military Science Courses.....	16 SCH
Professional Development Courses .....	9 SCH
<b>Minor Field Requirements</b> .....	<b>25 SCH</b>
ARMY 3313, 3323, 3371, 3381 .....	8 SCH
ARMY 4413, 4423, 4471, 4481 .....	8 SCH

**SUGGESTED COMMISSIONING REQUIREMENT COMPLETION SEQUENCE**

<b>FIRST YEAR, ADVANCED COURSE</b>					
<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>

<b>SECOND YEAR, ADVANCED COURSE</b>					
<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>