SOUTHERN
Board of Supervisors
UNIVERSITY

Meetings

1:00 p.m.

Friday, October 28, 2011

Board of Supervisors Meeting Room
2nd Floor, J.S. Clark Administration Building
Southern University and A&M College
Baton Rouge, Louisiana

ACADEMIC AFFAIRS COMMITTEE

1:00 p.m.
Friday, October 28, 2011
Board of Supervisors' Meeting Room
2nd Floor, J.S. Clark Administration Building
Southern University and A & M College
Baton Rouge, LA

AGENDA

1. Call to order and Invocation
2. Roll Call
3. Adoption of the Agenda
4. Public Comments
5. Action Items
   - A. Proposal for New Academic Programs, SUNO
     1. Letter of Intent to develop a B.S. Program in Applied Social Sciences
     2. Certification-Only Program Alternative Path, Secondary Certification
     3. B.S. in Mathematics and Physics
     4. B.S. in Biology and Chemistry
   - B. Approval of Education Online Services Agreement, SUS
6. Informational Items
   - A. Memorandum of Understanding (MOU) for the SUNO/SUSLA Connection
   - B. Online Early Start Amite High School Collaboration Presentation, SUNO
7. Other Business
8. Adjournment

MEMBERS

Atty. Patrick O. Jefferson – Chair; Dr. Eamon M. Kelly- Vice Chair;
Mr. Calvin W. Braxton, Sr., Atty. Tony M. Clayton, Mr. Willie E. Hendricks
Mrs. Ann A. Smith, Rev. Samuel C. Tolbert, Jr.
Mr. Darren G. Mire - Ex Officio

SOUTHERN UNIVERSITY AT NEW ORLEANS
6400 Press Drive
New Orleans, LA 70126-0002
(504) 286-5311
FAX (504) 284-5500
www. suno.edu

OFFICE OF THE CHANCELLOR

MEMORANDUM

To: Ronald Mason, J.D.,
President, Southern University System

From: Victor Ukpolo, Ph.D.,
Chancellor

Date: October 7, 2011

Re: October 2011 Meeting of the Board Supervisors

Southern University at New Orleans asks your approval to include the following action items on the agenda of the Board of Supervisors:

Action Items:

1. Letter of Intent to develop a B.S. Program in Applied Social Sciences
2. Certification-Only Program Alternative Path: Secondary Certification
3. Proposal for a B.S. in Mathematics and Physics
4. Proposal for a B.S. in Biology and Chemistry

We have also included the following:

Informational Items:

1. SUNO Master Programming Update Presentation by La. Office of Facility Planning & Control
2. September 2011 Report for Board of Supervisors
3. Online Early Start Amite High School/SUNO Collaboration Presentation

Thanks very much for your consideration.

VU/hec

Attachments

Approval Ronald Mason, J.D., President

SOUTHERN UNIVERSITY AT NEW ORLEANS
University Curriculum Committee
6801 Press Drive ♦ New Orleans, LA 70126
(504) 286-5331

APPENDIX II

MEMORANDUM

To: Dr. David Adegboye
Vice Chancellor for Academic Affairs

From: Frank Martin, Chair
University Curriculum Committee

Date: September 27, 2011

Re: **New Program Approvals**

At its monthly meeting of September 26, 2011, the University Curriculum Committee approved the following four proposals relating to new programs:

1. Letter of Intent to Develop a B. S. Program in Applied Social Sciences
2. Certification-Only Program Alternative Path: Secondary Certification
3. Proposal for a B. S. in Mathematics and Physics
4. Proposal for a B. S. in Biology and Chemistry

Approved: _____ 09-27-2011
Vice Chancellor for Academic Affairs

Approved: _____ 9/28/11
Chancellor

LETTER OF INTENT to DEVELOP a NEW ACADEMIC PROGRAM

General Information **Date: October 2011**

Campus: **Southern University at New Orleans**	Program: Title, CIP, Degree/Certificate Awarded **B. S. Applied Social Sciences (APSS).** **CIP Code is Social Sciences Other 2299.**
Institutional Contact Person & Access Info (if clarification is needed): **Dr. David S. Adegboye, Vice Chancellor for Academic Affairs, (504) 286-5381**	

1. Program Objectives and Content

Describe the program concept: purpose and objectives; basic structure and components/concentrations; etc.

The principal objective of the B. S. Applied Social Sciences program is to provide the university student with the basic social science knowledge and educational tools in sociology and political science that are required to better understand the people and institutions that structure social relations and to positively impact the daily life of communities, organizations, and individuals through the application of academic and concrete experiential knowledge in both the private and public sectors of society. Simply put, the program is designed to instill in students the value of diversity and tolerance and give students the skills necessary to develop both the social and political science knowledge base required to meet the needs and demands of communities in contemporary societies, their institutions, and the variety of interactions and challenges inherent in a diverse society. With training based in both applied aspects of Sociology and Political Science, graduates of this program will be prepared to serve, participate, and engage in private and public sector career opportunities focused on addressing current development and organizational needs of communities throughout Greater New Orleans, Louisiana, the nation, and the world. Furthermore, such an education will also empower students to pursue graduate work in the applied social sciences, secondary education, local and regional government and human services.

B. S. Applied Social Sciences Major: A total of 121 credit hours are required to graduate in the program. The breakdown is as follows:
General Education Requirement: 39 cr
Other Introductory Courses: 19 cr
Required Concentration: 30 cr
Required Internship: 3 cr
Required Specialization: 9 cr
Research Core: 12 cr
Electives: 9 cr
In addition to Board of Regents mandated 39 hours of General Education courses, the program requires the following Introductory Courses totaling 19 credits: JRDV College Survivals Skills (1 cr), MGIS Introduction to Computer Processes (3 cr), ENGL 260 Technical Writing (3 cr), Political Science 110 (3 cr), Substance Abuse 110 (3cr), Criminal Justice 110 (3 cr) and Sociology 210 (3 cr).

Two Concentrations are required: A concentration in **Sociology and Community Development** will require 15 hours of core courses which would include Socl 495, Socl 482, and 483 (Sociology of Community Development-to be developed) Socl 368, and Socl 374. A concentration in **Community Political Processes** will require 15 hours of core courses including Poli 210, Poli 301, Poli 325, Poli 303, and Poli 435. An internship that can be taken as Poli 305 or Socl 381 is required. A grade of C or better is required in all concentration courses.

Specialization: All students will be required to have a 9 hour of specialization in **diversity and cross cultural awareness** from among courses including Poli 250, Poli 310, Poli 390 and Socl 223, Socl 276, Socl 320, Socl 346, Socl 372.

Research Core: All students will be required to complete a research core of courses of twelve hours including Socl 347, Socl 348, Poli 490/Socl 491 and a new course Poli 492 (Computer Application in Applied Social Sciences)

Other Social Science Electives: Nine (9) additional Social Science electives must be selected from courses including Socl 252, Socl 274, Socl 321, Socl 331, Socl 346, Socl 372, Socl 380, Socl 385, Socl 430, Poli 250, Poli 310, or Poli 390.

2. Need

Outline how this program is deemed essential for the wellbeing of the state, region, or academy (e.g., accreditation, contribution to economic development; related to current or evolving needs within state or region). Cite data to support need: employment projections; supply/ demand data appropriate to the discipline and degree level, etc.

The current proposal for the Applied Social Sciences degree adapts two existing social science disciplines into a much needed degree program designed to better address the changing demand for graduates who will bring more applied knowledge to the Louisiana workforce. Sociology and Political Science were instituted by Southern University at New Orleans soon after the institution was founded in 1959. These programs were housed in the College of Liberal Arts and have produced several graduates in these two fields. During the past years, these programs became vibrant and successful until the rising demand of more applied social programs (e.g, criminal Justice, public administration, substance abuse).

There are no similarly situated programs in applied social sciences throughout the state. All of the existing undergraduate programs in the social sciences of state institutions lack the emphasis of educating students to better equip them to pursue careers with a focus on the growing demand in the applied fields. There are graduate level programs in Louisiana and throughout the nation that offer masters degrees in applied social sciences but none at the undergraduate level. In addition to addressing the changing demand of the job market for undergraduates students with more applied skills and knowledge, this program will provide an excellent source for the creation of academic pipeline to graduate programs in the applied social sciences field from our undergraduate program at SUNO.

As indicated earlier in Louisiana, there exists a need to address the changing manpower demands in industry, academia, government agencies and other institutions that require applied social

science knowledge. Communities are changing with regard to knowledge and skills required to address today's challenges. Manpower demands now call for graduates prepared to address an environment where there are stark differences across race, gender, class, and age as well as cross cultural orientations. Efforts to rebuild and improve communities now demand graduates that possess community development and redevelopment skills and the ability to engage citizens, bureaucracy, and private interests of diverse communities and neighborhoods in various activities, while preserving and sustaining historic and traditional values. The steady rise in natural and manmade disasters has fostered a greater need for the engagement of communities in new ways to foster sustainable community and citizen engaged planning and development. Manpower demands now call for governmental workers, policy analysts, social planners, community organizers, research assistants, program managers, campaign and election specialists, survey researchers, and project leaders in the private and public sectors that are needed more now than ever before to respond to the changing dynamics and growth of cities and urban communities with more applied knowledge. The proposed program, through the curriculum offered, will adequately train students to fit into the job demands outlined above following graduation.

3. Relevance

Explain why this program is an institutional priority at this time. How will it (a) further the mission of the institution and (b) increase the educational attainment of the state's adult population or foster innovation through research.

An institutional priority of Southern University according to the mission statement is to serve the community needs of the Greater New Orleans metropolitan area. This means providing the adult population of Greater New Orleans access to educational degrees offering effective learning and reasoning skills that address academic and concrete experiential knowledge and encompass an understanding of theoretical knowledge and practical tools of social sciences including applied research, conflict resolution, strategic planning, policy analysis, and community engagement, organization and development that help communities to address "real world" problems grounded in social and political relationships. This program will better prepare the state' s adult population needs by offering career-transferable Skills and functional abilities that are required in many different problem-solving and program activities essential in rebuilding communities in the New Orleans regions and the entire state.

4. Students

Summarize student interest/demand for the proposed program.

The standing internal source of feeding the new program is with majors in the General studies degree program. Students with an intrinsic interest in the social sciences have elected for social sciences and political science concentrations in General Studies due to the lack of a degree program in sociology and political science. The statistics offered below reflects the current enrollment of students remaining in the terminated Sociology program and the General Studies Areas of concentration in Social Sciences and Political Science.

Sociology	25
General Studies (Social Sciences Concentration)	25
General Studies (Political Science Concentration)	4

The above enrollment figures clearly indicate the high demand that has always existed for Sociology and Political Science classes over successive semesters. It also points to the likely source for recruiting prospective majors for the proposed Applied Social Sciences program. The job opportunities that the explanation under #2 (Need) above implies are strong bases to successfully recruit new freshmen and transfer students into the program.

5. Cost

Estimate costs for the projected program for the first five years. Indicate amounts to be adsorbed out of current sources of revenue and needs for additional appropriations (if any). Commit to provide adequate funding to initiate and sustain the program

APPLIED SOCIAL SCIENCES	FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR		FIFTH YEAR	
Description	Amount	FTE	Amount	FTE	Amount	FTE		FTE		FTE
	2012		2013		2014		2015		2016	
Faculty Salaries	299,758	6	340,000	7	357,007	7	376,317	7	376,317	7
Fringe	95,161		107,936		113,334		119,466		119,466	
Travel	10,000		10,000		10,000		10,000		10,000	
Office Supplies	8,000		8,000		8,000		8,000		8,000	
Library Resources	5,000		5,000		5,000		5,000		5,000	
Support Personnel	0		0		0		0		0	
Equipment	5,000		5,000		5,000		5,000		5,000	
Grand Total	422,919		467,936		498,341		523,783		523,782	
Total Anticipated From:	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
State Appropriations	422,919	100	404,615	86%	425,135	85%	474,993	91%	460,380	88%
Federal Grants	0		0		0		0		0	
State Grants	0		63, 321		73, 206		48,190		63,402	
Total	422,919		467,936		498,341		523,783		523,782	

Note: The Sociology and Community Development Concentration area has a very strong faculty strength of five (5). One additional faculty will be hired at a cost of $45,000 plus $15, 975 for fringe (35.5%) to strengthen the Community Political Processes concentration area. This is the only immediate extra cost to the proposed program.

CERTIFICATION:

Chief Academic Officer

09-27-2011
Date

Chancellor/President

9/28/11
Date

Management Board

Date

Southern University at New Orleans
Curriculum Committee Meeting
September 26, 2011- 11:00 AM

1. Frank Martin
2. Ron Mancoske
3. Romanus Ejiaga
4. Gilda Davis
5. Catherine Robinson
6. Davis G. Alijani
7. Deborah W. Darby
8. Carl P. John

Minutes of the Meeting
University Curriculum Committee
Held on Monday, September 26, 2011

Members (quorum) Present: Dr. D. Alijani
Dr. D. Darby
Ms. G. Davis
Dr. R. Ejiaga
Dr. C. Johnson
Dr. R. Mancoske
Dr. F. Martin, Committee Chair
Dr. K. Robinson

Members Absent: Mr. W. Bishop
Ms. S. Mosley-Wilson

The meeting was called to order by Dr. Martin at 11:06 A.M.

Dr. David Adegboye gave an overview of the four proposals dealing with new programs. During his remarks, he pointed out that the proposals for the new programs in science did not require a Letter of Intent before submission of the proposals.

Proposal I: Certification-Only Program Alternative Path: Secondary Certification

Discussion

-Dr. Louis Kaltenbaugh gave an overview of the proposal for a Certification-Only Program Alternative Path: Secondary Certification for the College of Education and Family Studies. She pointed out that this program replaces the previous Alternative Certification program for secondary education and that the content conforms exactly to the requirements of the State.

Motion to approve by: Ms. Davis
Second by: Dr. Alijani
Vote: The Committee unanimously voted to approve the proposal.

Proposal II
- College of Arts and Sciences Proposals for (1) BS Degree in Mathematics and Physics and (2) A BS Degree in Mathematics and Physics were presented by Dr. Mostafa Elassar.

Discussion

-Dr. Elassar gave an overview that included the scope and expected outcome of the proposals. He stated that the proposals are designed to enhance the natural sciences. Lastly he explained that

the proposals will not require the development of new courses.

Motion to approve by: Dr. Alijani
Second by: Dr. Johnson
Vote: The Committee unanimously voted to approve both proposals.

Proposal III: Letter of Intent to develop a B. S. Program in Applied Social Science

Discussion

-The applied Social Science degree program would encompass sociology and political science. The faculty of the Department believes that with the two disciplines combined into one program, sufficient number of graduate will be generated to justify the program.

Motion to approve by: Dr. Robinson
Second by: Ms. Davis
Vote: The Committee unanimously voted to approve the proposal.

The meeting adjourned at 12:40 P.M.

BOARD OF REGENTS & LOUISIANA DEPARTMENT OF EDUCATION

OFFICIAL PLAN SIGNATURE PAGE

Name of University:	Southern University at New Orleans

CAMPUS APPROVAL:

The signatures on this page certify that the attached Official Plan(s) and Request(s) have been approved for submission to the Board of Regents and Louisiana Department of Education by the Campus Head (or designee) and College of Education Dean (or designee). In addition, the signature of the dean from another college (e.g., Arts/Sciences/Humanities, Business, etc.) has been provided if minors/concentrations are being offered outside the College of Education.

Campus Head or designee	*Date* 9/28/11
College of Education Dean or Designee	*Date* 9-26-2011
College of Other College Dean or Designee	*Date* 9-27-2011

STATE APPROVAL:

The signatures on this page certify that the Board of Regents and Louisiana Department of Education have reviewed the Official Plan forms and determined that the courses address state certification requirements.

Board of Regents Designee	*Date*
Louisiana Department of Education Designee	*Date*

Please submit *one* Official Plan Signature Form for *all* Official Plans and Requests being submitted.

Southern University at New Orleans

College of Education and Human Development

Certification-Only Program Alternative Path
Secondary Education Programs

Program Admission Requirements

Candidates seeking admission into the Certification–Only Program Alternative Path at the Secondary Level are required to meet the following:

Screening: The candidate seeking admission must possess critical thinking skills, a record of academic achievement, a commitment to educate all children and a belief that all children are worthy and can achieve.

- Hold a baccalaureate degree from a regionally accredited institution in a non-teaching program
- Have a GPA of 2.50 or higher on the last 60 hours of coursework earned and a minimum of 2.20 or higher overall
- Pass the Praxis Pre-Professional Skills Tests (PPSTs). Candidates who possess a graduate degree will be exempted as will candidates whose ACT composite score is at least a 22 or a SAT combined verbal/critical reading and math combined score of 1030
- Pass the Praxis content-specific subject examination for the content area(s) to be certified.
- If no examination has been adopted for Louisiana in the certification area, candidates must present a minimum of 31 semester hours of coursework specific to the content area
- Candidates for All-Level K-12 areas of art and health and physical education must pass the subject-specific examination(s) for the content area(s) to be certified.
- Have a clean criminal background report (Must be provided prior to acceptance)

The Secondary Programs of Study include an 80 hour contact teacher readiness training workshop to be completed as part of the enrollment/admittance process. The workshop module allows a candidate to begin his/her program in any semester, including the summer session. The workshop module addresses: (1) Classroom Environment; (2) Classroom Management; (3) Instructional Design; and (4) Instructional Delivery.

The text for the 80 Hour Teacher Readiness Training Workshop is *The Teacher's Craft* by Paul Chance. Lesson Design and Lesson Delivery components utilize the Louisiana Comprehensive Curriculum Guides and national standards – content specific.

Every Certification-Only secondary candidate must attend the 80 hour Teacher Readiness Training Workshop. However, a Certification-Only secondary candidate may be exempt from the workshop if she/he has proof/verification that she/he has had at least one full semester of successful full time teaching experience in a 6-12 school setting.

CERTIFICATION-ONLY PROGRAM
ALTERNATIVE PATH TO CERTIFICATION

Name of University:	**Southern University at New Orleans**
Name of College Offering the Program (e.g., College of Education, etc.):	**College of Education and Human Development**
Type of Certification & Content Area(s):	*List type of certification (e.g., Elementary Education – Grades 1-5; Secondary Education – Grades 6-12, etc.):* **Secondary Education, Grades 6-12**
	List the content area(s) for certification – if appropriate (e.g., French, Vocal Music, English, Biology, etc.): **Biology**

Directions: *Please list the course hours, prefixes, numbers, and titles that have been approved by your university for the Certification Only Alternate Program.*

Program Requirements	Semester Hours Required	Course Prefixes and Numbers	Course Titles
CLASSROOM READINESS TRAINING *(80 contact hours)*			80 Hour Classroom Readiness Training Workshop: Classroom Environment, Classroom Management, Lesson Design and Lesson Delivery
KNOWLEDGE OF THE LEARNER AND LEARNING ENVIRONMENT *(12 semester hours)*	3	EDUC 110	Introduction to Teaching
	3	EDUC 315 or EDUC 275	Diverse Learners or Multicultural Education
	3	EDSN 320	Adolescent Psychology
	3	EDUC 330	Assessment, Measurement, & Evaluation
METHODOLOGY AND TEACHING *(6 semester hours)*	3	EDSN 440	Methods/Materials for Secondary Content Areas
	3	EDSN 441	Methods/Materials for Secondary Sciences/Biology, Grades 6-12
READING COURSES *(3-9 semester hours)* *Grades PK-3: 9 semester hours* *Grades 1-5: 9 semester hours* *Grades 4-8: 6 semester hours* *Grades 6-12: 3 semester hours* *Grades K-12: 3 semester hours*	3	EDSN 350	Teaching Reading in Secondary Content Areas
INTERNSHIP OR STUDENT TEACHING *(6 semester hours)*	3 3 9	EDSN 498 EDSN 499 Or EDSN 470	Internship I and Internship II Or Student Teaching in Grades 6-12
TOTAL HOURS *(27-33 semester hours)*	27-30		

CERTIFICATION-ONLY PROGRAM
ALTERNATIVE PATH TO CERTIFICATION

Name of University:	**Southern University at New Orleans**
Name of College Offering the Program (e.g., College of Education, etc.):	**College of Education and Human Development**
Type of Certification & Content Area(s):	*List type of certification (e.g., Elementary Education – Grades 1-5; Secondary Education – Grades 6-12, etc.):* **Secondary Education, Grades 6-12**
	List the content area(s) for certification – if appropriate (e.g., French, Vocal Music, English, Biology, etc.): **English**

Directions: *Please list the course hours, prefixes, numbers, and titles that have been approved by your university for the Certification Only Alternate Program.*

Program Requirements	Semester Hours Required	Course Prefixes and Numbers	Course Titles
CLASSROOM READINESS TRAINING *(80 contact hours)*			80 Hour Classroom Readiness Training Workshop: Classroom Environment, Classroom Management, Lesson Design and Lesson Delivery
KNOWLEDGE OF THE LEARNER AND LEARNING ENVIRONMENT *(12 semester hours)*	3	EDUC 110	Introduction to Teaching
	3	EDUC 315 or EDUC 275	Diverse Learners or Multicultural Education
	3	EDSN 320	Adolescent Psychology
	3	EDUC 330	Assessment, Measurement, & Evaluation
METHODOLOGY AND TEACHING *(6 semester hours)*	3	EDSN 440	Methods/Materials for Secondary Content Areas
	3	EDSN 444	Methods/Materials for Secondary English, Grades 6-12
READING COURSES *(3-9 semester hours)* *Grades PK-3: 9 semester hours* *Grades 1-5: 9 semester hours* *Grades 4-8: 6 semester hours* *Grades 6-12: 3 semester hours* *Grades K-12: 3 semester hours*	3	EDSN 350	Teaching Reading in Secondary Content Areas
INTERNSHIP OR STUDENT TEACHING *(6 semester hours)*	3 3 9	EDSN 498 EDSN 499 Or EDSN 470	Internship I and Internship II Or Student Teaching in Grades 6-12
TOTAL HOURS *(27-33 semester hours)*	27-30		

CERTIFICATION-ONLY PROGRAM
ALTERNATIVE PATH TO CERTIFICATION

Name of University:	**Southern University at New Orleans**
Name of College Offering the Program (e.g., College of Education, etc.):	**College of Education and Human Development**
Type of Certification & Content Area(s):	*List type of certification (e.g., Elementary Education – Grades 1-5; Secondary Education – Grades 6-12, etc.):* **Secondary Education, Grades 6-12**
	List the content area(s) for certification – if appropriate (e.g., French, Vocal Music, English, Biology, etc.): **Mathematics**

Directions: *Please list the course hours, prefixes, numbers, and titles that have been approved by your university for the Certification Only Alternate Program.*

Program Requirements	Semester Hours Required	Course Prefixes and Numbers	Course Titles
CLASSROOM READINESS TRAINING *(80 contact hours)*			80 Hour Classroom Readiness Training Workshop: Classroom Environment, Classroom Management, Lesson Design and Lesson Delivery
KNOWLEDGE OF THE LEARNER AND LEARNING ENVIRONMENT *(12 semester hours)*	3	EDUC 110	Introduction to Teaching
	3	EDUC 315 or EDUC 275	Diverse Learners or Multicultural Education
	3	EDSN 320	Adolescent Psychology
	3	EDUC 330	Assessment, Measurement, & Evaluation
METHODOLOGY AND TEACHING *(6 semester hours)*	3	EDSN 440	Methods/Materials for Secondary Content Areas
	3	EDSN 442	Methods/Materials for Secondary Math, Grades 6-12
READING COURSES *(3-9 semester hours)* *Grades PK-3: 9 semester hours* *Grades 1-5: 9 semester hours* *Grades 4-8: 6 semester hours* *Grades 6-12: 3 semester hours* *Grades K-12: 3 semester hours*	3	EDSN 350	Teaching Reading in Secondary Content Areas
INTERNSHIP OR STUDENT TEACHING *(6 semester hours)*	3 3 9	EDSN 498 EDSN 499 Or EDSN 470	Internship I and Internship II Or Student Teaching in Grades 6-12
TOTAL HOURS *(27-33 semester hours)*	27-30		

CERTIFICATION-ONLY PROGRAM
ALTERNATIVE PATH TO CERTIFICATION

Name of University:	**Southern University at New Orleans**
Name of College Offering the Program (e.g., College of Education, etc.):	**College of Education and Human Development**
Type of Certification & Content Area(s):	*List type of certification (e.g., Elementary Education – Grades 1-5; Secondary Education – Grades 6-12, etc.):* **Secondary Education, Grades 6-12**
	List the content area(s) for certification – if appropriate (e.g., French, Vocal Music, English, Biology, etc.): **Social Studies**

Directions: *Please list the course hours, prefixes, numbers, and titles that have been approved by your university for the Certification Only Alternate Program.*

Program Requirements	Semester Hours Required	Course Prefixes and Numbers	Course Titles
CLASSROOM READINESS TRAINING *(80 contact hours)*			80 Hour Classroom Readiness Training Workshop: Classroom Environment, Classroom Management, Lesson Design and Lesson Delivery
KNOWLEDGE OF THE LEARNER AND LEARNING ENVIRONMENT *(12 semester hours)*	3	EDUC 110	Introduction to Teaching
	3	EDUC 315 or EDUC 275	Diverse Learners or Multicultural Education
	3	EDSN 320	Adolescent Psychology
	3	EDUC 330	Assessment, Measurement, & Evaluation
METHODOLOGY AND TEACHING *(6 semester hours)*	3	EDSN 440	Methods/Materials for Secondary Content Areas
	3	EDSN 443	Methods/Materials for Secondary Soc. Studies, Grades 6-12
READING COURSES *(3-9 semester hours)* *Grades PK-3: 9 semester hours* *Grades 1-5: 9 semester hours* *Grades 4-8: 6 semester hours* *Grades 6-12: 3 semester hours* *Grades K-12: 3 semester hours*	3	EDSN 350	Teaching Reading in Secondary Content Areas
INTERNSHIP OR STUDENT TEACHING *(6 semester hours)*	3 3 9	EDSN 498 EDSN 499 Or EDSN 470	Internship I and Internship II Or Student Teaching in Grades 6-12
TOTAL HOURS *(27-33 semester hours)*	27-30		

CERTIFICATION-ONLY PROGRAM
ALTERNATIVE PATH TO CERTIFICATION

Name of University:	**Southern University at New Orleans**
Name of College Offering the Program (e.g., College of Education, etc.):	**College of Education and Human Development**
Type of Certification & Content Area(s):	*List type of certification (e.g., Elementary Education – Grades 1-5; Secondary Education – Grades 6-12, etc.):* **All-Level K-12**
	List the content area(s) for certification – if appropriate (e.g., French, Vocal Music, English, Biology, etc.): **Art**

Directions: *Please list the course hours, prefixes, numbers, and titles that have been approved by your university for the Certification Only Alternate Program.*

Program Requirements	Semester Hours Required	Course Prefixes and Numbers	Course Titles
CLASSROOM READINESS TRAINING *(80 contact hours)*			80 Hour Classroom Readiness Training Workshop: Classroom Environment, Classroom Management, Lesson Design and Lesson Delivery
KNOWLEDGE OF THE LEARNER AND LEARNING ENVIRONMENT *(12 semester hours)*	3	EDUC 110	Introduction to Teaching
	3	EDUC 315 or EDUC 275	Diverse Learners or Multicultural Education
	3	EDSN 320	Adolescent Psychology
	3	EDUC 330	Assessment, Measurement, & Evaluation
METHODOLOGY AND TEACHING *(6 semester hours)*	3	ELED 432	Art Methods for Teaching in Elementary Schools
	3	EDSN 432	Art Methods for Teaching in Secondary Schools
READING COURSES *(3-9 semester hours)* *Grades PK-3: 9 semester hours* *Grades 1-5: 9 semester hours* *Grades 4-8: 6 semester hours* *Grades 6-12: 3 semester hours* *Grades K-12: 3 semester hours*	3	EDSN 350	Teaching Reading in Secondary Content Areas
INTERNSHIP OR STUDENT TEACHING *(6 semester hours)*	3 3 9	EDSN 498 EDSN 499 Or EDSN 470	Internship I and Internship II Or Student Teaching in Grades 6-12
TOTAL HOURS *(27-33 semester hours)*	27-30		

CERTIFICATION-ONLY PROGRAM
ALTERNATIVE PATH TO CERTIFICATION

Name of University:	**Southern University at New Orleans**
Name of College Offering the Program (e.g., College of Education, etc.):	**College of Education and Human Development**
Type of Certification & Content Area(s):	*List type of certification (e.g., Elementary Education – Grades 1-5; Secondary Education – Grades 6-12, etc.):* **All-Level K-12**
	List the content area(s) for certification – if appropriate (e.g., French, Vocal Music, English, Biology, etc.): **Health and Physical Education**

Directions: *Please list the course hours, prefixes, numbers, and titles that have been approved by your university for the Certification Only Alternate Program.*

Program Requirements	Semester Hours Required	Course Prefixes and Numbers	Course Titles
CLASSROOM READINESS TRAINING *(80 contact hours)*			80 Hour Classroom Readiness Training Workshop: Classroom Environment, Classroom Management, Lesson Design and Lesson Delivery
KNOWLEDGE OF THE LEARNER AND LEARNING ENVIRONMENT *(12 semester hours)*	3	EDUC 110	Introduction to Teaching
	3	EDUC 315 or EDUC 275	Diverse Learners or Multicultural Education
	3	EDSN 320	Adolescent Psychology
	3	EDUC 330	Assessment, Measurement, & Evaluation
METHODOLOGY AND TEACHING *(6 semester hours)*	3	ELED 431	Health/Physical Educ. Methods in Elementary Schools
	3	EDSN 431	Health/Physical Educ. Methods in Secondary Education
READING COURSES *(3-9 semester hours)* *Grades PK-3: 9 semester hours* *Grades 1-5: 9 semester hours* *Grades 4-8: 6 semester hours* *Grades 6-12: 3 semester hours* *Grades K-12: 3 semester hours*	3	EDSN 350	Teaching Reading in Secondary Content Areas
INTERNSHIP OR STUDENT TEACHING *(6 semester hours)*	3 3 9	EDSN 498 EDSN 499 Or EDSN 470	Internship I and Internship II Or Student Teaching in Grades 6-12
TOTAL HOURS *(27-33 semester hours)*	27-30		

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *ELED 432- Arts Methods for Teaching in Elementary Schools*

III. **Catalog description:** *The Art Methods for Teaching in Elementary Schools course is a requirement for students majoring in elementary education and K-12 art education. The course enables students to examine the role visual arts plays in the education of young children, and its impact on culture and child development. Studio activities for this methods course include educational theory and pedagogy, hand-on experiences with a variety of materials and techniques, and field experiences. The course also examines teaching methods appropriate for elementary classrooms with emphasis on practical aspects of program planning and classroom management. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Fifteen* (15)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents.* **See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 320- Adolescent Psychology*

III. **Catalog description:** *This course is a study of adolescents and their physiological, psychological, emotional, social and intellectual development. It is designed to explore the cognitive and affective factors that influence the learning process as well as the cultural diversity that permeates the urban setting. This course will explore growth and development for students in grades 6^{th}-12^{th}. It incorporates class discussions, simulations, independent study projects and lectures. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *None*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course.*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered:** *Sixty* (60)

XI. **Conflicts with or benefits to other academic programs:** *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 350- Teaching Reading in Secondary Content Areas*

III. **Catalog description:** *Reading in the Content Area is a required methodology course designed to assist candidates to address middle-high school students' reading and learning across grade levels and content areas, equip them with methods and techniques to support students' continued literacy development that includes concept acquisition across disciplines, reading strategies, vocabulary enhancement, and research/report writing. This course will also provide candidates with additional techniques to identify and prescribe reading instruction for students who are struggling with reading. Candidate expected outcomes are aligned with state and national standards regarding reading competencies and LCET. Twenty-five hours of field experiences are required in this course.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements.*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Thirty* (30)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 431-Health and Physical Education Methods in Secondary Education*

III. **Catalog description:** *This course provides Physical Education/Health Education majors with opportunities to study, discuss, organize, and practice instructional methods specifically for high school students. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Fifteen* (15)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regent. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 432- Arts Methods for Teaching in Secondary Schools*

III. **Catalog description:** *The Visual Arts Methods for Teaching in Secondary Schools is a required course for art education majors. It is designed to enhance aesthetic growth, increase creativity, provide effective ways to use art materials, equip candidates with visual arts pedagogy, provide a laboratory for best practices, and advance the candidates' teaching skills. Practical aspects of lesson plans, program planning, and classroom management on the secondary school level are also considered. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course.*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Fifteen* (15)

XI. **Conflicts with or benefits to other academic programs:** *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 440- Methods/Materials for Secondary Content Areas*

III. **Catalog description:** *This course is designed to develop knowledge, skills, and understandings needed to teach effectively and reflectively in a global environment. Specifically, this course develops an understanding of various learning modes, learning styles, multiple intelligence, questioning techniques, and other instructional strategies needed to engage students in the secondary classroom. In addition, this course demonstrates how to use lesson plan designs, technology, various assessment techniques, as well as strategies for ongoing professional development for teachers. Field experiences are required in this course. Candidate outcomes are aligned with national and state standards and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course.*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered:** *Sixty* (60)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 441- Methods/Materials for Secondary Sciences Grades, 6^{th}-12^{th}*

III. **Catalog description:** *This course is designed to provide investigation of current scientific knowledge, teaching strategies, and instructional materials contributing to effective teaching of science in the middle and secondary schools with a focus on teaching biological, chemical, and physical sciences. The course is based on best practices for the teaching of science and is structured using two (2) modules of instruction which will address grades 6^{th}-$12^{th.}$ Clinical field experiences are required in this course. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will be reinstituting our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *see attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course.*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Thirty* (30)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 442 – Methods/Materials for Secondary School Mathematics*

III. **Catalog description:** *This course is designed to provide candidates with theory and research-based instructional strategies and clinical experiences to teach mathematics at the secondary level. The content emphasizes mathematical conceptualization, communication, problem-solving skills, and reasoning skills necessary for effective teaching at the secondary level. Using the State Grade Level Expectations (GLEs), the Louisiana Comprehensive Curriculum (LCC), and the National Council for Teachers of Mathematics (NCTM) standards, candidates will plan, assess, and evaluate classroom learning.* ***Field experience hours are required for this course****, and should include teaching mini-lessons, tutoring individual students needing remediation in mathematics, and working with cooperative learning groups. Candidate outcomes are aligned with national and state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Thirty* (30)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 443- Methods/Materials for Secondary Social Studies, Grades 6th -12th*

III. **Catalog description:** *This course is designed to assist in the development of knowledge, skills, and understandings needed to manage and teach in secondary social studies classrooms. Specifically, this course will provide a comprehensive overview of the most effective approaches needed in planning, implementing, and assessing effective learning experiences in the secondary social studies classrooms. With the assistance, of technology, emphasis will be placed on exploring the relationship between educational theory and the development of practical teaching techniques. Field experiences must be completed during this course. Candidate outcomes are aligned with national, state standards and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements.*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course.*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Thirty* (30)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification -Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 444- Methods/Materials for Secondary English, Grades 6th -12th*

III. **Catalog description:** *This course prepares candidates for teaching English/Language Arts concepts in secondary school curricula. The course addresses appropriate instructional skills and strategies for and the appropriate cognitive/perceptual development per concept for teaching secondary students. Instruction is delivered in modules which include the necessary competencies to enhance student learning in grades 6th-12th. The course is based on best practices for teaching of English/Language arts, and utilizes the Louisiana Comprehensive Curriculum as a basis for determining scope and sequence of skills/knowledge. Candidate outcomes are aligned with national and state standards and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course.*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Thirty* (30)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 470- Student Teaching in Grades 6th-12th*

III. **Catalog description:** *This required clinical/field course is designed to provide teacher candidates with experiences in observing and teaching in a selected off-campus middles-secondary elementary school. This collaborative course will be under the direction of the university supervisor. Teacher candidates must complete a semester of Student Teaching (15 weeks), and during the course of the 15 weeks, the candidates must complete 270 hours and of the 270 hours 180 hours must be actual teaching hours. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered:** *Fifteen* (15)

XI. **Conflicts with or benefits to other academic programs:** *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 498- Internship I*

III. **Catalog description:** *This required clinical/field course is designed to provide the Certification-Only candidate with experiences in teaching in a selected off-campus middle/secondary school. This collaborative course will be under the direction of the university supervisor. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Fifteen* (15)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *EDSN 499- Internship II*

III. **Catalog description:** *This required clinical/field course is designed to provide the Certification-Only candidate with experiences in teaching in a selected off-campus middle/secondary school. This collaborative course will be under the direction of the university supervisor. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program admission requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Fifteen* (15)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

Southern University at New Orleans

New Course Proposal

I. **Department:** *College of Education and Human Development/ Certification-Only Program Alternative Path*

II. **Catalogue number/course name:** *ELED 431-Health and Physical Education Methods in the Elementary School*

III. **Catalog description:** *Focus is on teaching skills and age-appropriate curriculum in health and physical education for grades PK-6 and the integration of movement and health issues into classroom curriculum. In addition, focus will include the collaborative efforts of classroom and P.E. teachers to affect the learning of diverse students. Candidate outcomes are aligned with national, state standards, and LCET.*

IV. **Reason for Adding Course:** *Implementation of Certification-Only Program Alternative Path/Secondary Education. We will reinstitute our alternative certification secondary education program as per the request of Chancellor Victor Ukpolo, Vice Chancellor David Adegboye (Academic Affairs) and Dr. Jeanne Burns (LA Board of Regents).*

V. **Prerequisites:** *The candidate must meet Certification-Only Program requirements*

VI. **Recommended credit hours:** *Three (3)*

VII. **Signature and date of department approval:** *See attached signature sheet with date*

VIII. **Signature and date of college approval:** *See attached signature sheet with date*

IX. **New staff needed:** *Current faculty will be teaching this course*

X. **Minimum number of students expected to enroll during the first three semesters the course is offered**: *Fifteen* (15)

XI. **Conflicts with or benefits to other academic programs**: *No conflict. Benefits include increased enrollment in the CoE &HD and the University as well as provide additional students in the content areas. In addition, this course will also benefit graduates of the CDFS program who wish to obtain certification-only through the secondary program of study.*

XII. **Specific Program Requirements:** *Certification-Only Program requirements as determined by the Louisiana Board of Regents. *See attached*

B. S. in MATHEMATICS AND PHYSICS

A DEGREE PROGRAM PROPOSAL

Submitted by

THE DEPARTMENT OF NATURAL SCIENCES

COLLEGE OF ARTS & SCIENCES

SOUTHERN UNIVERSITY AT NEW ORLEANS

October, 2011

LOUISIANA BOARD OF REGENTS

GUIDELINES: REQUEST FOR AUTHORITY TO OFFER A NEW PROGRAM*

SUBMIT FIVE (5) COPIES AND ONE (1) DISK (WORDPERFECT OR WORD)

Name of Institution Submitting Proposal	Southern University at New Orleans
Specific Degree to be Awarded Upon Completion	B. S. in Mathematics & Physics
CIP Taxonomy (*From Program Classification Structure*)	
Date to be Initiated	Fall 2012
Name of Department or Academic Subdivision Responsible for the Program	Natural Science
Name, Rank, and Title of Individual Primarily Responsible for Administering the Program	Dr. Henry Efesoa-Mokosso, Dean College of Arts & Sciences
Date Approved by Governing Board	
Date Received by Louisiana Board of Regents	
Academic Affairs Committee Review	
Board Action (Nature of Action)**	
Date of Board Action	

* Information requested in these guidelines which has already been provided in the related Letter of Intent need not be presented again, unless the data given in the letter of intent has changed in the interim period between submittal of the letter and submittal of the full proposal.

** Prior to final action by the Board of Regents, no institution shall initiate or publicize a new program.

TABLE OF CONTENTS

Proposal for B.S. in Mathematics and Physics

1. Description

a. **Bachelor of Science (B.S.) in Mathematics and Physics**, Department of Natural Sciences, Southern University at New Orleans, New Orleans, LA

A Bachelor of Science (B.S.) in Mathematics and Physics is being proposed by Southern University at New Orleans (SUNO). The goals of this new degree program are to strengthen the existing mathematics program, increase opportunities for new majors, and to better prepare the students for graduate schools. Upon successful completion of all requirements of the program, students will be awarded a B.S. in Mathematics, **OR** B.S. in Physics, **OR** B.S. in Mathematics and Physics (double major). The implementation of this program is expected to commence at the beginning of the fall of 2012. Additional details on the implementation are provided below on student advisement.

b. List and describe the program curriculum (i.e., required courses), in sequence or term by term. Indicate new courses by an asterisk (*). Include any special requirements (internships, comprehensive examination, thesis, dissertation, etc.).

Common Core Courses Required for the B.S. in Mathematics or B. S. in Physics

(Total Number of Credits: 66)

Course Number	Title	Credits
JRDV 111	College Survival Skills	1
JRDV 111A	Freshman Assembly	0
ENGL 111	English composition I	3
ENGL 112	English composition II	3
FIAR 101 or MUSC 101	Introduction to Art or Music	3
HIST 210 or 220	The United States to 1865/since 1865	3
HUMA 310 or 311 or 312 or 314	Humanities	3
MGIS 164	Introduction to Information Processing	3
MGIS 200	Structured Programming	3
POLI 110	American Government	3
BIOL 124 or CHEM 111	General Biology or General Chemistry(Lecture)	3
BIOL 124 L or CHEM 111L	General Biology or General Chemistry Laboratory	2
MATH 161	Pre-Calculus	3
MATH 162	Trigonometry	3
MATH 290	Calculus I	4
MATH 291	Calculus II	4

MATH 292	Calculus III	3
MATH 350	Mathematical Statistics	3
MATH 360	Linear Algebra	3
MATH 390	Elementary Differential Equations	3
PHYS 211	General Physics I (Lecture)	3
PHYS 211 L	General Physics I Laboratory	2
PHYS 222	General Physics II (Lecture)	3
PHYS 222 L	General Physics II Laboratory	2
TOTAL COMMON CORE CREDITS		**66**

Required Additional Courses for the Concentration in Mathematics

Mathematics Concentration (19 credits)

Course Number	Title	Credits
MATH 100	Intro. to Mathematics	1
MATH 296	Fundamentals of Mathematics	3
MATH 340	Modern Algebra	3
MATH 400	Mathematics Seminar	3
MATH 402	Real Analysis	3
MATH 403	Computer Application	3
MATH 460	Complex Variables	3

Total: 19 credits

Required Elective Courses (6 credits)

A student with concentration in Mathematics is required to take at least two courses from the following block

Course Number	Title	Credits
MATH 392	Numerical Analysis	3
MATH 395	Mathematical Modeling	3
MATH 397	Introduction to Modern Geometry	3
MATH 401	Advanced Calculus	3
MATH 450	Special Topics	3
MATH 455	Elementary Number Theory	3
MATH 470	Introduction to General Topology	3

Total Required: 6 credits

Other Required Courses (30 credits)

ECON 211	Economics Principles I	3
ENGL 260	Technical Writing	3
	General Electives (6 courses)	18
	Foreign Language (Spanish or French)	6

Total: 30 credits

Total credits required for B. S. Mathematics: 121 credits

Required Additional Courses for the Concentration in Physics

Physics Concentration (28 credits)

Course Number	Title	Credits
PHYS 321	Electronics	3
PHYS 331	Electricity & Magnetism	4
PHYS 332	Wave Phenomena	4
PHYS 441	Theoretical Mechanics	4
PHYS 442	Thermodynamics	4
PHYS 451	Modern Physics	3
PHYS 460	Quantum Mechanics	3
PHYS 490	Research	3
		Total: 28 credits

Required Elective Courses (6 credits)

A student with concentration in Physics is required to take at least two courses from the following block

Number	Title	Credits
PHYS 361	Experimental Methods	3
PHYS 440	Statics	3
PHYS 452	Nuclear Physics	3
PHYS 491	Physics Seminar	3
PHYS 492	Special Topics	3
		Total: 6 credits

Other Required Courses (20 credits)

ECON 211	Economics Principles I	3
ENGL 260	Technical Writing	3
CHEM 111	General Chemistry I	3
CHEM 111 L	General Chemistry I Laboratory	2
	General Electives (3 courses)	9
		Total: 20 credits

Total credits required for B.S. Physics: 120 credits

Curriculum in Mathematics

FRESHMAN YEAR

Course	Hrs. Credit	Course	Hrs. Credit
JRDV 111 (College Survival Skills)	1	MGIS164 (Intro. to Information Processing)	3
JRDV 111A (Freshman Assembly)	0	MATH 100 (Intro. To Mathematics)	1
ENGL 111 (English Composition I)	3	ENGL 112 (English Composition II)	3
MATH 161 (Pre-Calculus)	3	MATH 162 (Trigonometry)	3
BIOL 124 & 124L or CHEM 111 & 111L	5	POLI 110 (American Government	3
FIAR or MUSC 101	3	Elective	3
	15		16

SOPHOMORE YEAR

PHYS 211 & 211L (General Physics 1)	5	PHYS 222 & 222L (General Physics II)	5
MATH 290 (Calculus I)	4	MATH 291 (Calculus II)	4
MGIS 200 (Structured Programming)	3	MATH 340 (Modern Algebra)	3
ECON 211 (Economics Principles I)	3	ENGL 270 (Global Literature)	3
	15		15

JUNIOR YEAR

MATH 292 (Calculus III)	3	MATH 390 (Differential Equations)	3
MATH 296 (Fund. Of Math)	3	MATH 360 (Linear Algebra)	3
MATH 350 (Math Stat.)	3	Elective	3
Elective	3	HUMA (Humanities 310 or 311 or 312 or 314)	3
Elem. Spanish 101	3	Elem. Spanish 102	3
	15		15

SENIOR YEAR

MATH 402 (Real Analysis)	3	MATH 400 (Math Seminar)	3
MATH 403 (Computer Application)	3	MATH 460 (Complex)	3
MATH Elective	3	MATH Elective	3
Elective	3	Elective	3
HIST 210 or 220 (U. S. History)	3	Elective	3
	15		15

Total: 121 Credit Hours

Curriculum in Physics

FRESHMAN YEAR

Course	Hrs. Credit	Course	Hrs. Credit
JRDV 111 (College Survival Skills)	1	CMIS 164 (Intro. to Info. Processing)	3
JRDV 111A (Freshman Assembly)	0	POLI 110 (American Government)	3
ENGL 111 (English Composition I)	3	ENGL 112 (English Composition II)	3
MATH 161 (Pre-Calculus)	3	MATH 162 (Trigonometry)	3
BIOL 124 & 124L (General Biology I)	5	CHEM 111 & 111L (General Chemistry)	5
FIAR or MUSC 101	3		
	15		17

SOPHOMORE YEAR

PHYS 211 & 211L (General Physics I)	5	PHYS 222 & 222L (General Physics II)	5
MATH 290 (Calculus I)	4	MATH 291 (Calculus II)	4
MATH 350 (Mathematical Statistics)	3	ENGL 260 (Professional & Technical Writing)	3
MGIS 200 (Structured Programming)	3	Elective	3
	15		1 5

JUNIOR YEAR

PHYS 331 (Electricity & Magnetism)	4	PHYS 332 (Wave Phenomena)	4
PHYS 321 (Electronics)	3	PHYS 451 (Modern Physics)	3
MATH 292 (Calculus III)	3	MATH 360 (Linear Algebra)	3
Elective	3	MATH 390 (Differential Equations)	3
PSYC 210 (General Psychology)	3	HUMA (Humanities 310 or 311 or 312 or 314)	3
	16		16

SENIOR YEAR

PHYS 441 (Theoretical Mechanics)	4	PHYS 442 (Thermodynamics)	4
PHYS 490 (Research)	3	PHYS 460 (Quantum Mechanics)	3
Physics Elective	3	Physics Elective	3
HIST 210 or 220 (U.S. History)	3	Elective	3
	13		13

Total: 120 Credit Hours

MATHEMATICS COURSE DESCRIPTIONS

MATH 095 INTRODUCTORY MATHEMATICS 3 no credit hours

This is a skill-building course for freshmen designed as a preparatory approach to algebra. A general overview of basic Mathematics is included to strengthen the student's background of fundamentals. Topics include: order of operations, factoring, polynomials, equations solving and problem solving.

MATH 100 INTRODUCTION TO MATHEMATICS 1 credit hour

The course will provide an introduction to the mathematics field and training in the presentation and discussion of current mathematical problems, time management, and study skills. Invited guests will speak on trends in mathematics, and the requirements for graduate and professional careers. The course is designed for freshmen and sophomore students who intend to major in Mathematics. The course is offered each semester.

MATH 118 COLLEGE MATHEMATICS 3 no credit hours

This course is a study of the fundamental concepts of the real number system, sets, integers, exponents, rational expressions, radicals, roots, polynomials, linear equations and inequalities, and applications. This course serves as prerequisite to either MATH 151 or MATH 161, according to major but it does not count towards fulfillment of degree requirements. (Prerequisite: MATH 095 or ACT score of 15-18)

MATH 151 COLLEGE ALGEBRA 3 credit hours

This course is designed for students, who are not required to take calculus. It is a study of real numbers, equations, inequalities, linear, quadratic, polynomial, exponential, and logarithmic functions and their graphs. Emphasis is placed on applications of algebra in natural sciences and social sciences. A graphing calculator is required. (Prerequisite: MATH 118 or ACT score of 19 and above)

MATH 161 PRE-CALCULUS 3 credit hours

This is a course designed for students anticipating enrollment in calculus. It is a study of real numbers and their properties, operations with complex numbers, equations, inequalities, polynomials, rational, exponential, logarithmic functions and their graphs. Emphasis is placed on applications of algebra in natural sciences and social sciences. A graphing calculator is required. (Prerequisite: MATH 118 or ACT score of 21 or better)

MATH 162 TRIGONOMETRY 3 credit hours

This course is a study of trigonometry of right and oblique triangles with applications, trigonometry functions of general angles and their graphs, and trigonometric identities and equations. (Prerequisites: MATH 161)

MATH 210 MATHEMATICS FOR TEACHERS 3 credit hours

This course is a study of number properties, operations, computation, geometric properties and relationships, data collection and organization. Emphasis will be placed on estimation, exploration, and problem solving. (Prerequisites: MATH 151 or MATH 161)

MATH 220 COLLEGE GEOMETRY 3 credit hours

This course is a study of sets of points, line segments, congruence, linear and angular measure, area and volume, similarity, Pythagorean Theorem, and coordinates geometry. It is an introduction to trigonometry and spherical geometry taught from an informal standpoint to develop geometric intuition and insight. (Prerequisites: MATH 210)

MATH 232 FINITE MATHEMATICS 3 credit hours

This course is a study of sets and logic, Boolean algebra, linear programming, vectors, matrices and probability with applications to biological and social sciences. (Prerequisite: MATH 151 or MATH 161).

MATH 250 ELEMENTARY STATISTICS 3 credit hours

This course includes the study of graphical representation, measures of central tendency, and dispersion the normal curve, correlation, testing hypotheses, and probability. It is recommended for majors in the fields of biology, mathematics, social sciences, education and business. (Prerequisites: MATH 151 or 161).

MATH 290 CALCULUS I 4 credit hours

This course is a study of functions, limits, continuity, differentiation, derivatives, graphs, tangents, extreme values, differentials, mean value theorems, and anti-derivatives. (Prerequisites: MATH 161 and 162).

MATH 291 CALCULUS II 4 credit hours

This course is a study of trigonometric, exponential and logarithmic functions, anti-derivatives and integration; curves, curvature and curvilinear motion; Taylor's theorem; application of integration and sequences. (Prerequisite: MATH 290).

MATH 292 CALCULUS III 3 credit hours

This course is a study of Taylor's theorem; series, applications, differentiation and integration of functions of several variables. It is an introduction to ordinary differential equations. (Prerequisite: MATH 291).

MATH 296 Fundamentals of Mathematics, 3 credit hours

This course is a study of proof techniques needed for more rigorous levels of mathematics logic and proofs, set theory, relations, functions, and concepts of analysis. (Prerequisite: MATH 291)

MATH 340 INTRODUCTION TO MODERN ALGEBRA 3 credit hours

This course is a study of sets, groups, rings, integral domains, fields and polynomial rings. (Prerequisites: MATH 290 and consent of instructor).

MATH 350 MATHEMATICAL STATISTICS 3 credit hours

This course is a study of probability, measures of central tendency and generating functions and distributions of statistical inference. (Prerequisites: MATH 250 and 291).

MATH 360 LINEAR ALGEBRA AND MATRICES 3 credit hours

This course is a study of Vector spaces, matrices, linear transformations, determinants and linear equations. Selected topics of eigen value, canonical forms, inner product spaces, bilinear and quadratic forms. (Prerequisite: MATH 290).

MATH 390 ELEMENTARY DIFFERENTIAL EQUATIONS 3 credit hours

This course is a study of equations of first order and higher order differential equations, general linear equations, the method of successive. (Prerequisite: MATH 291)

MATH 392 NUMERICAL ANALYSIS 3 credit hours

This course is a study of interpolation, least squares theory, and harmonic analysis, numerical solutions of ordinary differential equations, and approximations through Fourier series. (Prerequisite: MATH 291)

MATH 395 MATHEMATICAL MODELING, 3 credit hours

This course is intended to introduce students how to apply mathematics to construct, build and analyze models arising in various areas of application in the physical, biological and social sciences. Methods of modeling covered will include linearization, optimization, probability, and differential equations. (Prerequisite: MATH 250, 291, and 390.)

MATH 397 INTRODUCTION TO MODERN GEOMETRY. 3 credit hours

Calculus in Euclidean space; frame fields; geometry of surfaces and curves in R^3; concepts in advanced Euclidean, projective, and non-Euclidean geometry. (Prerequisite: 292 and 360.)

MATH 400 MATHEMATICS SEMINAR 3 credit hours

This course comprises research in algebra, analysis, geometry, or applied mathematics, involving individual projects. (Prerequisite: MATH 291)

MATH 401 ADVANCED CALCULUS

This course includes advanced topics of calculus including vectors and vector calculus, linear approximations of vector valued functions, line integrals, surface integrals, theorems of Green's and Stoker's divergence theorem. (Prerequisite: MATH 292)

MATH 402 REAL ANALYSIS 3 credit hours

This course includes topics on limits, continuity limit superior and limit inferior, metric spaces, open and closed sets, Heine-Borel theorems. (Prerequisite: MATH 292)

MATH 403 COMPUTER SOFTWARE APPLICATION IN MATHEMATICS 3 credit hours

This course includes problem solving in Mathematics using appropriate contemporary software such as MATHCAD, MATHLAB, MAPLE, SPSS, Scientific Place, Mathematics, and Microsoft Excel. Problems solved will include, but not limited to, Algebra, Calculus, Linear Algebra, Statistics, and Mathematical Modeling. (Prerequisite: Consent of the instructor)

MATH 450 SPECIAL TOPICS 3 credit hours

This course is designed to deal with a topic(s) selected from such fields of mathematics as: Algebra, Analysis, Probability, and Mathematical Logic at each offering. (Prerequisite: Consent of the instructor)

MATH 455 ELEMENTARY NUMBER THEORY 3 credit hours

This course is an introductory study of number theory. Topics include Divisibility, Congruencies, Quadratic Reciprocity, Numerical Functions, Diophantine Equations, simple continued fractions, and indices. (Prerequisite: Consent of the instructor)

MATH 460 COMPLEX VARIABLES 3 credit hours

This course is an introduction to complex analysis for students interested in applied mathematics and physical sciences. The fundamentals and the applications of analytical function theory are studied. (Prerequisite: Consent of instructor)

MATH 470 INTRODUCTION TO GENERAL TOPOLOGY 3 credit hours

Set theory; abstract topological spaces; relative topology and subspaces; continuous functions; metric and normed spaces; product spaces; quotient spaces; compactness and connectedness; separation axioms. (Prerequisite: Math 292 and 295.)

PHYSICS COURSE DESCRIPTIONS

PHYS101 PHYSICAL SCIENCE I 3 credit hours

This course is a survey of topics in astronomy, physics, chemistry and geology, designed for students with no previous background in physics or chemistry. It is a general survey course for anyone interested in learning the methods and applications of the physical sciences.

PHYS 101L PHYSICAL SCIENCE I LABORATORY 1 credit hour

This course includes: two hours of laboratory, covering simple experiments; measurements of area, volume, density, specific heat, molecular size, etc. (Prerequisite: Phys 101)

PHYS102 PHYSICAL SCIENCE II 3 credit hours

This course is a continuation of PHYS 101 with special emphasis on astronomy and geology. It is a general survey course for anyone interested in learning the methods and applications for the physical sciences. (Prerequisite: Phys 101)

PHYS 103 INTRODUCTORY PHYSICS I 3 credit hours

A first semester introductory physics course to satisfy general education requirements for students. Topics include mechanics, heat and classical physics.

PHYS 103L INTRODUCTORY PHYSICS I LABORATOR 1 credit hour

This course includes two hours of laboratory consisting of elementary experiments, demonstrations, films and problem solving to accompany PHYS 103 Lecture.

PHYS 104 INTRODUCTORY PHYSICS II 3 credit hours

A second semester introductory physics course to satisfy general education requirements. Topics include electricity, magnetism, light and modern physics with emphasis on applications. (Prerequisites: PHYS 103 and 103L)

PHYS 104L INTRODUCTORY PHYSICS II LABORATORY 1 credit hour
This course includes two hours of laboratory consisting of elementary experiments, demonstrations, films, and problem solving to accompany Physics 104 lecture. (Prerequisites: PHYS 103 and 103L)

PHYS 131 GEOL – EARTH SCIENCE 3 credit hours
This course focuses on: (a) the study of the Earth, the Solar System, and the Universe, (b) the study of the earth's structure, composition, and properties of materials that constitute the surface layers, (c) survey of rocks, maps, and fossils used to understand the history of earth and life, (d) emphasis is placed on processes responsible for changes in the earth's crust such as earthquakes, volcanoes, and plate tectonics. (Prerequisite: MATH 151 or 161)

PHYS 131L GEOL – EARTH-SCIENCE LABORATORY 1 credit hour
A series of activities to aid students in understanding geological materials and processes. (Co-requisite: GEOL 131).

PHYS 150 PHYS – SPACE SCIENCE 3 credit hours

This course focuses on: (a) theories of the origin of the Universe, Novas and Super Novas, (b) birth, life and death of stars, black holes, galaxies, quasars, and pulsars, (c) special relativity, (d) elements found in the sun and other planets, (e) laws of motion for orbiting bodies, and (f) current space exploration. (Prerequisite: MATH 151 or MATH 161)

PHYS 211 GENERAL PHYSICS I 3 credit hours

This is a study of translational and rotational motion, Newton's law of motion, conservation of energy and momentum, physical properties of matter, principles of thermodynamics. This course is designed for science and engineering majors and introduces basic calculus techniques. (Prerequisites: MATH 161, 162, 290)

PHYS 211L GENERAL PHYSICS I LABORATORY 2 credit hours

The laboratory class meets two times per week and several experiments in mechanics, heat, and optics are performed. Experimental errors and methods of data analysis are emphasized. (Co-requisite: PHYS 211)

PHYS 222 GENERAL PHYSICS II 3 credit hours

This is a continuation of topics from Physics 211. Geometrical optics, waves, electric and magnetic forces, circuits, relativity and atoms, and radioactivity are emphasized. (Prerequisites: PHYS 211 and 211L or equivalent)

PHYS 222L GENERAL PHYSICS II LABORATORY 2 credit hours

This class meets for four hours of laboratory per week to perform experiments related to Physics topics in 222. (Co-requisite: Phys 222, Prerequisites: Phys 211L)

PHYS 321 ELECTRONICS 3 credit hours

Topics include DC and AC circuit analysis, power supplies, amplifiers, oscillators, etc. Transistor circuits are also emphasized. Design and application of measuring instruments are included. (Prerequisites: PHYS 222 and 222L and consent of department)

PHYS 331 ELECTRICITY AND MAGNETISM 4 credit hours

This course includes: Differential and Integral Calculus of vector fields; Maxwell's equations; Gauss's Law, superposition; dipole approximation; method of images; functions of the complex variable; methods for finding the electric potential energy; dielectrics; cavities; electrostatic analogs; magnetostatics; the vector potential; inductance, and relativity. (Prerequisites: PHYS 222 and 222L and consent of department)

PHYS 332 WAVE PHENOMENA 4 credit hours

This is a study of waves on a string, acoustic plane waves and electro-magnetic waves; wave equations and boundary value problems; Maxwell's equations, polarization, and interference; Fraunhofer and Fresnel diffraction, multiple slits; and normal modes expansion of a pulse. (Prerequisite: PHYS 222 and -222L and consent of department)

PHYS 361 EXPERIMENTAL METHODS 3 credit hours

This course provides a study of the methods of experimental physics; experiment design, error analysis, curve fitting, calibration techniques, etc. Projects in classical and modern physics are assigned. (Prerequisites: PHYS 222, 222L and consent of department)

PHYS 440 STATICS 3 credit hours

This course is the study of Vectors, two-dimensional and three-dimensional force systems, equilibrium friction, centroids, mass moments of inertia, and second moments of area. (Prerequisites: PHYS 211 and consent of department)

PHYS 441 THEORETICAL MECHANICS 4 credit hours

This course is a study of statics, dynamics of particles and rigid bodies; Virtual work, equilibrium, orbits, oscillations, moments and products of inertia; center of mass, coordinate transformations, Lagrange's Equations; and Hamiltonian. (Prerequisites: PHYS 222 and 222L).

PHYS 442 THERMODYNAMICS AND STATISTICAL MECHANICS 4 credit hours

This course is a study of Thermodynamic equilibrium, temperature, work, heat, equations of state kinetic theory, Maxwellian distribution, equiparation of energy, Zeroth; first, second, and third laws of Thermodynamics; entropy, statistical mechanical, partition function, Maxwell's equation, TdS equations, enthalpy, Helmholtz and Gibbs functions; phase transitions, Radiation Laws of Wien, Stefan-Bolzmann, and Planck. (Prerequisite: PHYS 222, 222L and consent of department)

PHYS 451 MODERN PHYSICS 3 credit hours

This course covers the more recent developments in Physics. The topics include special relativity, the structure of atoms, energy levels, Quantum numbers, X-rays; introduction to Quantum theory, Schrodinger equation, its solution; first order perturbation theory and applications to atomic Spectroscopy. (Prerequisites: PHYS 222, 222L and consent of department)

PHYS 452 NUCLEAR PHYSICS 3 credit hours

This course is a study of the nucleus of the atom, including nuclear processes, decay schemes, sub-atomic particles, nuclear reactions, radioactive decay, neutron cross-section; fission, theory of chain reactions; discussion of various models; binding energy, principles of nuclear reactors; and application of nuclear energy and radio-isotopes in industry and medicine. (Prerequisite: PHYS 451)

PHYS 460 QUANTUM MECHANICS 3 credit hours

Topics: Schrodinger equation to solve one dimensional potential problems and hydrogenic atoms. Operator Algebra, Atomic Spectra, Perturbation Theory, Angular Momentum, and Scattering Theory. (Prerequisites: PHYS 451, 452 and MATH 460)

PHYS 490 RESEARCH 1-6 credit hours

This is a course in student-oriented research in Physics under the guidance of a faculty member. A group comprised of Physics students and Physics faculty meets at regular intervals during the semester to discuss progress reports. Physics majors must formally present an approved paper at the end of research work. (Prerequisite: Consent of department)

PHYS 491 PHYSICS SEMINAR 3 credit hours

This course includes discussions in advanced and intermediate undergraduate physics determined by individual needs and interests and emphasis on preparation for further work, either in research environments or in academic pursuits. (Prerequisite: Consent of department)

PHYS 492 SPECIAL TOPICS 3 credit hours

This is a course comprising topics in advanced and intermediate undergraduate physics selected according to the needs and interests of the students and instructor. Topics in modern physics are emphasized. (Prerequisite: Consent of department)

c. Describe how the proposed program will be offered, e.g., traditionally, online, via interactive video, hybrid, etc. Discuss possibilities for a cooperative program, cross-enrollment options, or other manners of sharing/extending resources and access.

The proposed program will be offered in a traditional way in the Department of Natural Sciences at Southern University at New Orleans. Some of the courses in mathematics (MATH 151, 161, 210, 232, 250) and physics (PHYS 101, 102) are being offered on-line to facilitate students' enrollment in classes that are required for non-science and science majors. During any semester, if courses are not offered and are not available on SUNO campus for students, they are allowed to cross enroll in equivalent courses on other campuses with prior approval of student's academic advisor and the departmental chairperson. Upon successful completion of cross enrolled classes credits will be transferred to student's transcripts at SUNO.

Over the years, SUNO established Articulation Agreements with Delgado Community College and Nunez Community College to attract students in to STEM fields after their successful completion of Associate Degrees. Once students come to SUNO they will be advised to complete a four year college degree in the area of Mathematics and Physics, based on their future academic and or career goals. Specifically, articulation agreements between aforementioned campuses and SUNO have been enhancing STEM majors' enrollment at SUNO. This will continue to boost STEM student retention and graduation rates at SUNO, once we implement the proposed BS Biology and Chemistry Program beginning fall 2012, pending approval.

d. Furnish documentation of the approval of the proposed program by the institution's Governing Board.

Please see Appendix II that confirms proposal approval by SUNO Curriculum Committee. The proposal will be submitted directly to the Board of Regents by the Office of the Southern University System (SUS) following Board approval. The documents from the SUS office will confirm Governing Board approval.

2. Need

a. Describe how the proposed program fits within the institution's existing role, scope and mission.

This proposed program fits well within the institution's existing role, scope, and mission by creating and maintaining an environment conducive to learning and growth, promoting the upward mobility of students by preparing them to enter into new as well as traditional careers, and equipping them to function optimally in the mainstream of American society.

Goal one of the Strategic Plan is about access to higher education. This proposal supports that.

a. Has the proposed program, or a similar one, been offered at the institution previously? (If yes, give reasons for the termination of the earlier program.)

The B. S. Mathematics program is currently being offered. The B.S. Physics program was terminated in Spring 2006 as a low completer program.

b. List similar programs offered at other institutions (public and private) in Louisiana. If a graduate program is requested, indicate similar programs in neighboring states.

We are not aware of any similar programs being offered at other public institutions in Louisiana.

c. If similar programs exist in Louisiana, why is an additional program needed? Indicate manpower needs, including interest on the part of industry, academia, governmental agencies, or other institutions.

N/A

d. If a graduate program is requested, indicate:
   i. State, regional, and national need in the field for more graduates. Cite any pertinent studies or national and state trends.
   ii. Are there possibilities for cooperative programs?

N/A

e. If this program is approved, will its approval result in the termination or phasing out of existing programs? That is, could this program be considered a replacement program?

Yes, students in the current B.S. Mathematics program will be asked to continue under the proposed program.

f. Describe how the proposed program will further the mission of the institution and support initiatives identified in the Board of Regents' Master Plan for Public Postsecondary Education in Louisiana: 2011.

The proposed program will enhance the quality of STEM education at SUNO by providing better educational opportunities and scholarship for students; provide opportunities for students and faculty to expose to several scientific peers via participation at the local, regional, and national scientific meetings/conferences; enhance the net working capabilities/opportunities for STEM students to explore and pursue advance degrees in the STEM fields; to name a few, which will align with the overall goals and objectives of Board of Regents' Master Plan for Public Postsecondary Education in Louisiana: 2011 (Goal 1:

Objectives 1.3, 1.4, 1.6, and 1.7; Goal 2: Objective 2.2; and Goal 3: Objectives 3.1 and 3.5).

Furthermore, SUNO will be able to resume 3+2 Physics/Engineering degree agreement it had with UNO which was abandoned when the B.S. Physics was eliminated in Spring 2006. The institution will thus be additionally equipped to support manpower needs of the state of Louisiana.

3. Students

a. Project the enrollment and estimate the number of graduates expected for the proposed program for the first five years by level of student and with a justification for the projections.

Projection for Enrollment and Graduation

Academic Year	Enrollment	Graduation
2012/2013	36	3
2013/2014	40	5
2014/2015	45	6
2015/2016	50	7
2016/2017	55	10

Justification

After Katrina, we lost both the BS Mathematics and BS Physics programs due to low completers. The BS Mathematics program was reinstated in fall 2008. By offering the BS Mathematics and Physics program, we make a conservative projection as indicated in the table above. Similarly, we expect to graduate 31 students during the first five years of the proposed program. Subsequently, we expect the number of graduates to be at least ten per year.

b. Indicate the source of students from existing programs or students who might not otherwise be attracted to the institution.

The main reason why proposed program is expected to succeed is that Mathematics and Physics have a lot in common and as such we use the implementation of the proposed program to generate a much needed synergy that will propel our enrollment, retention, and graduation to new heights. Additionally, the implementation of the new admission requirement will help us to attract more competitive students in Mathematics and Physics. The design of this new program is expected to enable its graduates to be strengthened and well rounded in their disciplines. This should bode well for their ability to access more

opportunities in the workforce and graduate schools. We will continue to attract external funding, such as LS-LAMP and NSF HBCU-UP grants, to support the type of programs and activities that will enable our students to succeed. The 3+2 Physics/Engineering agreement is expected to attract freshmen into the proposed program at SUNO. They will graduate with B.S. Physics at SUNO, and with a B.S. Engineering at UNO according to the agreement which was not cancelled even after SUNO's Physics was eliminated.

c. What preparation will be necessary for student to enter the program?

Students must meet all the university admission requirements such as:

Applicants for admission should submit their applications by July 1 for Fall, December 1 for Spring, or May 1 for the Summer Session. An application for admission may be completed online at www.suno.edu or may be requested from the Office of Recruitment, Admissions and Retention, Southern University at New Orleans, 6400 Press Drive, New Orleans, LA 70126. SUNO's admission criteria are outlined below. The Core Curriculum prepares students very well for college-level English and Mathematics that are critical to succeed in the proposed program.

FRESHMAN ADMISSION

Only traditional high school graduates and non-traditional students (students who have completed the General Educational Development (GED) test; home schooled; and other students certified by appropriate state agencies as high school graduate and/or its equivalency) are eligible for admission. All first-time college students must satisfy the following criteria for admission:

- Completion of the Louisiana Board of Regents high school core curriculum (also TOPS core curriculum); **AND**
- Requirement of no more than one remedial course for immediate admission; **AND**
- High school GPA of 2.0 or greater; **OR**
- ACT composite score of 20 (SAT 950) or greater; **OR**
- High school graduation rank top 50% of class.

First-time college students, who graduate from out-of-state schools or are home schooled, must meet one of the following minimum admissions criteria:

Criteria 1
- Completion of Louisiana Board of Regents' high school core curriculum: **AND**
- Minimum ACT English score of 18 and Math score of 19 (SAT verbal score of 450 or SAT Math score of 460-470); **AND**
- Minimum high school GPA of 2.0 on a 4.0 scale; **OR**
- Minimum composite ACT score of 20 (SAT score of 950); **OR**
- Rank in the top 50% of the high school graduating class.

Criteria 2
• Minimum composite ACT score of 20 (SAT score of 950); **AND**
• Minimum ACT English score of 18 and Math score of 19 (SAT verbal score of 450 or SAT Math score of 460-470); **AND**
• Minimum high school GPA of 2.0 on a 4.0 scale; **AND**
• Rank in the upper 50 percent of the high school graduating class; **AND**
• No more than one developmental course is required.

Criteria 3
• Minimum composite ACT score of 23 (STE score of 1060); **AND**
• Minimum ACT English score of 18 and Math score of 19 (SAT verbal score of 450 or SAT Math score of 460-470); **AND**
• No more than one development course required.

d. Provide enrollment data for closely related programs currently offered at the institution. If the proposed program is an expansion of an existing program, give the past four years' enrollments in existing programs by level, and number of degrees granted.

Existing Degree Program:	**ENROLLMENT Data:**		
	2007-2008	2008-2009	2009-2010
BS in Mathematics	20	30	40
BS in Physics	5	0	0

Existing Degree Program:	**COMPLETER Data:**		
	2007-2008	2008-2009	2009-2010
BS in Mathematics	2	0	3
BS in Physics	1	0	0

e. If a graduate program is requested, indicate sources of financial support for students.

N/A

4. Faculty

a. List the present faculty members who will be most directly involved in the proposed program. Indicate for each faculty member: name; date of appointment; present rank; degrees (by field) and the institutions granting them; present credits, contact hours, and student credit hours produced; and other assignments.

Name	Date of Appointment	Rank	Degree	Degree Granting Institution	Contact Hours	Student Credit Hours Produced
Joe Omojola*	1998	Professor	PhD	U of Arizona	12	360
Penney Heath	1996	Associate Professor	PhD	UNO	12	360
Heon Kim	2008	Assistant Professor	PhD	LSU	12	360
Tchavdar Marinov	2008	Assistant Professor	PhD	ULL	12	360
Cynthia Singleton	1996	Associate Professor	PhD	SUBR	12	360
Delin Tan	2008	Assistant Professor	PhD	New York State U-Stonybrook	12	360
Zheng Chen	2007	Assistant Professor	PhD	Florida State U	12	360
Mostafa Elaasar	1997	Professor	PhD	Kent State U	6**	180
Rachid Belmasrour	2011	Assistant Professor	PhD	UNO	12	360

*Teaches Mathematics and Physics

** Chair of Department

Faculty curriculum vitae are attached as Appendix I.

b. Calculate the present student-faculty ratio in the subject matter field or department in which the proposed program will be offered. The basis for this calculation should be full-time equivalent students and faculty and should be computed based on all students taught rather than the student majors or other related groupings.

Currently, we have 20:1 (on average) student: faculty ratio across the classes we teach in the Department of Natural Sciences at SUNO.

c. Project the number of new faculty members needed to initiate the proposed program for each of the first five years. If the proposed program will be absorbed in whole or part by present faculty, explain how this will be done.

One additional faculty in physics will be needed to meet the demands of new students that will be in the physics concentration.

d. Explain if recruiting new faculty members will require an unusual outlay of funds or unique techniques. For example, will a special chair of instruction be required to attract a nationally recognized person?

No special chair of instruction is required. The one additional faculty required will increase the existing budget by $44,500 basic salary plus $15,797 fringe (35.5%).

e. Describe involvement of faculty, present and projected, in research, extension and other activities and the relationship of these activities to the teaching load.

Involvement of faculty in undergraduate research plays a pivotal role in nurturing, mentoring, and molding students appropriately to enable and achieve the fullest of their potential in the fields of STEM. Approximately 75% of mathematics faculty members are actively involved in undergraduate research. Teaching loads are one of the major reasons why STEM faculty members are not more involved in research and mentoring. We are planning to implement release time for faculty on an annual rotation basis to dedicate their time to secure external funding involving students in active research, present research results at the local, regional, and or national conferences, and to publish research findings in peer reviewed scientific journals. This approach will enhance further the quality of education at SUNO in STEM fields.

f. If a graduate program is requested, indicate:

i. For present faculty, areas of specialized competence related to the new program. (List publications and their nature as well as direction of theses and dissertations.)

ii. For proposed new faculty, qualifications and/or strengths needed.

N/A

5. Library and Other Special Resources

a. Are present library holdings in related fields adequate to initiate the proposed program?

Yes. Funding from the National Science Foundation and donations from other institutions have enabled us to have adequate library holdings for mathematics and physics.

b. Will the library holdings need to be expanded and improved to meet program needs of the program in the first five years? If so, what types will be needed: books, periodicals, reference books, primary source materials, etc.?

Yes. We need at least some of the important scientific journals/periodicals in the areas of STEM to enhance the quality of education for our students.

c. Do other institutions have library resources being used or available to faculty and students for the proposed program?

Yes, library resources at UNO, Tulane University, Loyola University, Dillard University, and Xavier University are available to SUNO faculty and students. SUNO is a member of LOUIS and LALINC consortia that have strong inter-institutional loan agreement.

d. Indicate or estimate total expenditure for the last two completed fiscal years in library acquisitions for the subject matter fields or departments in which the proposed program will be offered, or which are related to it.

An estimated $2,000 was spent on Mathematics acquisitions and approximately $500 on Physics acquisitions. The expenditure is expected to increase proportionately as the proposed program develops.

e. Project library expenditures needed for the first five years of the proposed program.

Approximately $40,000 is needed to procure some important journals, mathematics and physics abstracts, and a few periodicals in the areas of mathematics and physics.

f. What additional special resources, other than library holdings, will be needed?

In the near future, as student numbers increase we will need to hire laboratory technician.

g. If a graduate program is requested, indicate:

i. Special library resources needed to offer a program of quality.

ii. How do library resources deemed desirable compare to other institutions with similar programs that are high quality? Cite specific comparisons of other institutions.

N/A

6. Facilities and Equipment

a. Describe existing facilities (classrooms, laboratories, offices, etc.) available for the proposed program.

Existing facilities for the proposed program include two computer labs, a learning lab, a physics lab, university library, university computer labs, university learning center, four classrooms located in the Old Science Building (BRN 205, 209, 309, 311) and one research lab. Additionally, each faculty member has an office.

b. Describe present utilization of these facilities where facilities are assigned to the department.

We are using all the office spaces, class rooms, and laboratories for teaching and research STEM programs.

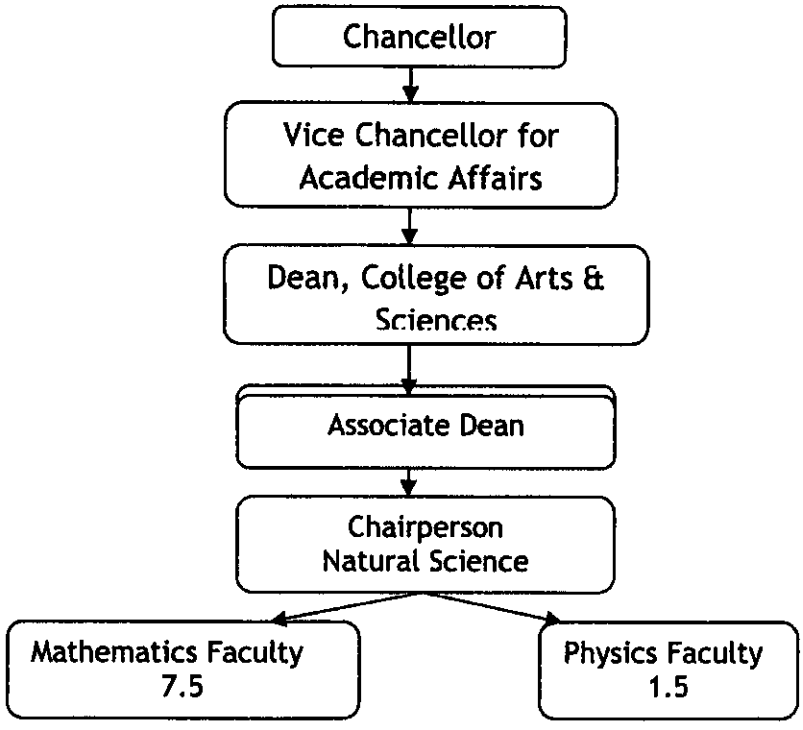
c. Indicate the need for new facilities, such as special buildings, laboratories, minor construction, remodeling, and fixed equipment. If special facilities and equipment will be needed, estimate cost and indicate proposed sources for financing.

An ultramodern complex that will house the Biology, Chemistry, Mathematics and Physics programs is expected to be available by 2013-2014 or earlier. Funds are available. The project is undergoing necessary approval processes at the state office.

7. Administration

a. In what department, division, school, college, or other designation will the proposed program be administered? Explain if the program is interdisciplinary and/or inter-departmental.

The proposed program will be administered by the Department of Natural Sciences in the College of Arts and Sciences. The pertinent Organizational Chart is shown below. One faculty carries a joint appointment in Mathematics and Physics.



Program Administration Chart

b. Indicate if the proposed program will affect the present administrative structure of the institution.

No.

c. Describe any special departmental strengths and/or weaknesses and how the proposed program will affect them.

The proposed program will be an added strength and advantage for the Department of Natural Sciences at SUNO due to the following facts:

1. It will provide an opportunity for our students to major in mathematics and physics.
2. It will strengthen the overall STEM program at SUNO;
3. It will provide additional scholarship opportunities for STEM majors both at SUNO

and at other institutions to participate in summer research internships;

4. It will prepare our STEM students in the fields of mathematics and physics in a competitive environment with self esteem and confidence to pursue advance degrees in mathematics, physics, or both.

5. Finally, we anticipate that this program will have a good economic impact not only in the state of Louisiana but also at the national level by having our graduates in STEM higher education and the future workforce.

8. Accreditation

a. Is the program eligible to be accredited? If so, give the name(s) of the accrediting agency(ies), requirements for accreditation, and how the criteria will be achieved.

Special accreditation is not required for the proposed program. Programs that do not fall under mandatory accrediting agencies, such as the proposed program, however must undergo internal periodic program review process to ensure quality is maintained. This is a requirement, and it is reviewed by both internal and external consultants. The B.S. Mathematics program, for instance, developed a portfolio that was reviewed prior to the SACSCOC on-site visit in March 2011. The consultants' reports, which were favorable, supported the evidence of institutional effectiveness presented to SACSCOC. This process will continue once this proposal is approved.

b. Delineate the initial costs of accreditation and subsequent annual cost.

N/A

c. If a doctoral program is requested, describe the use of consultants in developing the proposed program and include a copy of their report as an appendix to the proposal. The use of consultants to assist in the development of such proposal is highly recommended, if not imperative.

N/A

9. Related Fields

a. Indicate subject matter fields at the institution which are related to, or will support, the proposed program.

The proposed program will continue to have a close relationship and interaction with the faculty as well as facilities of biology and chemistry in the Department of Natural Sciences at SUNO. The department of Natural Science faculty have been actively involved in securing grants from the state and federal funding agencies such as LA Board of Regents, National Science Foundation, National Institutes of Health, Department of Education, Department of Defense, Department of Energy, and the National Aeronautics and Space Administration. Funding secured through these grants will continue to support students enrolled in the new program effective fall 2012, pending approval, toward their tuition, scholarships, summer research internships, travel, etc., to enhance their academic and research performance; and to prepare them for graduate school to pursue their advance degrees in the chosen STEM fields including various engineering fields.

b. Evaluate the supporting fields and indicate if they need improvement. If so, indicate the extent of improvement needed and cost.

N/A

10. Costs

a. Estimate costs of the proposed program for the first four years. Indicate any amounts to be absorbed out of current sources of revenue and needs for additional appropriations (if any). Indicate if federal or other sources of funds are available. Are there prospects for increased income from students recruited specifically to this program who otherwise would not have enrolled?

Approximately $60,300.00 additional fund is needed above the current budget level to hire one new Assistant Professor in the area of Physics to provide needed academic and research support for the proposed program.

b. Indicate departmental costs:

i. Show departmental operating expenditures for the last two completed fiscal years for departments involved in or related to the proposed program. (See below)

	2008-09		2009-10		2010-11		2011-12	
	AMOUNT	**FTE**	**AMOUNT**	**FTE**	**AMOUNT**	**FTE**	**AMOUNT**	**FTE**
Faculty	$654747	9	$687484	9	$721,858	9	$757,951	9
Graduate Assistants	0	0	0	0	0	0	0	0
Support Personnel	$60,600	2	$63630	2	$66811	2	$70152	2
Fellowships & Scholarships	0	0	0	0	0	0	0	0
SUB-TOTAL	$715,347	11	$751,114	11	$788,669	11	$828,103	11

	AMOUNT	**AMOUNT**	**AMOUNT**	**AMOUNT**
Facilities	$75,000	$65,000	$50,000	$50,000
Equipment	$95,000	$50,000	$52,500	$47,500
Travel	$3,500	$3,500	$3,500	$3,500
Supplies	$10,000	$15,500	$12,500	$10,500
Library Resources	$4,500	$4,500	$4,500	$4,500
SUB-TOTAL	$188,000	$138,500	$123,000	$116,000
GRAND TOTAL	**$903,347**	**$889,614**	**$911,669**	**$944,103**

Total Anticipated From:	**AMOUNT**	**%**	**AMOUNT**	**%**	**AMOUNT**	**%**	**AMOUN T**	**%**
State Appropriations	**$852,700**	94.4	**$829,860**	93.3	**$822,860**	90.3	**$867,618**	91.9
Federal Grants/Contracts	0	0	0	0	$24,000	2.6	$20,000	2.1
State Grants/Contracts	$47,000	5.2	$56,000	6.3	$60,000	6.6	$50,000	5.3
Private Grants/Contracts	$3,647	0.4	$3,754	0.4	$4,809	0.5	$6,485	0.7

Other (specify)	0	0	0	0	0	0	0	0
TOTAL	**$903,347**	**100**	**$889,614**	**100**	**$911,669**	**100**	**$944,103**	**100**

ii. How will the proposed program affect the allocation of these funds?

The proposed program will not adversely affect the allocation of funds for the Department of Natural Sciences. The departmental laboratories are adequately stocked with teaching and research equipment acquired through (a) FEMA replacement of hurricane-associated equipment and supply losses; (b) post-Katrina National Science Foundation and Board of Regents grant awards.

c. Indicate if additional funds for research will be needed to support the proposed program.

None is needed. Faculty members in STEM programs traditionally receive external funds for research.

d. Provide estimates of additional cost on the attached form.

N/A

APPENDIX I - Faculty Curriculum Vitae

(See Attached)

APPENDIX II - SUNO Curriculum Committee Approval

(See Attached)

Professional Resume

A.

BIOGRAPHICAL SKETCH			
Name: Joe Omojola	***Position:*** Professor of Mathematics and Physics		
Institution & Location	**Degree**	**Year Conferred**	**Field of study**
University of Ife, Nigeria	B. Sc.	1980	Physics
University of Wisconsin-Madison	M.S.	1984	Nuclear Engineering
University of Arizona, Tucson, AZ	Ph.D.	1990	Nuclear Engineering
	Professional Certifications & Licensure	**Year**	**Field of concentration**
Kerforschungszentrum, Karlsruhe, Germany	Certification	1981	Nuclear Reactor Physics

B. PROFESSIONAL EXPERIENCE	INSTITUTION	DATE
Professor of Mathematics and Physics	Southern University at New Orleans	2006 - Present
Dean, College of Science	Southern University at New Orleans	2004 - 2006
Chair, Department of Mathematics and Physics	Southern University at New Orleans	2003 - 2004
Associate Professor of Mathematics and Physics	Southern University at New Orleans	1998 - 2003

C. MAJOR RESEARCH INTERESTS

Mathematical Modeling and Simulation

Statistical Experimental Design

Applied Physics and Mathematics

Environmental Science and Technology

D. PUBLICATIONS *(Short list)*

1. Omojola, J. O., Johnson, Carl P., & Hardy, Henry L., *"Effective Methods in Science and Mathematics Education for Urban Students,"* a book chapter in Best Practices for Teaching Student in Urban Schools, Publication, pg. 219–227, 2004.
2. Omojola, J. O., Johnson, Carl P., & Hardy, Henry L., *"Enrichment Methods for Improving Science and Mathematics Education of High School Students,"* Journal of Urban Education: Focused on Enrichment, Vol 1, pg 78-82, 2004.
3. Kambhampati, M.S., J. Omojola, A. Omar, D. Miranda, C. Singleton, A. Esmail, and A. Tibodeaux. (2005). Interdisciplinary Science, Mathematics, and Technology Course Modules for PRAXIS II: A Necessity at Southern University at New Orleans. *Journal of Urban Education Focus on Enrichment.* (ISSN 1546-3206). 2(1): 89-98.
4. Omojola, J. O., *"Characteristics of Highly Effective Mentors,"* Abstract in the J. K. Haynes Teachers Preparation Conference, Southern University, Baton Rouge, July 22-23, 2004.

E. GRANTS AWARDED (short list)

1. **PI**: Enhancement, Enrichment, and Excellence in Science and Mathematics (E^3MaS)

$1.75 million/5 years: 2009-2013; Funding Agency: National Science Foundation

2. **PI**: Reliability Studies of Space Systems, $ 10,000: 2010-2011; Funding Agency: Louisiana Space Consortium (LaSPACE)
3. **PI**: Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM), $10,000; 2008-2009: National Science Foundation
4. **Co-PI**: Research Experiences in Linear Algebra and Number Theory for Undergraduate Faculty. A workshop for 24 HBCU Mathematics faculty, Aug. 11-15, 2008, Palo Alto, CAFunding Agency: American Institute of Mathematics.
5. **Co-PI**: Scholarships for Excellence in Natural Sciences (SENS) $598,964/4 years
6. **PI**: GIS Seed Grant Proposal, $2,000, 2008-2009; Funded by North Carolina Central University; **2008-2012**; Funding Agency: National Science Foundation
7. **Co-PI**: Development of Environmental Biotechnology Laboratory, $286,000/3 years: 2005-2008; Funding Agency: Department of Education
8. Co-PI: HBCU-UP Supplemental Proposal to buy equipment lost to hurricane Katrina. $100,000: **2007- 2009** Funding Agency: NSF
9. **PI**: Louisiana Alliance for Minority Participation (LAMP), Southern University at New Orleans, $500,000/5 years: 2006-2010; Funding Agency: National Science Foundation & Louisiana Board of Regents
10. **Co-PI**: Program for Excellence in Science, Mathematics, and Computer Technology (PESMaCT) $2.5 million/5 years: 2001-2009; Funding Agency: National Science Foundation
11. **PI**: Graduate Alliance for Education in Louisiana (GAELA), $200,000/5 years: 2002-2009; Funding Agency: National Science Foundation

F. MEMBERSHIPS

- National Alliance for Doctoral Studies in the Mathematical Sciences
- Louisiana Academy of Sciences
- Alpha Nu Sigma - Honors Society of American Nuclear Society (ANS)
- National Association of Mathematicians
- Professional Association of KUMON Instructors

G. COMMUNITY SERVICE

- School Board Member and President: Sophie B. Wright Institute for Academic Excellence and Charter School, June 2005 – August 2006
- HBCU-UP National Conference Planning Committee, 2005 – Present
- Dillard University HBCU-UP Grand Advisory Committee 2005 - Present

H. CONFERENCE PRESENTATIONS (Short list)

- My Professor is Smart But Cannot Teach, LA Academy of Science Conference, Baton Rouge, LA, March 16, 2007
- "A Critical Look at NCTM Principles and Standards Relative to Mission of Urban Schools," J. K. Haynes Teachers Conference, Southern University, Baton Rouge, LA, July 19 -20, 2005.
- Strengthening the Foundation of Future Black Scientists and Engineers: NSF's HBCU-UP Highlights and Case Stories, American Education Research Association (AREA) Annual Conference, Montreal, Canada, April 13, 2005.
- "K-12 Outreach and Collaboration," Annual Conference of NSF Program Directors and Managers, Washington, DC 3/24/03
- "Keys to a Successful Proposal," QEM Network Workshop for Proposal Development, Southern University at New Orleans, New Orleans, LA 8/9/02

Professional Resume

A.

BIOGRAPHICAL SKETCH	
Panagiota (Penney) Heath	Associate Professor of Mathematics

Education:

Institution & Location	Degree	Year Conferred	Field of study
Our Lady of Holy Cross College, New Orleans, La.	BS	1982	Mathematics
University of New Orleans, New Orleans, La.	M.Sc.	1986	Mathematics
University of New Orleans, New Orleans, La.	Ph.D.	1995	Curriculum and Instruction

Facility & location	Professional Certifications & Licensure	Year	Field of concentration
University of New Orleans, New Orleans, La.	Adult Education (Certificate)	1995	Adult Educataion

B. **PROFESSIONAL EXPERIENCE** **DATE**

Associate Professor of Mathematics at Southern University at New Orleans	1996- Present
Adjunct Professor of Mathematics at Our Lady of Holy Cross College	2004 – Present
Adjunct Professor of Mathematics at the University of Phoenix	1997 – 2004
Mathematics Instructor at Xavier University's Upward Bound Program for high school students	1994 – 2000
Mathematics Instructor at Xavier University of Louisiana	1987 – 1995
Mathematics Instructor University of New Orleans while a graduate student	1983 - 1986
Adjunct Faculty of Mathematics Delgado community College	1986 - 1993

C. MAJOR RESEARCH INTERESTS

- **Integrating Technology in College Mathematics**
- **Exploring Teaching Methodologies that Align with NCTM recommendations**
- **Exploring ways to integrate techniques for using writing to learn in the mathematics classroom**
- **Developing teaching techniques that promote critical and analytical thinking in college mathematics**

D. PUBLICATIONS *(Short list)*

- The Effects of Using Daily Instructional Resource Forms to Implement the NCTM Standards (Dissertation)
- Produced CD – Rom and Book for Earth Science (for middles school students)
- Activities for CBL published by MainStay Program
- Lessons for the I Can Learn software series.
- Paper published by NASSA in the annual report manual
- Alternative Assessment for College Mathematics - A paper presented at the annual meeting of the American Educational Research Association (New Orleans, Louisiana, April 4-8, 1994). (ERIC Document Reproduction Service No. ED376208)

E. GRANTS AWARDED

- NASA/SUNO Partnership for Excellence in Mathematics and Science Education

The project involved the establishment of an electronic classroom equipped with 28 workstation computers and central server, TI-83 calculators, Smart Board, projector, computerized text books, and innovative software. The project also involved faculty development programs for SUNO faculty and in-service high school mathematics and science teachers 9-12. Workshop held at SUNO for the preparation of in-service teachers. NCTM methodologies were demonstrated with the primary focus on integrating the teaching of mathematics and science. Established the NASA/SUNO Support Group for Teachers Teaching with Technology. This support group consisted of in-service teachers of the area high schools. The group met twice a month to discuss needs in the classroom, to exchange information, and to receive information on teaching methodologies and activities in teaching with technology

- LaSIP/Delta RSI Professional Developmental Projects

In order to prepare teachers and students for the technological needs of the new millennium, Southern University at New Orleans conducted a two-week workshop for in-service teachers, grades 7-12, from 5 "focus" schools. During this workshop the in-service teachers constructed mathematical knowledge in the areas of Algebra, Geometry, Statistics, Science, and technology. The participants learned to teach these courses to their students, not in isolation, but in an integrated, comprehensive manner using technology as an integral part of instruction. .Emphasis during the workshop was placed in creating a curriculum and an educational environment in which participants will be taught mathematics and science by adapting to the changes in patterns of instruction as envisioned by the NCTM Standards. The workshop also provided the participants the opportunity to perform scientific and educational research, and promote a follow-up research program for their students.

- GRE Tutorial to SUNO Students provided by Title III

Prepared SUNO students for the GRE for several years

F. MEMBERSHIPS

- NCTM – National Council of Teachers of Mathematics
- MAA- Mathematics Association of America

G. COMMUNITY SERVICE

- Religious convictions require to maintain private all community services

Professional Resume

A.

BIOGRAPHICAL SKETCH			
NAME: Heon Kim		POSITION TITLE: Assistant Professor of Natural Science-Mathematics	
Education: (Begin with baccalaureate or other initial professional education and include post-doctoral training, Cert & Licensure)			
Institution & Location	**Degree**	**Year Conferred**	**Field of study**
Chonbuk National University, Chonju, S. Korea	BS	1995	Mathematics
Chonbuk National University, Chonju, S. Korea	MS	1997	Mathematics
University of Georgia, Athens, GA	MA	2002	Mathematics
Louisiana State University, Baton Rouge, LA	Ph.D.	2007	Mathematics
Facility & location	**Professional Certifications & Licensure**	**Year**	**Field of concentration**
	N/A		

B. PROFESSIONAL EXPERIENCE **DATE**

Assistant Professor of Natural Sciences-Mathematics, Jan. 2007-current
Southern University at New Orleans, New Orleans, LA
Mathematics teacher at a private learning center, Chonju, S. Korea March.1997-July.1998

C. MAJOR RESEARCH INTERESTS

- Computational Number Theory
- Algebraic Number Theory
- Analytic Number Theory
- Cryptography

D. PUBLICATIONS *(Short list)*

- "Infinite class of sign ambiguities" with Paul van Wamelen and Helena Verrill; submitted to the Journal of Number Theory, March 17, 2009.
- "Sign ambiguities of Gauss sums": worked with Paul van Wamelen and Helena Verrill on Ph.D. Dissertation, December, 2007.
- "Sphere packing and Jacobi theta series": worked with Hwashin Park on Master's thesis, February, 1997.

E. GRANTS AWARDED

- Submitted the Pilot Funding for New Research (PFund) to the Louisiana Board of Regents, October, 8, 2009.
- Funded (but still pending) the Internal Research Grant with the Research Plan Components: "The RSA Cryptosystem" and "Multiplicative Relation between Gauss sums", February 20, 2008.

F. MEMBERSHIPS

- Educational Program (01/2009-current)
- American Mathematical Society (08/2000-12/2007)

G. COMMUNITY SERVICE

- Mentoring one mathematics major student (Charles Elloie): 01/2009-current
- Served as a Committee Member of Education Programs/SUNO: 01/2009-current
- Organized the presentation of "Introduction of the Mathematics Major": 04/2009
- Assisted the Umoja Nia Campus Tour Group (35 high school students from Michigan): 04/2009
- Served as a Recruiter and retention counselor at SUNO: 01/2009
- Prepared the Mathematics Department Brochure and Poster, Natural Sciences-Mathematics: Spring/2009
- Recruited one undergraduate student to major in mathematics (Ronald Bowser): Spring/2009
- Mentored two undergraduate students (Shantal Jupiter and Brittny Scott): Fall/2008
- Served as a Course Coordinator (Math232), Natural Sciences: Fall/2008
- Served as a Vice President Korean Language School at Baton Rouge, LA: 2003-2005
- Served as a grader for the National Mathematics Competition in Baton Rouge at The Korean-American Scientist and Engineers Association: Summer/2004

Professional Resume

A.

BIOGRAPHICAL SKETCH	
NAME: Thavdar Marinov	POSITION TITLE: Assistant Professor of Mathematics

Education: (Begin with baccalaureate or other initial professional education and include post-doctoral training, Cert & Licensure)

Institution & Location	Degree	Year Conferred	Field of study
Sofia University, Bulgaria	M.Sc.	1984	Mathematics
Sofia University, Bulgaria	Ph.D.	1997	Mathematics
Saitama Institute of Technology, Japan	Post-Doc Research	2001	Mathematics
University of Alberta, Canada	Post-Doc Research	2003	Mathematics
University of Louisiana at Lafayette, Louisiana	M. Sc.	2006	Mathematics
University of Louisiana at Lafayette, Louisiana	Ph.D.	2008	Mathematics

Facility & location	Professional Certifications & Licensure	Year	Field of concentration
N/A.	N/A	N/A	N/A

B. **PROFESSIONAL EXPERIENCE** **DATE**

Associate Professor of Mathematics, Technical University of Varna, Bulgaria	Sept. 1985-Oct 1999
Assistant Professor of Mathematics, SUNO, New Orleans, Louisiana	Sept. 2008-

C. **MAJOR RESEARCH INTERESTS**

- Inverse Problems-----
- Numerical Analysis----
- Differential Equations--
- ----------

D. PUBLICATIONS *(Short list)*

- Marinov T.T., R. S. Marinova, Inverse Problem for Coefficient Identification in Euler-Bernoulli Equation by Linear Spline Approximation, Accepted in Lecture Notes in Computer Science, Springer: (2009).
- C.I. Christov, Marinov T.T., R. S. Marinova, Identification of solitary-wave solutions as an inverse problem: application to shapes with oscillatory tails, Submitted in Mathematics and Computers in Simulation: Special issue on 'Nonlinear Waves: Computation and Theory.'(2008).
- Marinov T.T., A. Vatsala, Inverse Problem for Coefficient Identification in Euler-Bernoulli Equation, Computers and Mathematics with Applications, 56(2), 400-410, 2008.
- R.S. Marinova, C.I. Christov, Marinov T.T., Identifying the Stationary Viscous Flows Around a Circular Cylinder at High Reynolds Numbers, Accepted in Lecture Notes in Computer Science, Springer: (2007).
- Christov, C.I., Marinov, T.T., Marinova, R.S. Variational Imbedding for Coefficient Identification in Elliptic Partial Differential Equation. International Journal of Computational Science and Engineering (IJCSE), 3 (2007), 277–286.
- Marinov T.T., Keng Deng, Characteristic line based schemes for solving hierarchical size-structured model with nonlinear growth, mortality and reproduction rates. Submitted in Journal of Scientific Computing (2008).
- C.I. Christov, R. S. Marinova, Marinov T.T., Does the Stationary Viscous Flow Around a Circular Cylinder Exist for Large Reynolds Numbers? A Numerical Solution via Variational Imbedding. Accepted in Journal of Computational and Applied Mathematics (2008)
- Marinov T.T., R.S. Marinova, C. I. Christov, Coefficient Identification in Elliptic Partial Differential Equation. Lecture Notes in Computer Science, I. Lirkov, Sv. Margenov, J. Wasniewski (Eds.), Springer: 372-379, (2006).
- Marinov, T.T., Christov, C.I., Marinova, R.S., Novel Numerical Approach to Solitary-Wave Solutions Identification of Boussinesq and Korteweg-de Vries Equations. Int. Journal of Bifurcation and Chaos, Vol. 15, No. 2, p.557-565, (2005).

NB: A complete list of all my publications can be found at accomplishedfaculty@suno.edu

E. GRANTS AWARDED

- Visiting Research Fellow, University of Alberta, Canada, 2002-2003
- JSPS Research Fellow, Saitama Institute of Technology, Japan, 1999-2001
- Principal Investigator of Grant Research Project, National Science Foundation, Ministry of Education and Science, Bulgaria, Project title: 'Investigation of Numerical Algorithms for Solving the Inverse Problems by the Method of Variational Imbedding', (contract # MM610/96). 1996-1999.
- NUFFIC Visiting Research Fellowship, University of Nijmegen, The Netherlands, Nov.-Dec., 1998

- Visiting Research Fellowship, University of Nijmegen, The Netherlands, Nov.-Dec., 1997

- Principal Investigator of Grant Research Projects, Ministry of Education and Science, Bulgaria, 'Development of Numerical Methods for Engineers in VMS and MS FORTRAN77, and VMS and Turbo Pascal', 9/1994 – 5/1998

F. MEMBERSHIPS

- AMS
- CMS
- BMS
-

G. COMMUNITY SERVICE

- Member of the Slidell Bridge Club
- Member of ACBA

Professional Resume

A.

BIOGRAPHICAL SKETCH	
Name Cynthia M. Singleton, Ph.D.	Position Title Associate Professor of Mathematics

EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.

INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Southern University, New Orleans Campus	B.S.	1985	Accounting, Minor: Mathematics Education
Loyola University, New Orleans Campus	M.S.	1996	Mathematics Mathematics & Science Education
Southern University A & M College, Baton Rouge Campus	Ph. D.	2009	

B. **PROFESSIONAL EXPERIENCE** **DATE**

- Associate Professor of Mathematics, Southern University at New Orleans 2010-present
- Assistant Professor of Mathematics, Southern University at New Orleans 1996-2010
- Chairperson, Mathematics Review for SACS, SUNO 2009-2011
- NCATE Liaison for Natural Sciences, SUNO 2007-2008
- District Assessment Team Member (Consultant), Milestone Academy of Learning Experience Skills, New Orleans 2001-2003
- NSF/LaSEPT, Mathematics Project Instructor: SCIENCE & MATH SUMMER WORKSHOP FOR MIDDLE & HIGH SCHOOL TEACHERS 1997
- NASA/SUNO Partnership Grant Instructor for Mathematics, High School

and Higher Learning Students 1997

- TRIO/Upward Bound/SUNO, Instructor of Mathematics 1997-1999; 2010-2011
- Delgado Community College, Visiting Lecturer in Department of Mathematics 1998-1999
- Jefferson Parish Public Schools, High School Teacher 1988-1996

C. MAJOR RESEARCH INTERESTS

My research interest is examining students' attitudes and understanding mathematics using interactive instructional multimedia.

Mathematics topic includes scientific computation and numerical analysis, linear regression, stochastic, and complex analysis.

FUNDAMENTAL TOOLS, EDUCATIONAL ENHANCEMENTS, AND IMPLEMENTING RESEARCH INVESTIGATIONS

- Statistics Software: Minitab, SPSS, and Excel
- Electronic Learning: MyMathLab and Blackboard
- Scientific Visualization: Mathematica, Maple, MATHlab, and Scientific Workplace
- Visualization Techniques: Geometry Sketchpad and Visio Professional
- Programming Languages: Visual C^{++} and JAVA
- Website Development Tools: MS 2000 FrontPage, Dream weaver, and HTML
- Presentation/Publications Tools: MS 2010: Word, Power Point, Publisher, Photo Editor, & Access
- Creating Videos using a webcam or a camcorder

D. PUBLICATIONS (short list)

- **Singleton, Cynthia.** (2008). The Fragmentation of the College Mathematics Curriculum. *Information Center (ERIC) Clearinghouse for Science, Mathematics, and Environmental Education (CSMEE) Document Reproduction Reference Tracking Number ED502652*
- Omar, A, A Kwanbunbumpen, and C **Singleton.** (2007). Hurricane Katrina's Aftermath: The Advancement of E-learning. In *The Proceedings of the Information Systems Education Conference*, v 24 (Pittsburgh): §2322. ISSN: 1542-7382.
- Kambhampati, M., Omojola, J., Omar, A. Miranda, D. and **Singleton,** C. (2005). Interdisciplinary Science, Mathematics, and Technology Course Modules for Praxis II, Southern University at New Orleans, *Journal of Urban Education Focus on Enrichment, Southern University at New Orleans, Volume 2, Issue 1*

NB: A complete list of my publications can be found at accomplishedfaculty@suno.edu

E. GRANTS AWARDED

- **Singleton, Cynthia** (PI) & Chen, Zheng (Co-PI). (2008). Enhancing the Mathematics Curriculum at Southern University at New Orleans, awarded $135,000
- Tan, Delin (PI); Omojola, Joe (Co-PI); Chen, Zhen (Co-PI); **and Singleton, Cynthia (Co-PI) (2011).** Build a Mathematics Learning System in SUNO that Could Reduce Students' Math Failure Rate and Enhance Their Study Quality, awarded $89,499

F. **MEMBERSHIPS**

- National Council of Teachers of Mathematics (NCTM)
- Louisiana Association for Developmental Education (LADE)

G. **COMMUNITY SERVICE**

- **Multimedia Education Resources for Learning and Online Teaching (MERLOT) Community Day Service;** John Dilbert Elementary School, New Orleans
- **Board Member;** Milestone Academy
- **Youth Fraternity Assistant Coordinator;** Order of Eastern Star
- **Mathematics Mentor** SUNO Gateway to Excellence in Mathematics & Science (GEMS)
- **Recruiter & Retention Counselor** SUNO Enrollment Services Department
- **Visiting Scientist** at SUNO Mathematics & Science Kamp for Beginnings (MSKB)

Professional Resume

A.

BIOGRAPHICAL SKETCH			
Name: Delin Tan	**Position: Assistant Professor**		
Institution & Location	**Degree**	**Year Conferred**	**Field of study**
Southern University at New Orleans New Orleans LA, 70126	Ph D. From State University of New York at Stony Brook	1990	Mathematics
	Professional Certifications & Licensure	**Year**	**Field of concentration**

B. **PROFESSIONAL EXPERIENCE**

	INSTITUTION	**DATE**
Mathematics Assistant Professor	**Texas A&M University Kingsville**	**1090-1994**
Mathematics & Computer Assistant Professor	**University of Houston Victoria**	**2001-2008**
Mathematics Assistant Professor	**Southern University at New Orleans**	**2008-present**

C. **MAJOR RESEARCH INTERESTS**

Complex Variable Theory
Image Simulation Programming

D. **PUBLICATIONS** *(Short list)*

1. Quasiconformal mapping . . .
Michigan Math Journal 39(1992)

2. On two generator discrete group of . . .
Proceeding of AMS. 106 .3 (1989)

3. A note about an Ahlfors inequality and . . .
Ann Acad Sci. Finland Mathematica 14(1989)

4. On the dilatation estimates for . . .
Proceeding of AMS. 100 .4 (1987)

5. Make Online Voiced Presentation
Mathematics Science & Mathematics Education. 1.1 (2006)

6. Microsoft Media Stream Technology and Online teaching. ACET Journal of Computer Education and Research, 1(2008)

Book: Introduction to 3D Simulation Programming in C#. (2010)
Publisher: Create Space
ISBN 1450505503

7. On the structure of Finite Boolean Algebra. Mathematics Science & Mathematics Education (submitted)

E. **GRANTS AWARDED** (short list)

F. **MEMBERSHIPS**

Member of MAA, Member of AMS

G. **COMMUNITY SERVICE**

H. **CONFERENCE PRESENTATIONS** (Short list)

1. " Noise function and Texture" MAA LA/MS annual 2010Meetting

Professional Resume

A.

BIOGRAPHICAL SKETCH			
Name: Zheng Chen	**Position: Tenure-Track Assistant Professor in Mathematics**		
Institution & Location	**Degree**	**Year Conferred**	**Field of study**
Florida State University, Tallahassee, FL	Ph.D.	2007	Applied and Computational Mathematics
Fudan University, Shanghai, China	Ph.D.	1994	Pure Mathematics
Northwest University, Xian, China	M.S	1990	Pure Mathematics
Sichuan Normal University, Chengdu, China	B.S.	1984	Mathematics
	Professional Certifications & Licensure	**Year**	**Field of concentration**

B. **PROFESSIONAL EXPERIENCE**

	INSTITUTION	**DATE**
Tenure-Track Assistant Professor	Department of Natural Sciences, Southern University at New Orleans, LA	Aug. 2007 --
Teaching Assistant & Research Assistant	Math Department, School of Computational Science, Florida State University, Tallahassee, FL	Aug. 2002-Aug. 2007
Teaching Assistant	Math Department, Iowa State University, Ames, IA	Aug. 2000-Aug. 2002
Assistant Professor	Department of Mathematics, Sichuan University, Chengdu, China	1995-Aug. 2000
Lecturer	Department of Mathematics, Sichuan University, Chengdu, China	Aug. 1993-1995
Graduate student	Fudan University, Shanghai, China	Aug. 1990-Aug. 1993

C. **MAJOR RESEARCH INTERESTS**

Stochastic partial differential equations	Numerical analysis and scientific computation	Finite element methods
Navier-Stokes equations	Complex analysis, Geometric function theory in several complex variables	Undergraduate research in random matrix, linear algebra and number theory

D. **PUBLICATIONS** *(Short list)*

Y. Cao, Z. Chen and M. Gunzburger, The ANOVA expansion and efficient sampling methods for	Y. Cao, Z. Chen and M. Gunzburger, Solutions of Stochastic Stokes equations with numerical simulation international J of Numerical Analysis	M. Breen, Z. Chen et al, Identifying Respiratory Parameters from Plethysmography Data, CRSC Technical Report edited by H. T. Banks et al ,

parameter dependent nonlinear PDEs, Computing and Information. Volume 6, Number 2, Pages 256–273

and modling 6(2009), no2. 256-273

CRSC-TR04-41, December 2004.

Z. Chen, The semigroup of fractional iterates of holomorphic mappings in the unit ball B^n. Sichuan Daxue Xuebao 33 (1996), no. 1, 31-36.

Z. Chen, Distortion theorems for holomorphic mappings between convex domains in Banach spaces. J. Fudan Univ. Natur. Sci. 32 (1993), no. 4, 437-441.

Z. Chen, Characterizations of biholomorphic and starlike mappings on a class of bounded, strictly balanced domains in C^n. Chinese Ann. Math. Ser. A 16 (1995), no. 2, 230–237.

Z. Chen, A Landau-type theorem for holomorphic endomorphisms of polydiscs. Sichuan Shifan Daxue Xuebao Ziran Kexue Ban 17 (1994), no. 1, 23–25.

Y. L. Zhang, and Z. Chen, On two subclasses of Bazilevic functions. Pure Appl. Math. (Xi'an) 10 (1994), no. 2, 39–48. 30C45

E. **GRANTS AWARDED** (short list)

As Co PI, received $130,000 from Louisiana Board of Regents for the grant entitled "enhancing the mathematics curriculum at Southern University at New Orleans". May, 2008

F. **MEMBERSHIPS**

American Mathematics Society

G. COMMUNITY SERVICE

A Member of search committee for new faculty members in Department of Natural Sciences at SUNO in the year of 2009 and 2010

A member of the Core Requirements: continuous operation subcommittee(s), April, 2010

A member of Sacs subcommittee of core requirements, 2009

H. CONFERENCE PRESENTATIONS (Short list)

1. Computer Assisted Teaching of Introductory Statistics, The Fifth Annual J. K. Haynes Teacher Preparation Conference, Baton Rouge, LA, July 15, 2008
2. Animation in Calculation of Solid Volume, The Fourth Annual J. K. Haynes Teacher Preparation Conference, Baton Rouge, LA, Sept. 2007
3. Reduced-order modeling and Stochastic partial differential equations, Minisymposium at SIAM Annual meeting, New Orleans, LA, July 2005
4. The ANOVA expansion, efficient sampling methods, and surrogate optimization, Poster, The School of Computational Science, Florida State University, Tallahassee, Fl, April, 2006

Professional Resume

A.

BIOGRAPHICAL SKETCH	
NAME: Dr. Mostafa Elaasar	POSITION TITLE: Chair – Dept. of Natural Sciences/Professor of Physics

Education: (Begin with baccalaureate or other initial professional education and include post-doctoral training, Cert & Licensure)

Institution & Location	Degree	Year Conferred	Field of study
Zagazig University – Zagazig, Egypt	B.S.	1978	Physics
Zagazig University – Zagazig, Egypt	M.S.	1983	Physics
Kent State University Kent, Ohio	M.A.	1987	Physics
Kent State University Kent, Ohio	Ph.D.	1993	Nuclear Physics
Kent State University Kent, Ohio	Post-Doc Research	1994	
Facility & location	Professional Certifications & Licensure	Year	Field of concentration
Thomas Jefferson Lab, Newport News, Virginia		1986-present	Nuclear Physics

B. **PROFESSIONAL EXPERIENCE** — **DATE**

Full Professor and Chairperson of the Natural Sciences Department, Southern University at New Orleans	August 2009 - Present
Associate Professor and Chairperson of the Natural Sciences Department, Southern University at New Orleans	Feb. 2006 – Aug. 2009
Associate Professor and Chairperson of the Mathematics And Physics Department, Southern University at New Orleans	Jan. 2005 – Feb. 2006
Associate Professor Physics Department, Southern University At New Orleans	Aug. 2004 – Dec. 2004
Assistant Professor of Physics, Southern University at New Orleans	Aug. 1997 – Aug. 2004
Research Associate – Louisiana Tech University Rushton, LA Post	Aug. 1994 – June 1997
Graduate Research Assistant – Kent State University, Kent, OH	Jan. 1985 – 1987
Graduate Student – North Carolina State U., Raleigh, NC	Aug. 1984 – Dec. 1984
Teaching and Research Assistant, Zagazig University, Zagazig, Egypt	1978 - 1985

C. **MAJOR RESEARCH INTERESTS**

- **Hypernuclear Physics**
- **Neutron detection**
- **Testing the Nuclear Standard Model**

D. PUBLICATIONS *(Short list)*

- Kaon, Pion, and Proton Associated Photofission of Bi Nuclei, *Physics of Atomic Nuclei, 2010, Vol. 73, No. 10, pp: 1707-1712*
- Proton spin structure in the resonance region, Phys. Rev. Lett 98. 132003 (2007 Mar 30).
- Quasifree Λ, Σ^0 and Σ^- electroproduction from ^{1,2}H, ^{3,4}He, and Carbon, Phys. Rev. C76, 054004, 054004 (2007.
- Measurement of the neutron electric to magnetic form-factor ratio G_{En}/G_{Mn} via the $^2H(\vec{e}, e'\vec{n})^1H$ reaction to $Q^2 = 1.45$ (GeV/c)^2, Phys. Rev. C 73, 025205, (2006).
- The Ratio of Proton electromagnetic form factors via recoil polarimetry at $Q^2 = 1.13$ (GeV/C)^2, Nuclear Physics A764(2006) 261-273.
- Electroproduction of Strangeness on $_\Lambda{}^{3,4}$H bound states on Helium. FEW-BODY PROBLEMS IN PHYSICS; The 19th European Conference on Few-Body Problems in Physics. AIP Conference Proceedings, Volume 768, pp. 294-296 (2005).
- Probing Quark-Gluon Interactinos with Tranverse Polarized Scattering, Phys. Rev. Lett. 105, 101601 (2010).
- The HKS experiment on A-hypernuclear spectroscopy via electroproduction at Jlab, Nuclear Physics A 790 (2007 679c-682c
- Proton G_E/G_M from beam-target asymmetry, Phys. Rev. C74, 035201 (2006).
- The Program of Excellence in Science, Math, & Computer Technology at Southern University at New Orleans, Journal of Instruction Delivery System, Spring 2006, V20 #2
- *Why American Students Shy Away from Science*, Proceedings of the International Academy of Business and Public Administration Disciplines. Conference Proceedings Code #180, May 24, 2005.
- Measurement of the electric form-factor of the neutron at $Q^2 = 0.5$ and 1.0 GeV$^2/c^2$, Phys. Rev. Lett. 92:042301, (2004).

E. GRANTS AWARDED

- Received an enhancement grant in the amount of $46.962 from the Board of Regents. The grant title is "Enhancement and Introduction of New Technology for SUNO Physics Laboratories."
- Enhancement for SUNO Physics Laboratories in the amount of $10,555.00 from SUNO Tech Fee fund.
- Enhancement for SUNO Mathematics Lab in the amount of $34,000.00 from SUNO Tech Fee fund.
- Received a grant from the Technology Fees in the amount of $13,308.40 to upgrade the Physics Lab. The grant is entitled: "Enhancement for SUNO Physics Laboratories."
- Received a *Laspace* grant entitled: "Statistical Analysis and Construction of a Statistical Profile of the Fit between Measured and Estimated Nuclear Cross-section Relevant to Cosmic Rays Studies." The amount of the grant was $10,080

F. MEMBERSHIPS

- American Physical Society (APS)
  The following Units of APS:
- Nuclear Physics Division
  International Physics Division
- Physics Education Forum
  APS Texas Section
- Member of Sigma Chi
- Member of the American Association of Physics Teachers (AAPT)
- Beta Kapa Chi

G. COMMUNITY SERVICE

- Judge in the 55th Greater New Orleans Science & Engineering Fair
- Judge in the E3MaS Science Fair
- Annual Fun for Sci. Families Day

Professional Resume

A.

BIOGRAPHICAL SKETCH			
Name: Rachid Belmasrour	**Position: Temporary Assistance Professor of Mathematics**		
Institution & Location	**Degree**	**Year Conferred**	**Field of study**
University of Hassan II	BA	1998	*Applied Mathematics*
University of Versailles Saint Quentin en Yvelines	MA	2001	Mathmatiques, Informatique
University of New Orleans	MA	2007	*Mathematics*
University of New Orleans	Ph.D	2010	*Mathematics*
	Professional Certifications & Licensure	**Year**	**Field of concentration**
Society of Actuaries	First Actuarial Exam	2007	Actuarial

B. **PROFESSIONAL EXPERIENCE**

	INSTITUTION	DATE
Adjunct	Xavier University of Louisiana	2010
Teaching Assistants	University of New Orleans	2006-2010
Cotton Structure and Quality research, Collaborator	United States Department of Agriculture	2007-2010

C. **MAJOR RESEARCH INTERESTS**

Statistical Computing, Statistical Consulting. Actuarial Science. Structure Equation Modeling, Partial Least Squares.

D. **PUBLICATIONS** *(Short list)*

Obtaining Cotton Fiber Length Distributions from the Beard Test Method Part1 Theoretical Distributions Related to the Beard Method. Joint with Dr. Xiaoliang Cui, etc. Journal of Cotton Science.2009

Using Partial Least Squares Regression to Obtain Cotton Fiber Length Distributions from the Beard Testing Method , Joint with Dr. Linxiong Li, etc. Journal of Cotton Science, 2010,

The Distribution of Actual Cotton Fiber Length by Weight. Journal of Cotton Science. (Paper in process...2009)

E. **GRANTS AWARDED** *(Short list)*

- $ 22,494 Funded by USDA 2007. Obtaining Cotton Fiber Length Distributions from the Beard Test Method Part1 Theoretical Distributions Related to the Beard Method
- $ 22,494 Funded by USDA 2008. Obtaining Cotton Fiber Length Distributions from the Beard Test Method Part2 Theoretical Distributions Related to the Beard Method

F. **MEMBERSHIPS**

Member of American Statistical Association

G. COMMUNITY SERVICE

- Volunteer tutoring students in the last two weeks before their finals: Helping to increase the quality of mathematics department to gain recognition as a great university.
- Organizing chess tournaments in the local youth communities: Helping students to develop analytical and decision making skills which will help them in their future. It also built confidence in ability to do academic research and gain the nature of competition.
- Coaching soccer teams both indoor and outdoor: Teaching to win and loosing as a team. More importantly keeping the youth out of the street life. I also presided over a non-profit organization to help youth from several public schools get involved in civic, cultural, and sportive events.

H. CONFERENCE PRESENTATIONS *(Short list)*

- *Cotton Fiber Length Distribution, Part II* Louisiana Chapter of the American Statistical Association, Louisiana ASA Chapter Fall 2008 Meeting

B. S. in BIOLOGY AND CHEMISTRY

A DEGREE PROGRAM PROPOSAL

Submitted by

THE DEPARTMENT OF NATURAL SCIENCES
COLLEGE OF ARTS & SCIENCES

SOUTHERN UNIVERSITY AT NEW ORLEANS

October, 2011

LOUISIANA BOARD OF REGENTS
GUIDELINES: REQUEST FOR AUTHORITY TO OFFER A NEW PROGRAM*

SUBMIT FIVE (5) COPIES AND ONE (1) DISK (WORDPERFECT OR WORD)

Name of Institution Submitting Proposal	Southern University at New Orleans
Specific Degree to be Awarded Upon Completion	B. S. in Biology and Chemistry
CIP Taxonomy (*From Program Classification Structure*)	
Date to be Initiated	Fall 2012
Name of Department or Academic Subdivision Responsible for the Program	Department of Natural Science
Name, Rank, and Title of Individual Primarily Responsible for Administering the Program	Dr. Henry Efesoa-Mokosso, Professor and Dean College of Arts & Sciences
Date Approved by Governing Board	
Date Received by Louisiana Board of Regents	
Academic Affairs Committee Review	
Board Action (Nature of Action)**	
Date of Board Action	

* Information requested in these guidelines which has already been provided in the related Letter of Intent need not be presented again, unless the data given in the letter of intent has changed in the interim period between submittal of the letter and submittal of the full proposal.

** Prior to final action by the Board of Regents, no institution shall initiate or publicize a new program.

TABLE OF CONTENTS

1. Description

a. **Bachelor of Science (B.S.) in Biology and Chemistry**, Department of Natural Sciences, Southern University at New Orleans, New Orleans, LA

The Department of Natural Science wishes to expand the overall academic capabilities of the existing B.S. Biology program to include a B.S. Chemistry option for students who specifically need the option for their career goals. SUNO's B.S. Chemistry program was eliminated in January 2006 as a low completer program. The Department of Natural Science has regained its pre-Katrina student population in the Biology program, and many students are, lately, requesting access to a B.S. Chemistry major or double major with Biology in order to improve their employment opportunities or the chances to gain admission into competitive professional or graduate programs. A B.S. Biology and Chemistry program that will permit a B.S. Biology option and a B.S. Chemistry option, or double major option is the main objective of this proposal. Approval of the proposal will be highly supportive of SUNO's Strategic Plan goal of improving opportunities for student access and success (in desired disciplines). Faculty in both disciplines have worked together to develop the common core for the BS in Biology and/or Chemistry. The common core for both disciplines consists of seventy one (71) credit hours, including 39 General Education courses. In addition to the common core, biology majors and chemistry majors independently require a total of fifty (50) credits for the completion of the degree program. Upon successful completion of all requirements of the program at SUNO including the core and elective courses, students will be awarded degrees as follows: BS in Biology **OR** BS in Chemistry **OR** BS in Biology and Chemistry (double major) **OR** BS Biology with minor in Chemistry **OR** BS Chemistry with minor in Biology as detailed in the attached Degree Audit Forms. The implementation, expected to be straight forward, commences at the beginning of the fall of 2012. Additional details on the implementation are provided in the responses to each component of the proposal guideline.

b. List and describe the program curriculum (i.e., required courses), in sequence or term by term. Indicate new courses by an asterisk (*). Include any special requirements (internships, comprehensive examination, thesis, dissertation, etc.).

Common Core Courses for the BS in Biology and Chemistry

They are required for the BS in Biology and Chemistry (Irrespective of a Major)

(Total Number of Credits: 71)

Number	Title	Credits
ENGL 111	English Composition I	3
ENGL 112	English Composition II	3
ENGL 203	Introduction to Literature	3
MATH 161	Pre-Calculus	3
MATH 162	Trigonometry	3

MATH 290	Calculus I	4
BIOL 124	General Biology I	3
HIST 210 OR 220	The United States to 1865/since 1865	3
PHIL 212	Introduction to Logic	3
FIAR OR MUSC 101	Introduction to Art or Music	3
JRDV 111	College Survival Skills	1
JRDV 111A	Freshman Assembly	0
MGIS 164	Introduction to Information Processing	3
PSYC 210	General Psychology	3
SOCL 210	Introduction to Sociology	3
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry Laboratory I	2
CHEM 112	General Chemistry II	3
CHEM 112L	General Chemistry Laboratory II	2
CHEM 241	Organic Chemistry I	3
CHEM 241L	Organic Chemistry Laboratory I	2
CHEM 242	Organic Chemistry II	3
CHEM 242L	Organic Chemistry Laboratory II	2
PHYS 211	General Physics I	3
PHYS 211L	General Physics I Laboratory	2
PHYS 222	General Physics II	3
PHYS 222L	General Physics II Laboratory	2
TOTAL COMMON CORE CREDITS		**71**

Required Elective Courses for B.S. Biology

Number	Title	Credits
BIOL 100	Biology Seminar	1
BIOL 124L	General Biology I Laboratory	2
BIOL 125	General Biology II	3
BIOL 125L	General Biology II Laboratory	2
BIOL 204 OR 205	Plant Diversity or Animal Diversity	3
BIOL 204L OR BIOL 205L	Plant Diversity Laboratory or Animal Diversity Laboratory	1
BIOL 217	General Microbiology	3
BIOL 217L	General Microbiology Laboratory	1
BIOL 302	Genetics	3
BIOL 302L	Genetics Laboratory	1
BIOL 324	Cell Biology	3
BIOL 324L	Cell Biology Laboratory	1
BIOL 494	Senior Seminar I	2
BIOL 495	Senior Seminar II	2
BIOL 496	Senior Comprehensive Exam (Exit Exam)	0
Biology Electives (4)	**Please see attached course descriptions**	**16**
MATH 250	Elementary Statistics	3
Foreign Language 101	Spanish/French/German	3
TOTAL REQUIRED + ELECTIVE CREDITS		**50**

Required Elective Courses for B.S. Chemistry

Number	Title	Credits
CHEM 251	Inorganic Chemistry	3
CHEM 351	Quantitative Analysis	3
CHEM 351L	Quantitative Analysis Laboratory	2
CHEM 362	Instrumental Methods of Analysis	3
CHEM 362L	Instrumental Methods of Analysis Laboratory	2
CHEM 411	Physical Chemistry I	3
CHEM 411L	Physical Chemistry I Laboratory	2
CHEM 412	Physical Chemistry II	3
CHEM 492S	Physical Chemistry II Laboratory	1
CHEM Electives (2)	**Please see attached course descriptions**	**6**
MATH 291	Calculus II	4
MATH 292	Calculus III	3
MATH 360 OR MATH 390	Linear Algebra and Matrices/ Elementary Differential Equations	3
ENGL 260	Professional and Technical Writing	3
SPCH 210	Fundamentals of Speech	3
General Electives (2)	Biology or Chemistry or Humanities	6
TOTAL REQUIRED AND ELECTIVE COURSES		**50**

Curriculum in Biology

FRESHMAN YEAR

Course	Hrs. Credit	Course	Hrs Cred
ENGL 111 (English Composition I)	3	ENGL 112 (English Composition II)	3
BIOL 124 & 124L (General Biology I)	5	BIOL 125 & 125L (General Biology II)	5
MATH 161 (Pre-Calculus)	3	MATH 162 (Trigonometry)	3
BIOL 100 (Biology Seminar)	1	MGIS 164 (Intro. to Info. Processing)	3
FIAR or MUSC 101	3	SOCL 210 (Intro. to Sociology)	3
JRDV 111 (College Survival Skills)	1		
JRDV 111A (Freshman Assembly)	0		
	16		17

SOPHOMORE YEAR

ENGL 203 (Writing About Literature)	3	HIST 210 or 220 (U.S. History)	3
CHEM 111 & 111L (General Chemistry I)	5	CHEM 112 & 112L (General Chemistry II)	5
BIOL 204 & 204L or (Plant Diversity) or BIOL 205 & 205L (Animal Diversity)	4	BIOL 217 & 217L (General Micro Biology)	4
MATH 250 (Elementary Statistics)	3	MATH 290 (Calculus I)	4
	15		16

JUNIOR YEAR

BIOL 302 & 302L (Genetics)	4	CHEM 242 & 242L (Organic Chemistry II)	5
CHEM 241& 241L (Organic Chemistry I)	5	PHYS 222 & 222L (General Physics II)	5
PHYS 211 & 211L (General Physics I)	5	PHIL 212 (Introduction to Logic)	3
Foreign Language 101	3		
	17		13

SENIOR YEAR

BIOL 324 & 324L (Cell Biology)	4	Biology Elective	4
Biology Elective	4	Biology Elective	4
Biology Elective	4	Psychology Elective	3
BIOL 494 (Senior Seminar)	2	BIOL 495 Senior Seminar	2
BIOL 496 (Senior Comprehensive)	0		
	14		13

Total: 121 Credit Hours

A minor in Biology is earned by completing eighteen (18) credit hours above Biology 124 and 125.

Curriculum in Chemistry

FRESHMAN YEAR

Course	Hrs. Credit	Course	Hrs Cred
JRDV 111 (College Survival Skills)	1	ENGL 112 (English Composition II)	3
JRDV 111A (Freshman Assembly)	0	MATH 162 (Trigonometry)	3
ENGL 111 (English Composition I)	3	CHEM 112 & 112L (General Chemistry II)	5
MATH 161 (Pre-Calculus)	3	Humanities Elective	3
CHEM 111 & 111L (General Chemistry I)	5	BIOL 124 (General Biology I)	3
FIAR or MUSC 101	3		
	15		17

SOPHOMORE YEAR

CHEM 241 & 241L (Organic Chemistry I)	5	CHEM 242 & 242L (Organic Chemistry II)	5
MATH 290 (Calculus I)	4	MATH 291 (Calculus II)	4
ENGL 203 (Writing About Literature)	3	CHEM 251 (Inorganic Chemistry)	3
Social Science Elective	3	CMIS 164 (Intro. to Information Processing)	3
	15		15

JUNIOR YEAR

CHEM 351 & 351L (Quantitative Analysis)	5	CHEM 362 & 362L (Instrumental Methods)	5
MATH 292 (Calculus III)	3	General Elective	3
PHYS 211 & 211L (General Physics I)	5	PHYS 222 & 222L (General Physics II)	5
ENGL 260 (Professional/Technical Writing)	3	COMM 210 (Fundamentals Public	
Speaking)	3		
	16		16

SENIOR YEAR

CHEM 411 (Physical Chemistry)	3	CHEM 411L (Physical Chemistry Lab)	2
CHEM Elective	3	CHEM 412 (Physical Chemistry)	3
MATH 360(Lin. Algebra) or 390(Diff. Equat.)	3	CHEM 492S (Seminar for Majors)	1
ECON 200 (Survey of Econ. Principles)	3	CHEM Elective	3
HIST 210 or 220 (U.S. History).	3	General Elective	3
	15		12

Total: 121 Credit Hours

A minor in Chemistry shall consist of a minimum of twenty-five (25) credit hours in Chemistry. Class work shall consist of Chemistry 111/111L, 112/112L, 241/241L, 242/242L, and 351/351L.

BIOLOGY COURSE DESCRIPTIONS

NOTE: All students enrolled in a laboratory class must enroll simultaneously in the lecture component or show prior credit for the lecture.

BIOL 100 BIOLOGY SEMINAR 1 credit hour
The course will provide training in the presentation and discussion of current biological problems, time management, study skills, preparation for standardized testing (orientation for GRE, MCAT and PCAT testing). Invited guests will speak on trends in biological and biomedical sciences, and the requirements for graduate and professional schools. The course is designed for freshmen and sophomore students and offered each semester.

BIOL 105 INTRODUCTION TO BIOLOGY I 3 credit hours
The course is designed for non-majors. This is the first semester course of a two-semester introduction to biology. It includes an introduction to evolutionary principles, a survey of the five kingdoms, cell chemistry, cell structure and function, cell cycle, tissues, respiration, photosynthesis, principles of inheritance, and evolution. The course will be offered in the fall, spring, and summer of each year.

BIOL 105L INTRODUCTION TO BIOLOGY I LABORATORY 1 credit hour
This is a course in laboratory practice designed to complement the lecture course. Students must enroll simultaneously in 105 lecture or show prior credit for it.

BIOL 106 INTRODUCTION TO BIOLOGY II 3 credit hours
This is the second course of a two-semester introduction to biology. The course is designed for non-majors. It includes an introduction to the plant kingdom and the human organ systems. The course will be offered in the fall, spring, and summer of each year.

BIOL 106L INTRODUCTION TO BIOLOGY II LABORATORY 1 credit hour
Laboratory activities are coordinated with the lecture series. Students must enroll simultaneously in BIOL 106 lecture or show prior credit for it.

BIOL 124 GENERAL BIOLOGY I 3 credit hours
The course is designed for science majors. This is the first semester course of a two-semester general survey of the biological sciences. It includes cell chemistry, cell structure and function, cell cycle, tissues, respiration, photosynthesis and a survey of four kingdoms of life, including monera, protista, fungi and plants. This course provides an introduction to basic ecological and evolutionary principles. The course concludes with an emphasis on the basic principles of genetics. The course will be offered in the fall, spring, and summer of each year.

BIOL 124L GENERAL BIOLOGY I LABORATORY 2 credit hours
This is the first semester laboratory course in a general survey of biological sciences. Laboratory activities are coordinated with the lecture series. Students must enroll simultaneously in 124 lecture or show prior credit for it.

BIOL 125 GENERAL BIOLOGY II 3 credit hours
This is the second course of a two-semester general survey of the biological sciences. The course, designed for science majors, is a comparative study of the five kingdoms of life including Monera, Protista, Fungi, Plantae, and Animalia. The course concludes with the study of the mammalian organ systems. The course will be offered in the fall, spring, and summer of each year.

BIOL 125L GENERAL BIOLOGY II LABORATORY 2 credit hours
This is the second semester laboratory course in a general survey of biological sciences. Laboratory activities are coordinated with the lecture series. Students must enroll simultaneously in BIOL 125 lecture or show prior credit for it.

BIOL 204 PLANT DIVERSITY 3 credit hours
This course includes a study of the classification, life history, morphology and reproduction of organisms from the prokaryotes to the flowering plants. The lecture series cover representative life forms including bacteria, algae, slime molds, fungi, liverworts, and seedless and seed bearing vascular plants. (Prerequisites: BIOL 124 and 125). The course will be offered in the fall of each year.

BIOL 204L PLANT DIVERSITY LABORATORY 1 credit hour
This course includes field activities on diversity of plants beginning with monera (blue-green algae) to plantae. Students are encouraged to collect specimens belonging to monera, fungi, and plantae kingdoms and observe the morphological and anatomical features. (Prerequisites: BIOL 124L). This course is offered in the fall of each year.

BIOL 205 ANIMAL DIVERSITY 3 credit hours
This course is designed to provide an in-depth investigation into the diversity of animal life from protozoans to chordates. This is in respect to morphology, physiology, phylogeny, taxonomy and ecology. (Prerequisites: BIOL 124 and 125) The course will be offered in the spring of each year.

BIOL 205L ANIMAL DIVERSITY LABORATORY 1 credit hour
This course provides hands-on activities involving diverse animal life from protozoans to chordates in correlation with the lecture series. (Prerequisites: BIOL 124L and 125L).

BIOL 216 MORPHOLOGY OF VASCULAR PLANTS 3 credit hours
This course is a study of morphological, physiological, and taxonomical relationships of the higher cryptograms and the angiosperms. Details of growth, development, life history, and evolutionary relationship of representative forms are covered. (Prerequisite: BIOL 124). Offered every other year.

BIOL 216L MORPHOLOGY OF VASCULAR PLANTS LABORATORY 1 credit hour
This is a laboratory course on cryptograms and the angiosperms to complement the lecture series. (Prerequisite: BIOL 124L).

BIOL 217 GENERAL MICROBIOLOGY 3 credit hours
This course includes a study of microorganisms and their classifications; general properties of bacteria; characterization of non-bacteria microorganisms; the isolation, cultivation, metabolism, physiology, genetics and control of bacteria. Infection, immunity and hypersensitivity are discussed. (Prerequisites: BIOL 124 and 125). Offered in the fall and spring of each year.

BIOL 217L GENERAL MICROBIOLOGY LABORATORY 1 credit hour
This course is designed to give students a hands-on approach to the basic understanding of microorganisms, in particular their safe handling, cultivation, and identification. (Prerequisites: BIOL 124L and 125L). Offered in the fall and spring of each year.

BIOL 220 PATHOGENIC MICROBIOLOGY AND IMMUNOLOGY 3 credit hours
This course is an in depth study of pathogenic micro-organisms including bacteria, chlamydia, rickettsia, mycoplasmas, fungi, viral agents, and prions, and their interactions with the host. The host defense system will be discussed in detail. (Prerequisite: BIOL 217). Offered in the fall of each year.

BIOL 220L PATHOGENIC MICROBIOLOGY AND IMMUNOLOGY LABORATORY 1 credit hour
Laboratory exercises will focus on the isolation, characterization and identification of microorganisms, the demonstration of some virulence factors, and on immunological techniques applicable to disease diagnosis. (Prerequisite: BIOL 217L). Offered in the fall of each year.

BIOL 221 IMMUNOLOGY AND SEROLOGY 3 credit hours
This course is a study of cellular and humoral mechanisms of immunity, nature of antigen-antibody interactions, biosynthesis of antibodies, hyper-sensitivities, and basic concepts of immunological disorders. (Prerequisite: BIOL 217). Offered every other year.

BIOL 221L IMMUNOLOGY AND SEROLOGY LABORATORY 1 credit hour
Laboratory exercises involving antigen-antibody reactions and cellular immunity techniques are coordinated with basic principles in lecture. (Prerequisite: BIOL 217L)

BIOL 231 DEVELOPMENTAL ANATOMY 3 credit hours
This course is designed to acquaint students with phylogenetical and anatomical changes in selected vertebrate animals. The study of the animal organ systems and their related organs will be detailed by dissection and an overview of their developmental processes. (Prerequisites: BIOL 124 and 125). Offered in the fall of each year.

BIOL 231L DEVELOPMENTAL ANATOMY LABORATORY 1 credit hour
The laboratory sessions will permit students to extend experiences gained during the formal lecture periods via hands-on dissection activities and observations. (Prerequisites: BIOL 124L and 125L). Offered in the fall of each year.

BIOL 270 DEVELOPMENTAL BIOLOGY 3 credit hours
This course includes a study of the comparative developmental processes in vertebrate embryos with special emphasis on the frog and chick. Studies in the frog begin with cleavage and continues through the tadpole stage, and in the chick from cleavage through the ninety-sixth hour of incubation. (Prerequisites: BIOL 124 and 125). Offered in the spring of each year.

BIOL 270L DEVELOPMENTAL BIOLOGY LABORATORY 1 credit hour
This course includes a study of patterns of cleavage of both frog and chick eggs. The process of early development in frog and chick embryos will be made by studying microscopic slides of serial sections (both transverse and sagittal) of frog and chick embryos. (Prerequisites: BIOL 124L and 125L).

BIOL 273 HUMAN ANATOMY AND PHYSIOLOGY 3 credit hours
This course is a study of human structures and functions at cellular, organ and system levels, and homeostasis. (Prerequisites: BIOL 106 and 106L, or BIOL 125 and 125L). Offered in the fall of each year.

BIOL 273L HUMAN ANATOMY AND PHYSIOLOGY LABORATORY 1 credit hour
Laboratory exercises include histological and macroscopic anatomy with emphasis on functional aspects of systems, and are carried out along with comprehensive dissection. This course is to be taken in conjunction with Biology 273. (Prerequisites: BIOL 106L or 125L). Offered in the fall of each year.

BIOL 274 HUMAN ANATOMY AND PHYSIOLOGY 3 credit hours
This course is a continuation of Human Anatomy and Physiology 273. The course focuses on human structures and functions at cellular, organ, and system levels, and homeostasis. (Prerequisite: BIOL 273). Offered in the spring of each year.

BIOL 274L HUMAN ANATOMY AND PHYSIOLOGY LABORATORY 1 credit hour
Laboratory exercises include histological and macroscopic anatomy, with emphasis on functional aspects of systems. Laboratory exercises include animal dissection. (Prerequisite: BIOL 273L). Offered in the spring of each year.

BIOL 279 INTRODUCTION TO MARINE SCIENCE 3 credit hours
This course is an introduction to physical, chemical, geological and biological processes in the oceans and coastal environments and their interactions. Interrelationship of man and the marine environment is included. (Prerequisite: BIOL 124 and 125).

BIOL 279L INTRODUCTION TO MARINE SCIENCE LABORATORY 1 credit hour
Laboratory activities will cover water analysis for physicochemical factors; phytoplankton and zooplankton identification and morphological studies; and interrelationships between abiotic and biotic factors in the marine ecosystems (Prerequisites: BIOL 124L and 125L).

BIOL 301 ANIMAL PHYSIOLOGY 3 credit hours

This is a study of physiological processes with emphasis on the human organ systems and how they relate to the functions of other animal systems in maintaining homeostasis. The course will focus on body fluid compartments, membrane potentials, action potentials, acid-base physiology, renal, endocrine, reproductive, respiratory and cardiovascular physiology. (Prerequisites: BIOL 124 and 125). Offered every other year.

BIOL 301L ANIMAL PHYSIOLOGY LABORATORY 1 credit hour

This course supplements and reinforces lecture concepts and provides hands-on experience in the study and analysis of physiological processes. (Prerequisite: BIOL 124L and 125L).

BIOL 302 GENETICS 3 credit hours

This course is an introduction to genetic information, including mendelian inheritance; cellular division; gene mapping; DNA structure; recombinant DNA techniques; control of gene expression and quantitative and population genetics. (Prerequisite: BIOL 124, BIOL 125, and CHEM 111). Offered in the fall and spring of each year.

BIOL 302L GENETICS LABORATORY 1 credit hour

Laboratory exercises will reinforce and supplement materials learned in lecture, and will include DNA fingerprinting, Polymerase Chain Reaction (PCR) for DNA and RNA, fly cross, and other exercises in genetics. (Prerequisite: BIOL 124L, 125L and CHEM 111L). Offered in the fall and spring of each year.

BIOL 304 INTRODUCTION TO PHARMACOLOGY 3 credit hours

This course is an introduction to the systematic study of the reactions of living organisms to chemicals and chemical modulation of physiological functions, especially in disease states and pharmaco-dynamics at the molecular and macromolecular levels. (Prerequisite: BIOL 124 and 125; CHEM 111 and 112). Offered in the spring of each year.

BIOL 304L INTRODUCTION TO PHARMACOLOGY LABORATORY 1 credit hour

Laboratory activities involve the simulation of chemical reactions and their physiological functions in living organisms. (Prerequisites: BIOL 124L and 125L; CHEM 111L and 112L). Offered in the spring of each year.

BIOL 306 PHYSIOLOGICAL CHEMISTRY 3 credit hours

This course is a study of biochemical principles, reactions of organic compounds in the living cell, metabolic pathways, energy, and biosynthetic processes. (Prerequisites: BIOL 124 and 125, and CHEM 241). Offered once every other year.

BIOL 306L PHYSIOLOGICAL CHEMISTRY LABORATORY 1 credit hour

Laboratory activities emphasize reactions of organic compounds, energy, and biosynthetic processes. (Prerequisites: BIOL 124L and 125L; CHEM 241L). Offered once every other year.

BIOL 314 SYSTEMATIC BOTANY 3 credit hours

This course includes the identification and classification of vascular plants with special emphasis on the angiosperms. (Prerequisites: BIOL 124 and 125). Offered every other year.

BIOL 314L SYSTEMATIC BOTANY LABORATORY 1 credit hour

Laboratory exercises include the identification and classification of vascular plants with special emphasis on angiosperms, collection of plant samples through field trips, and preparation of herbarium. (Prerequisites: BIOL 124L). Offered every other year.

BIOL 315 PLANT PHYSIOLOGY 3 credit hours

This is a study of the basic principles of plant physiology with emphasis on higher plants. Topics covered include growth and development, mineral nutrition, transport, water relations and metabolism. (Prerequisites: BIOL 124 and CHEM 241). Offered every other year.

BIOL 315L PLANT PHYSIOLOGY LABORATORY 1 credit hour
This course provides laboratory activities on physiological reactions in plant tissues: plant stress, growth and development, and mineral nutrition. (Prerequisites: BIOL 124L; CHEM 241L). Offered every other year.

BIOL 324 CELL BIOLOGY 3 credit hours
This is the study of the structure and function of cellular components including, the membrane, organelles, and macromolecules found in cells of plants, animals and bacteria. In addition, the course integrates the use of metric measurements, biological solutions and instrumentation in the study of cell biology. (Prerequisites: BIOL 124 and 125). Offered in the fall and spring of each year.

BIOL 324L CELL BIOLOGY LABORATORY 1 credit hour
The course supplements and reinforces lecture concepts and provides hands-on experience in analysis of cellular activities. (Prerequisite: BIOL 124L and 125L). Offered in the fall and spring of each year.

BIOL 325 MOLECULAR BIOLOGY 3 credit hours
This course is a study of the mechanism and regulation of DNA, RNA, and protein biosynthesis in prokaryotes and eukaryotes. Basic principles of recombinant DNA technology and applications in biomedical fields are discussed. (Prerequisite: BIOL 217 and BIOL 324). Offered in the spring of each year.

BIOL 325L MOLECULAR BIOLOGY LABORATORY 1 credit hour
Laboratory exercises are coordinated with lectures, and provide hands-on experience in modern molecular biology techniques. (Prerequisites: BIOL 217L and 324L). Offered in the spring of each year.

BIOL 332 PRINCIPLES OF MYCOLOGY 3 credit hours
This is a general study of the classification, structure, function and ecology of fungi. The roles of fungi in medicine and in the pathology of plants are emphasized. (Prerequisite: BIOL 124). Offered every other year.

BIOL 332L PRINCIPLES OF MYCOLOGY LABORATORY 1 credit hour
Laboratory exercises involve the identification, classification, cultures, and relationships between fungi and biogeochemical cycles (Prerequisite: BIOL 124L). Offered every other year.

BIOL 341 PRINCIPLES OF ECOLOGY 3 credit hours
This course is a study of the concepts of ecosystems, populations, biogeochemical cycles, biogeography, communities of organisms, overpopulation and pollution problems. (Prerequisites: BIOL 124, 125 and MATH 250). Offered in the fall of each year.

BIOL 341L PRINCIPLES OF ECOLOGY LABORATORY 1 credit hour
Principles of general ecology including the concepts of ecosystems, populations, biogeochemical cycles, biogeography, communities of organisms, overpopulation problems are studied. Exercises include field trips to study local flora and fauna and their relationships to the environment. (Prerequisites: BIOL 124L and 125L). Offered in the fall of each year.

BIOL 342 ENVIRONMENTAL BIOTECHNOLOGY 3 credit hours
Students will investigate the basic elements of environmental biotechnology (EB) and discover career opportunities in the biotechnology industries. Students will demonstrate a mastery of terminology, basic understanding of bioremediation, remedies for environmental pollution, research methodologies, the role of genetics in environmental science, proteins, enzymes, nucleic acids, and bacterial culture as well as descriptions of gene expression, gene manipulation, DNA cloning and applications in genetics, environmental science, and industry. Students will evaluate the impact of environmental biotechnology on human society, agriculture and the global environment (Prerequisites: BIOL 124 & 124L, BIOL 125 & 125L, five credits of inorganic chemistry.) Offered in the spring of each year.

BIOL 342L ENVIRONMENTAL BIOTECHNOLOGY LAB 1 credit hour
Laboratory exercises will reinforce the interdisciplinary concepts that are covered in lecture series (gel electrophoresis, extraction of DNA, compare DNA in samples collected from different environmental conditions, application of mathematical, chemical and physics principles and formulae to solve environmental problems). All lab activities are mandatory and will be graded. No make ups for lab activities and tests. (Prerequisites: BIOL 124 & 124L, BIOL 125 & 125L, five credits of inorganic chemistry.) Offered in the spring of each year.

BIOL 370 PRINCIPLES OF PARASITOLOGY 3 credit hours
This is the study of important protozoans, helminths, arthropods and cyclostomes which parasitize man, domestic animals and wildlife. (Prerequisites: BIOL 124 and 125). Offered every other year.

BIOL 370L PRINCIPLES OF PARASITOLOGY LABORATORY 1 credit hour
Laboratory activities focus on identification, collection, and preservation of protozoans, helminths, arthropods, and cyclostomes which parasitize animals and humans. (Prerequisites: BIOL 124L and BIOL 125L). Offered every other year.

BIOL 404 MARINE ECOLOGY (LUMCON) 3 credit hours (graduate or undergraduate)
This course includes a study of relationships of marine and estuarine organisms to environmental factors, interactions among organisms, ecological processes of energy and materials flow, the field studies of communities and ecosystems of the Louisiana coastal zone. Offered summer only for five weeks at a Louisiana Universities Marine Consortium Coastal Laboratory. (Prerequisites: General Biology, Invertebrate or Vertebrate Zoology, Introductory Chemistry and permission of instructor).

BIOL 405 COASTAL MARINE GEOLOGY (LUMCON) 4 credit hours (graduate or undergraduate)
This course includes geomorphologic features of estuarine, coastal and continental shelf environments; erosional, depositional and geochemical processes; and field and laboratory methods. (Prerequisites: Physical and historical geology, chemistry or minerology).

BIOL 407 MARINE INVERTEBRATE ZOOLOGY 4 credit hours (undergraduate)
This course includes a general study of the classification, structure, function and ecology of marine and estuarine invertebrates, emphasizing those of the Louisiana Gulf Coast. (Prerequisites: BIOL 124 and 125) The graduate and undergraduate courses are also offered at LUMCON.

BIOL 408 MARINE VERTEBRATE ZOOLOGY (LUMCON) 4 credit hours (graduate and undergraduate)
This course is a general study of the marine chordates with particular emphasis on the fishes, including classification, structure, function and ecology. (Prerequisite: Sixteen semester hours of Zoology).

BIOL 409 SPECIAL PROBLEMS IN MARINE SCIENCE (LUMCON) 4 credit hours
This course includes directed undergraduate research and study at a coastal laboratory of the Louisiana Universities Marine Consortium. (By arrangement.)

BIOL 410 ADVANCES IN ECOLOGY 3 credit hours
This is the study of the concepts of pollution, recycling, population growth and its demands on renewable and non-renewable resources, food resources, alternative sources of energy and cost effective procedures in energy conservation through classroom instruction. (Prerequisite: BIOL 341). Offered once a year.

BIOL 410L ADVANCES IN ECOLOGY LABORATORY 1 credit hour
Laboratory activities reinforce and impact the lecture series through field trips and special surveys. (Prerequisite: BIOL 341L).

BIOL 494-495 SENIOR SEMINAR 2 credit hours
This course involves presentation and discussion of current biological problems and research interests, independent library research, workshops on manuscript writing and proposal/grant writing, instrumentation in laboratories, and use of animals in research. Students are required to give oral and written critiques and summaries of scientific papers. The course is open to Biology and Biology Education majors. Offered once a year - 494 in Fall Semester, and 495 in Spring Semester.

BIOL 496 SENIOR COMPREHENSIVE 0 credit hours
All majors are required to pass a comprehensive examination. Students must register for the course IN THE SEMESTER PRIOR TO THE ONE IN WHICH THEY PLAN TO GRADUATE. The course will only be offered in the Fall and Spring semester.

CHEMISTRY COURSE DESCRIPTIONS

CHEM 101 INTRODUCTORY CHEMISTRY 3 credit hours
This course is a survey of the fundamentals of chemistry for the non-science student, with the emphasis on orientation to the physical sciences rather than the depth and rigor required of majors.

CHEM 101L INTRODUCTORY CHEMISTRY LABORATORY 1 credit hour
This course in laboratory practice is designed to accompany Chemistry 101. Concurrent enrollment in or prior credit for Chemistry 101 is required. (Two hours of laboratory per week)

CHEM 111 GENERAL CHEMISTRY I 3 credit hours
This course is designed to present the basics of the discipline in a systematic and fairly rigorous manner. Emphasis is placed on problem solving in the areas of stoichiometry, atomic/molecular structures, states of matter, gas laws and solutions. (Co-requisites: Mathematics 161)

CHEM 111L GENERAL CHEMISTRY I LABORATORY 2 credit hours
This course is designed to accompany Chemistry 111 and is an introduction to the fundamentals of laboratory practice. Many of the laboratory experiments are quantitative in nature and are designed to illustrate the fundamental laws of chemistry. Concurrent enrollment in or prior credit for Chemistry 111 is required. Five hours of laboratory per week.

CHEM 112 GENERAL CHEMISTRY II 3 credit hours
This course is a continuation of Chemistry 111 with emphasis on chemical kinetics, equilibria, and the descriptive chemistry of selected elements, electrochemistry, and elementary nuclear chemistry. (Prerequisite: Chemistry 111)

CHEM 112L GENERAL CHEMISTRY II LABORATORY 2 credit hours
Chemistry 112L accompanies Chemistry 112 and is designed around chemical kinetics, acid/base systems, equilibria and qualitative inorganic analysis. Six hours of laboratory per week.

CHEM 241 ORGANIC CHEMISTRY I 3 credit hours
This course is a comprehensive introduction to the study of organic compounds. Lectures include discussions of nomenclature, preparations, properties, reactions and reaction mechanisms of the major classes of organic compounds. (Prerequisite: Chemistry 112)

CHEM 241L ORGANIC CHEMISTRY I LABORATORY 2 credit hours
This course is designed to accompany Chemistry 241. It is an introduction to the laboratory practice of organic chemistry with six hours of laboratory per week. (Prerequisites: Chemistry 112L and concurrent enrollment in or prior credit for Chemistry 241)

CHEM 242 ORGANIC CHEMISTRY II 3 credit hours
This course (a continuation of Chemistry 241) is a study of more complex organic systems. Topics included are carbohydrates, amino acids, proteins, polynucleotides, and steroids. (Prerequisites: Chemistry 241 and 241L)

CHEM 242L ORGANIC CHEMISTRY II LABORATORY 2 credit hours
This course is designed to accompany Chemistry 242. Six hours of laboratory per week. (Prerequisite: Chemistry 241L and concurrent enrollment or prior credit in Chemistry 242)

CHEM 251 INORGANIC CHEMISTRY 3 credit hours
This course is a study of descriptive inorganic chemistry. It includes an introduction to nomenclature, structure (atomic, molecular and crystalline), the periodic table, chemistry of families of elements and special topics: Acid-bases, chemistry of selected anions, coordination chemistry, organometallic compounds and hydrogen bonding. (Prerequisites: Chemistry 112 and 112L)

CHEM 351 QUANTITATIVE ANALYSIS 3 credit hours
This course is an extension of studies of stoichiometry and equilibrium in general chemistry to principles and practice of quantitative chemistry. The lecture includes descriptive statistics with emphasis on small samples, various types of competing equilibria pertaining to acid-base, complexometric, potentiometric titrations and introduction to spectrophotometric processes. (Prerequisites: Chemistry 111, 112; Mathematics 161, 162)

CHEM 351L QUANTITATIVE ANALYSIS LABORATORY 2 credit hours
The laboratory portion of Chemistry 351 is intended to give practical experience in obtaining accurate, precise chemical measurements using both classical analytical techniques and instrumentation. Students will develop a number of the following skills: solution preparation, quantitative wet chemistry techniques, and proper use of instrumentation, assessment and interpretation of data, evaluation of results, written and oral presentation of work. (Prerequisites: Chemistry 112, 112L, and concurrent enrollment or prior credit in Chemistry 351)

CHEM 362 INSTRUMENTAL METHODS OF ANALYSIS 3 credit hours
This course is a rigorous introduction to instrumental methods of analysis. Among the methods considered are spectrophotometry, electroanalysis and thermoanalysis. (Prerequisites: Chemistry 351 and Mathematics 291)

CHEM 362L INSTRUMENTAL METHODS OF ANALYSIS LABORATORY 2 credit hours
This course is an introduction to the laboratory practice of analysis by instrumental methods. Concurrent enrollment or prior credit for 362 is required. Six hours of laboratory per week. (Prerequisites: Chemistry 351, 351L, and concurrent enrollment or prior credit in Chemistry 362.)

CHEM 371 BIOCHEMISTRY I 3 credit hours
This is an introductory course in biochemistry designed for upper level students. It emphasizes the major biological systems and the structures, function and reactions of various compounds of biological importance. (Prerequisite: Chemistry 242)

CHEM 371L BIOCHEMISTRY I LABORATORY 2 credit hours
This is a course of experiments selected to include work on biophysical principles, the chemical composition and properties of carbohydrates, lipids, proteins, and enzymes. The latter part of the laboratory includes isolation and characterization of biological compounds and the analysis of blood and urine. Six hours of laboratory per week. (Corequisites: Chemistry 242, 242L, and concurrent enrollment or prior credit in Chemistry 371)

CHEM 372 BIOCHEMISTRY II 3 credit hours
This course is a continuation of Chemistry 371. (Prerequisite: Chemistry 371)

CHEM 372L BIOCHEMISTRY II LABORATORY 2 credit hours
This course is a continuation of Chemistry 371L. Six hours of laboratory per week. (Prerequisites: Chemistry 371L and concurrent enrollment or prior credit for Chemistry 372)

CHEM 411 PHYSICAL CHEMISTRY I 3 credit hours
A rigorous introduction to the study of theoretical chemistry. Topics included are thermodynamics, states and properties of matter, kinetics, equilibrium and electrochemistry. (Prerequisite: Chemistry 242, Mathematics 291 and Physics 222)

CHEM 411L PHYSICAL CHEMISTRY LABORATORY 2 credit hours
This course is designed to accompany Chemistry 411 and 412. Concurrent enrollment or prior credit for Chemistry 412 is required. Six hours of laboratory per week.

CHEM 412 PHYSICAL CHEMISTRY II 3 credit hours
A rigorous introduction to the study of theoretical chemistry. Topics included are quantum mechanics, atomic and molecular structure, spectroscopy and statistical thermodynamics. (Prerequisite: Chemistry 242, Mathematics 291 and Physics 222)

CHEM 425 ADVANCED ORGANIC CHEMISTRY 3 credit hours
This course is an in-depth course designed to meet the needs of those who plan to do further study and/or research in organic chemistry. The lectures include aspects of physical organic chemistry as well as aspects of classical organic chemistry. Seminars and readings are assigned which require knowledge of the chemical literature. (Prerequisite: Chemistry 242; Corequisite: Chemistry 411)

CHEM 450 SPECIAL PROBLEMS AND SEMINAR 1-4 credit hours
This course provides conference and laboratory experiences for the student. Supervised research projects, reporting and presentation of seminar are required activities.

CHEM 461 ADVANCED INORGANIC CHEMISTRY 3 credit hours
This course is an advanced treatment of the fundamentals of inorganic chemistry. Emphasis is placed on the physical aspects as well as the classical aspects of inorganic chemistry. Seminars and readings are assigned which require a knowledge of the chemical literature. (Prerequisite: Chemistry 242; Corequisite: Chemistry 411)

CHEM 482 CHEMICAL RESEARCH 1-4 credit hours
This course is an introduction to research and the supervised study of a current research problem. It may be taken at any level with the approval of the department.

CHEM 492S SEMINAR FOR MAJORS 1 credit hour
Presentation and discussion of current problems related to the major. Time management, study skill, preparation for standardized testing (orientation for GRE, MCAT, etc.) guest speakers on trends in respective disciplines and requirements for graduate and professional schools.

c. Describe how the proposed program will be offered, e.g., traditionally, online, via interactive video, hybrid, etc. Discuss possibilities for a cooperative program, cross-enrollment options, or other manners of sharing/extending resources and access.

The proposed program will be offered in a traditional way in the Department of Natural Sciences at Southern University at New Orleans. Some of the courses in biology and chemistry (BIOL 105 and BIOL 106; BIOL 124 and BIOL 125; CHEM 101) have been offered on-line to facilitate students to enroll in classes that are required for non-science and science majors, respectively, as gate keeper courses. If courses are not offered and are not available on SUNO campus for students then they are allowed to cross enroll in equivalent courses on other campuses with prior approval of student's academic advisor and the departmental chairperson. Upon successful completion of cross enrolled classes, credits will be transferred to student's transcripts at SUNO.

Over the years, SUNO established Articulation Agreements with Delgado Community College and Nunez Community College to attract students into STEM fields after their successful completion of Associate Degrees. Once students come to SUNO they will be advised to complete a four year college degree in the areas of Biology and/or Chemistry, based on their future academic and/or career goals. Specifically, articulation agreements between aforementioned campuses and SUNO have been enhancing STEM majors' enrollment at SUNO. This will continue to boost STEM student retention and graduation rates at SUNO, once we implement the proposed BS Biology and Chemistry Program beginning fall 2012, pending approval.

d. Furnish documentation of the approval of the proposed program by the institution's Governing Board.

Please see Appendix II that confirms proposal approval by SUNO Curriculum Committee. The proposal will be submitted directly to the Board of Regents by the Office of the Southern University System (SUS) following Board approval. The documents from the SUS office will confirm Governing Board approval.

2. Need

a. Describe how the proposed program fits within the institution's existing role, scope and mission.

This proposed program fits well within the institution's existing role, scope, and mission by creating and maintaining an environment conducive to learning and growth, promoting the upward mobility of students by preparing them to enter into new as well as traditional careers, and equiping them to function optimally in the mainstream of American society. Goal one of the Strategic Plan is about access to higher education. This proposal supports that.

a. Has the proposed program, or a similar one, been offered at the institution previously?

(If yes, give reasons for the termination of the earlier program.)

Yes. The B.S. Biology program is currently being offered. The B.S. Chemistry program was terminated in January 2006 as a low completer program.

b. List similar programs offered at other institutions (public and private) in Louisiana. If a graduate program is requested, indicate similar programs in neighboring states.

Not a graduate program.

c. If similar programs exist in Louisiana, why is an additional program needed? Indicate manpower needs, including interest on the part of industry, academia, governmental agencies, or other institutions

SUNO serves a unique population of students, mainly African- Americans and other minority groups, who need the Biology and Chemistry programs to make progress into various disciplines that are relevant to the manpower needs of the State of Louisiana. For instance, several graduates of the two programs at SUNO have successfully graduated in Pharmacy, Nursing, and other Allied Health programs, and are working in Louisiana health-related systems. The programs are gateways to several ares of manpower needs of Louisiana, and are relevant to every state institution of higher learning.

d. If a graduate program is requested, indicate:
   i. State, regional, and national need in the field for more graduates. Cite any pertinent studies or national and state trends.
   ii. Are there possibilities for cooperative programs?

N/A

e. If this program is approved, will its approval result in the termination or phasing out of existing programs? That is, could this program be considered a replacement program?

Yes. Students in the existing B.S. Biology program will be able to seamlessly continue with the requirements of that program within the proposed program as the curriculum has not changed.

f. Describe how the proposed program will further the mission of the institution and support initiatives identified in the Board of Regents' Master Plan for Public Postsecondary Education in Louisiana: 2011.

The proposed program will enhance the quality of STEM education at SUNO by providing better educational opportunities and scholarship for students; provide opportunities for students and faculty to expose to several scientific peers via participation at the local, regional, and national scientific meetings/conferences; enhance the net working capabilities/opportunities for STEM students to explore and pursue advance degrees in the STEM fields; to name a few, which will align with the overall goals and objectives of Board of Regents' Master Plan for Public Postsecondary Education in Louisiana: 2011 (Goal 1: Objectives 1.3, 1.4, 1.6, and 1.7; Goal 2: Objective 2.2; and Goal 3: Objectives 3.1 and 3.5) and increases the variety of undergraduate programs in sciences as proposed under guideline 6.C for role/scope admission of regional universities.

3. Students

a. Project the enrollment and estimate the number of graduates expected for the proposed program for the first five years by level of student and with a justification for the projections.

The Biology program alone graduated 68 students within the past three years, i.e. 18 in 2008-09, 21 in 2009-10, and 28 in 2010-11. By offering BS Biology and Chemistry Program, we project 2% increase in enrollment for the first 2 to 3 years and 10% increase in the 4th and 5th years. We project the total number of graduates for the first five years for the proposed program to be approximately 120. The Biology program alone currently has 386 majors as of Fall 2011. Enrollment in both programs is expected to be close to 500 by the 5th year.

b. Indicate the source of students from existing programs or students who might not otherwise be attracted to the institution.

This program is expected to succeed, compared to the current available degree programs in sciences, due in part to increasing student enrollments. It will provide an opportunity to students to have a more competitive curriculum based on the inter-disciplinary nature of the program for prospective graduates in STEM fields. We will vigorously recruit students, with the assistance of other pertinent offices. We expect to apply for student support programs at the National Science Foundation, National Institutes of Health, Department of Education, and other agencies or organizations.

c. What preparation will be necessary for student to enter the program?

Students must meet all the university admission requirements:
Applicants for admission should submit their applications by July 1 for Fall, December 1 for Spring, or May 1 for the Summer Session. An application for admission may be completed online at www.suno.edu or may be requested from the Office of Recruitment, Admissions and Retention, Southern University at New Orleans, 6400 Press Drive, New Orleans, LA 70126. SUNO adopted the Selective Admission criteria effective from Fall

2011 which ensures that admitted students henceforth will possess a strong preparation in Mathematics and English through the Louisiana Core Curriculum.

The admission criteria are a follows:

FRESHMAN ADMISSION

Only traditional high school graduates and non-traditional students (students who have completed the General Educational Development (GED) test; home schooled; and other students certified by appropriate state agencies as high school graduate and/or its equivalency) are eligible for admission. All first-time college students must satisfy the following criteria for admission:

- Completion of the Louisiana Board of Regents high school core curriculum (also TOPS core curriculum); **AND**
- Requirement of no more than one remedial course for immediate admission; **AND**
- High school GPA of 2.0 or greater; **OR**
- ACT composite score of 20 (SAT 950) or greater; **OR**
- High school graduation rank top 50% of class.

First-time college students, who graduate from out-of-state schools or are home schooled, must meet one of the following minimum admissions criteria:

Criteria 1
- Completion of Louisiana Board of Regents' high school core curriculum: **AND**
- Minimum ACT English score of 18 and Math score of 19 (SAT verbal score of 450 or SAT Math score of 460-470); **AND**
- Minimum high school GPA of 2.0 on a 4.0 scale; **OR**
- Minimum composite ACT score of 20 (SAT score of 950); **OR**
- Rank in the top 50% of the high school graduating class.

Criteria 2
- Minimum composite ACT score of 20 (SAT score of 950); **AND**
- Minimum ACT English score of 18 and Math score of 19 (SAT verbal score of 450 or SAT Math score of 460-470); **AND**
- Minimum high school GPA of 2.0 on a 4.0 scale; **AND**
- Rank in the upper 50 percent of the high school graduating class; **AND**
- No more than one developmental course is required.

Criteria 3
- Minimum composite ACT score of 23 (STE score of 1060); **AND**
- Minimum ACT English score of 18 and Math score of 19 (SAT verbal score of 450 or SAT Math score of 460-470); **AND**
- No more than one development course required.

d. Provide enrollment data for closely related programs currently offered at the institution. If the proposed program is an expansion of an existing program, give the past four years' enrollments in existing programs by level, and number of degrees granted.

Existing Degree Program:	ENROLLMENT Data:			
	2007-2008	2008-2009	2009-2010	2010-2011
BS in Biology	231	265	335	386

Existing Degree Program:	COMPLETER Data:			
	2007-2008	2008-2009	2009-2010	2010-2011
BS in Biology	11	18	21	28

e. If a graduate program is requested, indicate sources of financial support for students.

N/A

4. Faculty

a. List the present faculty members who will be most directly involved in the proposed program. Indicate for each faculty member: name; date of appointment; present rank; degrees (by field) and the institutions granting them; present credits, contact hours, and student credit hours produced; and other assignments.

Name	Date of Appointment	Rank	Degree	Degree Granting Institution	Contact Hours	Student Credit Hours Produced
David S. Adegboye	1999	Professor	PhD	University of Cambridge, UK	N/A*	
Solomon S. Adekunle	2007	Associate Professor	PhD	Boston University	12	360
Bashir M. Rezk Atteia	2011	Assistant Professor	PhD	Maastricht University, The Netherlands	12	360
Alvin Bopp	1996	Professor	PhD	UNO	12	360
Ibrahim Ekaidi	2007	Associate Professor	MD	Craiova U., Romania	12	360
Carl P. Johnson	1996	Professor	PhD	Alabama State University	12	360
Murty S. Kambhampati	1994	Professor	PhD PhD	Jackson State University Andhra University, India	12	360
Lisa Mims-Devezin	1993	Professor	PhD	SUBR	6**	180
Tonye E. Numbere	2010	Assistant Professor	PhD	Kansas State University	12	360
Joseph O. Olubadewo	2007	Associate Professor	PhD	Vanderbilt University	12	360
Quincy A. Quick	2011	Assistant Professor	PhD	Virginia State University	12	360
Illya Tietzel	2008	Assistant Professor	PhD	University of Maryland	12	360
Yolander R. Youngblood	2011	Assistant Professor	PhD	University of Florida	12	360

*Vice Chancellor for Academic Affairs and Accreditation Liaison

** Associate Dean, College of Arts and Sciences

Please see the attached curriculum vitae of Biology and Chemistry faculty **(Appendix I)** for other details.

b. Calculate the present student-faculty ratio in the subject matter field or department in which the proposed program will be offered. The basis for this calculation should be full-time equivalent students and faculty and should be computed based on all students taught rather than the student majors or other related groupings.

Currently, we have 20:1 (on average) student: faculty ratio across the classes we teach in the Department of Natural Sciences at SUNO.

c. Project the number of new faculty members needed to initiate the proposed program for each of the first five years. If the proposed program will be absorbed in whole or part by present faculty, explain how this will be done.

Two additional new faculty in the area of chemistry are needed to initiate the proposed program. The Biology component is adequately staffed.

d. Explain if recruiting new faculty members will require an unusual outlay of funds or unique techniques. For example, will a special chair of instruction be required to attract a nationally recognized person?

No special chair of instruction is required. Two qualified candidates with terminal degrees in Chemistry will be required at the rank of Assistant Professor. The two faculty requirement will increase the existing departmental budget by $120,594 in salary and fringe.

e. Describe involvement of faculty, present and projected, in research, extension and other activities and the relationship of these activities to the teaching load.

Involvement of faculty in undergraduate research plays a pivotal role in nurturing, mentoring, and molding students appropriately to enable and achieve the fullest of their potential in the fields of STEM. Approximately 30-40% of Biology faculty are actively involved in undergraduate research in the Department of Natural Sciences. Teaching loads are one of the major reasons why several of the STEM faculty are not able/willing to participate actively in research and mentoring. We are planning to implement release

time for faculty on an annual rotation basis to dedicate their time to secure external funding involving students in active research, present research results at the local, regional, and or national conferences, and to publish research findings in peer reviewed scientific journals. This approach will enhance further the quality of education at SUNO in STEM fields.

f. If a graduate program is requested, indicate:

i. For present faculty, areas of specialized competence related to the new program. (List publications and their nature as well as direction of theses and dissertations.)

ii. For proposed new faculty, qualifications and/or strengths needed.

N/A

5. Library and Other Special Resources

a. Are present library holdings in related fields adequate to initiate the proposed program?

Yes. Pending the renovation of the main library which was destroyed by hurricane Katrina, SUNO has developed a temporary 40,000 sq ft library on the ground floor of the multipurpose building. This facility was judged as adequate in the interim by the SACSCOC on-site team, especially after the team received evidence that concrete plans are on the way to renovate the main library soon, possibly by year 2012.

b. Will the library holdings need to be expanded and improved to meet program needs of the program in the first five years? If so, what types will be needed: books, periodicals, reference books, primary source materials, etc.?

Yes. We need at least some of the important scientific journals/periodicals in the areas of STEM to enhance the quality of education for our students.

c. Do other institutions have library resources being used or available to faculty and students for the proposed program?

Yes. We, STEM faculty and students, can use library database at SUNO as well as other academic institutions in the state of Louisiana and other research institutions and national labs. SUNO is a member of the LOUIS and LALINC consortia that honor inter-university loan agreement.

d. Indicate or estimate total expenditure for the last two completed fiscal years in library acquisitions for the subject matter fields or departments in which the proposed program will be offered, or which are related to it.

Estimates received from the Director of the Library shows that approximately $3,000.00 was spent on Biology acquisitions and approximately $400.00 on Chemistry acquisitions. Expenditures can be increased as needed as enrollment in the proposed program increases.

e. Project library expenditures needed for the first five years of the proposed program.

A bare minimum of $50,000 is needed to procure some important journals, biological and chemical abstracts, and a few periodicals in the areas of biology and chemistry.

f. What additional special resources, other than library holdings, will be needed?

An additional laboratory technician is needed to provide adequate laboratory support to faculty in the expanded program.

g. If a graduate program is requested, indicate:
   i. Special library resources needed to offer a program of quality.
   ii. How do library resources deemed desirable compare to other institutions with similar programs that are high quality? Cite specific comparisons of other institutions.

N/A

6. Facilities and Equipment

a. Describe existing facilities (classrooms, laboratories, offices, etc.) available for the proposed program.

Biology program has a total of 11 full-time faculty. Nine (9) faculty are 9-month and teach a minimum of 12 contact hours per semester. Nine faculty have offices in the New Science Building (NSC) on Park Campus. We have four class rooms (NSC 308, 310, 312, and 314), five laboratories for students (NSC 316, 318, 320, 327, 329 and 333, and two research labs (NSC 333 and 321E) for faculty and undergraduate research. In addition, we have a computer laboratory in NSC 322. Currently the Department of Natural Sciences has two chemistry faculty. Their offices are located on the third floor of the Old Science Building/Brown Building (BRN) on Park campus. Chemistry has two classrooms and three laboratories in BRN. Biological supplies are in NSC 304. Autoclaves and equipment for cleaning glassware housed in NSC 329. Meeting for faculty and program seminars can be held in the designated conference room NSC 306. An ultramodern complex that will house the Biology, Chemistry, Mathematics and

Physics programs is expected to be available by 2013-2014 or earlier. One faculty is the Vice Chancellor for Academic Affairs and another is the Associate Dean, College of Arts and Sciences who teaches at reduced (50%) load. Both are accommodated in different buildings.

b. Describe present utilization of these facilities where facilities are assigned to the department.

We are using all the office spaces, class rooms, and laboratories for teaching and research STEM programs.

c. Indicate the need for new facilities, such as special buildings, laboratories, minor construction, remodeling, and fixed equipment. If special facilities and equipment will be needed, estimate cost and indicate proposed sources for financing.

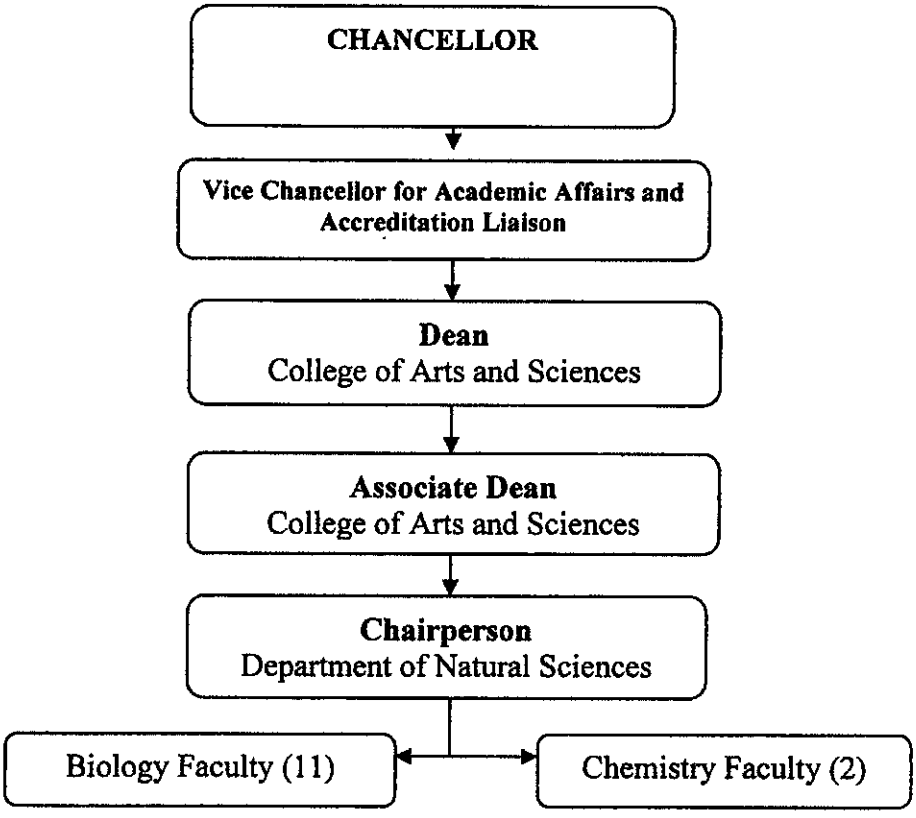
Funds are available for the ultramodern science complex referred to in 6a. The project is undergoing necessary approval processes at state offices.

7. Administration

a. In what department, division, school, college, or other designation will the proposed program be administered? Explain if the program is interdisciplinary and/or inter-departmental.

This is an interdisciplinary program. The proposed program will be administered by the Chairperson of the Department of Natural Sciences in the College of Arts and Sciences.

The organization chart for the program administration is shown below.



b. Indicate if the proposed program will affect the present administrative structure of the institution.

No.

c. Describe any special departmental strengths and/or weaknesses and how the proposed program will affect them.

The proposed program will be an added strength and advantage for the Department of Natural Sciences at SUNO due to the following facts:

1. It will provide an opportunity for students to major in Biology OR Chemistry OR Biology and Chemistry OR Biology majors with a minor in Chemistry and vice versa;
2. It will strengthen the overall STEM program at SUNO;
3. It will provide additional scholarship opportunities for STEM majors both at SUNO and at other institutions to participate in summer research internships;
4. It will prepare STEM students in the fields of biology and chemistry in a competitive environment with self esteem and confidence to pursue advance degrees in biology and chemistry;

5. It will allow the department to apply for an increased range of funding from regional and national sources; and
6. Finally this program will have a tremendous economic impact not only in the state of Louisiana but also at the national level by increasing the total graduates in STEM higher education and the future workforce.

8. Accreditation

a. Is the program eligible to be accredited? If so, give the name(s) of the accrediting agency(ies), requirements for accreditation, and how the criteria will be achieved.

No, Program-specific accreditation is not required. Programs that do not fall under mandatory accrediting agencies, such as the proposed program, however must undergo internal periodic program review process to ensure quality is maintained. This is a requirement, and it is reviewed by both internal and external consultants. The B.S. Biology program, for instance, developed a portfolio that was reviewed prior to the SACSCOC on-site visit in March 2011. The consultants' reports, which were favorable, supported the evidence of institutional effectiveness presented to SACSCOC. This process will continue once this proposal is approved.

b. Delineate the initial costs of accreditation and subsequent annual cost.

N/A

c. If a doctoral program is requested, describe the use of consultants in developing the proposed program and include a copy of their report as an appendix to the proposal. The use of consultants to assist in the development of such proposal is highly recommended, if not imperative.

d.

N/A

9. Related Fields

a. Indicate subject matter fields at the institution which are related to, or will support, the proposed program.

The proposed program will continue to have a close relationship and interaction with the faculty as well as facilities of mathematics and physics in the Department of Natural Sciences at SUNO. The department of Natural Science faculty have been actively involved in securing grants from the state and federal funding agencies such as LA Board of Regents, National Science Foundation, National Institutes of Health, Department of Education, Department of Defense, Department of Energy, and the National Aeronautics and Space Administration. Funding secured through these grants will continue to support students enrolled in the new program effective fall 2012, pending

approval, toward their tuition, scholarships, summer research internships, travel, etc., to enhance their academic and research performance; and to prepare them for graduate school to pursue their advance degrees in the chosen STEM fields – Biology and/or Chemistry.

b. Evaluate the supporting fields and indicate if they need improvement. If so, indicate the extent of improvement needed and cost.

N/A

10. Costs

a. Estimate costs of the proposed program for the first four years. Indicate any amounts to be absorbed out of current sources of revenue and needs for additional appropriations (if any). Indicate if federal or other sources of funds are available. Are there prospects for increased income from students recruited specifically to this program who otherwise would not have enrolled?

Salaries for two new faculty in the area of Chemistry at the level of Assistant Professor will be an additional yearly cost of approximately $120,000 on the existing budget. Furthermore, one additional Laboratory Technician is required at an additional cost of $35,000.

b. Indicate departmental costs:

i. Show departmental operating expenditures for the last two completed fiscal years for departments involved in or related to the proposed program.

	2008-09		2009-10		2010-11		2011-12	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
Faculty	$802,937	11	$843,084	11	$885,238	11	$929,500	11
Graduate Assistants	0	0	0	0	0	0	0	0
Support Personnel	$60,600	2	$63,630	2	$66,811	2	$70,152	2
Fellowships & Scholarships	0	0	0	0	0	0	0	0
SUB-TOTAL	$863,537	13	$906,714	13	$952,049	13	$999,652	13
	AMOUNT		AMOUNT		AMOUNT		AMOUNT	
Facilities	$75,000		$65,000		$50,000		$50,000	
Equipment	$95,000		$50,000		$52,500		$47,500	

Travel	$3,500		$3,500		$3,500		$3,500	
Supplies	$10,000		$15,500		$12,500		$10,500	
Library Resources	$4,500		$4,500		$4,500		$4,500	
SUB-TOTAL	$188,000		$138,500		$123,000		$116,000	
GRAND TOTAL	**$1,051,537**		**$1,045,214**		**$1,075,049**		**$1,115,652**	
Total Anticipated From:	**AMOUNT**	**%**	**AMOUNT**	**%**	**AMOUNT**	**%**	**AMOUNT**	**%**
State Appropriations	**$992,651**	94.4	**$975,185**	93.3	**$970,769**	90.3	**$1,025,284**	91.9
Federal Grants/Contracts	0	0	0	0	$27,951	2.6	$23,429	2.1
State Grants/Contracts	$54,680	5.2	$65,848	6.3	$70,953	6.6	$59,130	5.3
Private Grants/Contracts	$4,206	0.4	$4,181	0.4	$5,375	0.5	$7,810	0.7
Other (specify)	0	0	0	0	0	0	0	0
TOTAL	**$1,051,537**	**100**	**$1,045,214**	**100**	**$1,075,049**	**100**	**$1,115,652**	**100**

ii. How will the proposed program affect the allocation of these funds?

The most expensive component of a program budget is faculty costs. Both degree programs have adequate faculty for Year One. We anticipate one Assistant Professor of Chemistry will be employed with effect from Year Two at an additional cost of $44,500.00 plus $15,797 (35.5%) fringe. A second new faculty is expected to be needed by Year Three of the program at similar cost.

Hiring two additional faculty in Chemistry will positively impact the graduation time for STEM students by reducing the wait period to enroll in required courses.

c. Indicate if additional funds for research will be needed to support the proposed program.

No.

The Biology and Chemistry faculty are prolific grant writers as can be seen from their vitae. They have attracted millions of dollars in grants from agencies such as the Board of Regents, National Science Foundation, Department of Defense, Department of Education, National Institutes of Health, etc. within the past five years.

d. Provide estimates of additional cost on the attached form.

N/A

APPENDIX I - Faculty Curriculum Vitae

(See Attached)

APPENDIX II - SUNO Curriculum Committee Approval

(See Attached)

David Sunday Adegboye
3844 Aspen Drive
Harvey, LA 70058
Phone: Home 504 368 7194
Cell 504 931 7120
E-mail: *dadegboye@suno.edu*

Education

- **Ahmadu Bello University, Zaria, Nigeria**

  Doctor of Veterinary Medicine -1972

- **University of Cambridge, Cambridge, United Kingdom**

  Doctor of Philosophy (Microbiology/Immunology) -1975

- **National Institutes of Health, Bethesda, MD, U.S.A.**

  Post-doctoral in Microbiology, Fulbright Fellow - 1978

- **University of London, London, U.K.**

  Post-doctoral in Molecular Biology, Commonwealth Fellowship, 1990-'91

- **Iowa State University, Ames, IA, U.S.A.**

  Post-doctoral in Molecular Biology, Biotechnology Research and Development Corporation grant, August 1993 to July 1995

Special Administrative Training

- Institute for Higher Education Policy Workshop, Birmingham, AL, July 20-24, 2008
- Noel-Levitz Leadership Training for Executive Team and Campus Leaders May 27 & 28, 2003
- Comprehensive Public Training Program – Performance Planning & Review for Supervisors, Louisiana Department of State Civil Service. May 01, 2003.
- Personnel Action Form Workshop, Human Resources, October 11, 2001.
- Employment Training Workshop, Human Resources, May 31, 2001

Citizenship: United States of America

Employment History

- **Southern University at New Orleans, New Orleans, Louisiana**

Vice Chancellor for Academic Affairs & Accreditation Liaison, Feb. 2010 to current.

Assumed full responsibility as the Chief Academic Officer responsible for all academic programs of the university, including curriculum, faculty, academic publications, accreditation, and other related programs as outlined under the Interim position.

Interim Vice Chancellor for Academic Affairs & Accreditation Liaison, Feb. 2009 to Jan. 2010

Combined the responsibilities of Associate VC Academic Affairs/Accreditation Liaison with the following additional responsibilities:

1. Serve as the Chief Academic Officer of SUNO on an interim basis, supervising Deans of Colleges, the Registrar and Records Office, administrative staff, and directors of academic support areas.
2. Provide assistance to the Chancellor in the formulation of broad academic policies and development of major institutional reports.
3. Work with Deans and Chairs to ensure excellence in the quality of teaching, faculty development, and in addressing student and faculty concerns.
4. Work collaboratively with other Vice Chancellors for the success of SUNO.

Associate Vice Chancellor for Academic Affairs-Academic Programs & Accreditation Liaison, March 2006 to Jan. 2009.

1. Member of the Chancellor's Cabinet
2. Deputized for the Vice Chancellor for Academic Affairs on several occasions.
3. Coordinate all accreditation-related activities, including SACS-COC, NCATE, AACSB, CSWE, etc.
4. Coordinate New Program Approvals/Annual Reports with the LA Board of Regents Staff.
5. Coordinate all accreditation-related communications with SACS-COC, e.g. Institutional Reports, Substantive Change Notifications, etc.

Chairperson, Department of Biology, August 1999 to February 2006.
Achievements:

1. **Teaching**:

Biol 105	Introduction to Biology, Part I
Biol 105L	Introduction to Biology Laboratory
Biol 106	Introduction to Biology, Part II
Biol 227	General Microbiology

Biol 217L	General Microbiology Laboratory
Biol 220	Pathogenic Microbiology and Immunology
Biol 220L	Pathogenic Microbiology & Immunology Lab
Biol 325	Molecular Biology
Biol 325L	Molecular Biology Laboratory
Biol 494	Senior Seminar, Part I
Biol 495	Senior Seminar, Part II

At the request of the University of Lagos, Nigeria, and SUNO's approval, served as the external supervisor of a Ph.D. thesis on "*Studies on human urogenital mycoplasmosis in Lagos and Jos, Nigeria", 2002 to 2008.* Ph.D. was awarded to the candidate in Fall 2008.

2. **Curriculum Development**
   - Developed *Biol 220 Pathogenic Microbiology* and *Immunology*, and *Biol 325 Molecular Biology* courses, making the SUNO Biology Curriculum more highly competitive.
   - Coordinated the inclusion of Calculus I (*Math 290*) in the Biology Curriculum to facilitate better performance in Physics courses.
   - Coordinated the development of a single syllabus for all multi-section courses in Biology.
3. Developed a highly rated **Biology portfolio** for the SACS Accreditation team in year 2000, and wrote a history of the Department of Biology.
4. With two other colleagues, developed the **Science portfolio** for the College of Education accreditation team.
5. **Research Grants** – Wrote 10 grants, as Principal Investigator or Co-Principal Investigator, in four years, and got 7 funded outright, two provisionally funded, and only one unfunded. Total cash value to SUNO is approx. 1.8 million dollars.
6. Through the efforts, enrollment in Biology courses remained steady, and yearly graduate school and **professional school admission** increased as follows, prior to the Katrina Hurricane:

1999/00	2000/01	2001/02	2002/03	2003/04
1	2	3	8	11

7. Recognized as the **Most Outstanding Grantsman** at SUNO for 2002-2003 and 2004-05.
8. **Student Evaluation**, 4.71 three-year average on a scale of 5.0.
9. **Major Committee Membership at SUNO**:
   - SUNO Campus Safety Committee
   - Enrollment Management Advisory Council
   - SUNO Administrative Council
   - Curriculum Redesign Committee
   - College of Education NCATE Standard 5 Committee.

- Teacher Education Council
- Undergraduate Research Committee
- Research Risks and Human Subjects Committee
- Member, SUNO Administrative Council, 1999 to 2005
- Chair of the Search Committee for Dean, College of Science. Year 2004.

10. **Community Services**:
    - SUNO representative, City of New Orleans Health Advisory Board - advise the Mayor of New Orleans on health-related matters, 2003 to 2005.
    - SUNO Representative, LA Board of Regents' Allied Health Articulation Committee - the committee's task was to harmonize all Allied Health courses offered by Louisiana Universities and Colleges, 2003 to 2005.
    - SUNO Representative, Administrative Board at Medical Center of Louisiana at New Orleans - a high power management board of LSU hospital complex, 2003 to current.
    - Member of the Task Force, Louisiana Slave Ship Museum Development (Landrieu Project)
    - President, African Christian Fellowship (ACF), New Orleans Chapter, Inc., 2000 to 2004. Led the fellowship to purchase and develop a 3.1 acre community center on Chef Menteur Highway, New Orleans East.
    - ACF South Region Council Member
    - ACF South Region Committee on Education and Missions

- **Dillard University, New Orleans, Louisiana**
  Associate Professor of Biology
  August 1995 to July 1999.

  Achievements:

  1. Teaching:
     Bio 103-001 Introductory Biology (Part I)
     Bio 104-001 Introductory Biology (Part II)
     Bio 201-901L Anatomy and Physiology Laboratory to Nursing & Pre-Med Majors
     Bio 203-001 Medical Microbiology to Nursing Majors
     Bio 203-901L Microbiology Laboratory
     Bio 203-902L Microbiology Laboratory
     Bio 304-001 General Microbiology and Immunology to Pre-Med, Pre-Vet, Pre-Dentistry Biology Majors, and Allied Health Majors

2. Excellent student evaluation - average of 4.60 on a scale of 5.0
3. Appointed **Barron Hilton Endowed Professor of Nursing/Pre-Medical Careers.**
4. Served on major committees, including: Faculty-Trustee Liaison Committee, African World Studies Institute Advisory Committee, Association of Louisiana Faculty Senate (elected by faculty), etc.
5. Improved the Microbiology laboratory and re-organized an underutilized laboratory into a Molecular Biology/Immunology Research Laboratory.

- **University of Iowa, Iowa City, Iowa**
  Adjunct Professor, June and July, 1996, 1997

  Achievements:

  1. Under the Faculty Partnership Program of the Funds for Improvement of Post-Secondary Education (FIPSE), worked on the Molecular Biology of extremophilic bacteria (environmentally important), with emphasis on enzyme encoding genes.

  2. **Guest Speaker** at closing workshops on **Building A Bridge To Graduate School: Strategies to Recruit Minority Students Into Science, Engineering, and Mathematics Graduate Program.**

- **Iowa State University, Ames, Iowa**
  Visiting Professor, August 1993 to June 1995

  Achievements:

  1. Taught, jointly, Pathogenic Microbiology to Microbiology majors.
  2. Developed an immunohistochemical diagnostic test for calf mycoplasmal diseases using monoclonal antibodies, and published three important journal papers on this topic.
  3. Worked jointly on the immune response to the capsular antigen of *Mycoplasma dispar.*
  4. Worked on the Molecular Biology of mycoplasmas, in particular, capsule genes and variable surface proteins of *Mycoplasma bovis.*

- **North London Blood Transfusion Center, London, United Kingdom**

  Quality Control Microbiologist, May to October 1991
  Duties:
  Screening of apparently healthy blood donors for antibodies to HIV, Hepatitis B and C viruses, *Treponema pallidum*, etc, and determination of the prevalence of anti-HTLV antibody.

- **University of London, London, United Kingdom**

  Visiting Professor, January 1990 to April 1991
  Achievements:
  1. Assisted my host in the running of laboratory classes in Pathogenic Bacteriology.
  2. Conducted major research on the Molecular Biology of equid herpes virus type 1 immediate early gene, and successfully cloned the gene.
  3. Carried out electron microscopic studies on *Dermatophilus congolensis,* a skin pathogen of cattle.
  4. Attended the **Immunology Update for Clinicians** course at the Royal Postgraduate Medical College, Hammersmith Hospital, London, U.K.

- **University of Ilorin, Ilorin, Nigeria**

  Full Professor, 1985 - 1992

  Achievements:

  1. **Teaching**: Anatomy of Domestic Animals, Animal Health, and Meat Hygiene, to undergraduates; Principles of Disease Control, to graduates.
  2. **Graduate Student Supervision:** MS and PhD projects in multi disciplinary areas, including: Microbiology, Parasitology, Public Health, and Reproductive Physiology, by special arrangements with Ahmadu Bello University, Zaria.
  3. **Chairperson**, Department of Animal Production (1985 to 1987).
  4. **Dean,** College of Agriculture (1985 to 1989).
  5. **Member, Commonwealth Scholarship Interview Panel**. Interviewed top graduates of Nigerian universities planning to study abroad each year – approximately 2000 graduates interviewed yearly. 1987 to 1989.
  6. **Member, National Universities Commission Panel on Academic Standards**. Advised the Federal Government of Nigeria on policy matters affecting quality of education, such as curriculum development, centers of excellence for each discipline, number and location of new universities, etc. 1987 to 1989.

- **Ahmadu Bello University, Zaria, Nigeria**

  Full Professor, 1983 - 1985; ***Lecturer*** rising to ***Reader (Associate Professor)*** 1972 - 1983

  Achievements:

  1. **Teaching**: All sections of Microbiology, including Pathogenic Bacteriology, Immunology, and Clinical Diagnosis, to undergraduates; Advanced Immunology, and Mycoplasmology, to graduates.

2. **Graduate Student Supervision**: MS and PhD projects in multi disciplinary areas including: Microbiology, Parasitology, Public Health, Reproductive Physiology, Pathology, etc. Former graduate students with whom I have joint journal publications include: Dada, B.J.O, Aganga, A.O., Etukudo, B.O., Alafiatayo, Ruth A., Garba, S.A., Fasanya, O.O.A., Ibeziako, Uche .E., and Molokwu, J.U.

3. **Assistant Dean for Postgraduate and Research Affairs**
   My duties included: 1. coordinating all graduate admissions (MS & Ph.D.) to the College of Veterinary Medicine; 2. appointing supervisors for all graduate students; 3. assessing progress reports of each graduate student; 4. appointing external examiners for all MS and Ph.D. candidates and serving as the Chairman during oral thesis defense;

   5. serving as College of Veterinary Medicine representative on the University Graduate School Board; 6. assisting the Dean to present graduating undergraduates and graduates for their degrees at commencement exercises; 7. reviewing all university senate grant proposals.
   October 1981 to July 1983.

4. **Member, Membership Committee of the International Organization for Mycoplasmology**. Helped to recruit scientists from Africa. 1980 to 1984.

5. **National Secretary of the Nigerian Veterinary Medical Association**
   I served as the negotiator of policies affecting the practice of veterinary science in Nigeria with the appropriate arm of government. I represented approximately 800 professionals in this role. I organized the national annual conference, and made proposals to the government on the importation of drugs and livestock feed. 1979 to 1981.

6. **Nigerian Veterinary Council Examiner**. All veterinarians trained abroad in the former Soviet Union countries had to take a board certification examination in all disciplines before they could practice in Nigeria. I was the examiner in Pathology and Microbiology. 1979-1981.

7. One of the two faculty members selected on merit to participate in a **Faculty Exchange Program** with Kansas State University, Manhattan, KS, the American university that established the colleges of Agriculture and Vet Medicine at Ahmadu Bello University, Zaria, Nigeria. 1981.

- **Kansas State University, Manhattan, Kansas**

  Visiting Adjunct Professor, Summer 1981

  Developed mycoplasmal culturing and identification system for the Department of Pathology and Microbiology, and taught a Mycoplasmology Summer course.

- **National Institute for Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, Maryland**

  Fulbright Scholar, 1978

  Worked at the Mycoplasma Section, National Institute for Allergy and Infectious Diseases. I acquired skills in microbial characterization and storage.

Grants/Prizes

1. **Bioinformatics and Biotechnology Research Initiative.** A U.S. Army Medical Research Acquisition Activity (USAMRAA) award for research on *Mycoplasma genitalium* genome, in collaboration with the Louisiana State University Health Sciences Center, New Orleans. PD/PI. 2008-2011. **$1.265 million.**

2. **Southern Education Foundation Mini-Grant Award** – for funding campus-wide SACS-COC accreditation preparation workshops. PI. 2008-2009. **$15,000.**

3. **Minority Science and Engineering Improvement Program.** U.S. Department of Education. Co-PI. 2005-08. **$238,705.**
4. **Louisiana Biomedical Research Network Supplementary grants.**
   National Institutes of Health. PI.
   - 2003-04. **$37,763** - for photomicrography station.
   - 2004-05. **$24,000** - for campus-wide bandwidth.
   - 2004-05. **$31, 838** - for Faculty Summer Research Program.
5. **Enhancement of the Computer Laboratory Facility for Biology Instruction at Southern University at New Orleans**. Co-PI. Board of Regents Support Funds, State of Louisiana. 2005-2006. **$50,000.**
6. **Enhancement of Microbiology, Cell and Molecular Biology, and Ecology Teaching and Research Infrastructure at Southern University at New Orleans.** Co-PI. Board of Regents Support Funds, State of Louisiana, 2005-2006. **$38,632.**
7. **Enhancement of Microbiology Teaching and Research Infrastructure.** PI. Board of Regents Support Funds, State of Louisiana, 2003-04. **$53,497**.
   Rated second best among enhancement grant proposals this year.

8. **Louisiana Biomedical Research Infrastructure Network.** A multi-campus grant. Project Director, Southern University at New Orleans (SUNO) Campus. National Institutes of Health. 2002-05. **$5.9 million.** SUNO allocation was $586,474.
9. **Enhancement of Technological Infrastructure for Environmental Science Instruction.** Co-PI. Board of Regents Support Funds, State of Louisiana, 2000-01. **$41,854.**
10. **Enhancement of Undergraduate Curriculum by the Integration of Molecular Biology**. PI. Board of Regents Support Funds, State of Louisiana. 1999-00. **$49,374.**
11. **Modernizing the Biology Curriculum at Southern University at New Orleans.** PI. Air Force Office of Scientific Research, Department of Defense. 1999-00. **$194,298.00.**
12. **Enhancement of Laboratory Instruction in Biology.** Co-PI. Board of Regents Support Funds, State of Louisiana, 1999-00. **$40,000.**
13. **Henry C. McBay Research Fellowship** awarded by The College Fund/UNCF, for studies on human ureaplasmosis. Summer 1998. **$10,000.**
14. **U.S. Department of Education/University of Iowa Faculty Partnership Project and Research Support** grant for Summer Research. 1995-97. **$22,500.**
15. **Biotechnology Research and Development Corporation** grant for studies on immune response to capsules of mycoplasmas, 1993-94. **$325,000.**
16. **USDA Formula Funds** grant for studies on capsule genes, 1993-94. $10,000.

17. **Iowa Livestock Health Advisory Funds** for development of diagnostic tests, 1993-94. $15,000.00.
18. **Commonwealth Senior Academic Staff Fellowship** (United Kingdom) for ultrastructural studies of dermatophilosis, 1990.
19. **Welcome and National Coordinated Committee on Dermatophilosis Research** grant (Nigeria) for studies on bovine dermatophilosis, 1984-89.
20. **National Veterinary Research Institute** grants (Nigeria) for development of contagious bovine pleuropneumonia vaccines, 1978-84.
21. **Dixon Boyd Fellowship**, Clare College, Cambridge, United Kingdom, for Ph.D. work. 1972-75.
22. **Prizes as overall best graduate**, College of Veterinary Medicine, 1967-1972:
    Nigerian Tobacco Company Prize (best second year student);
    Commonwealth Bureau of Animal Health Prize (best pre-final year student);
    May and Baker Prize (best final year student);
    Welcome Ltd. Prize. (best graduate of the year).

Honors

- Listed in **Who's Who in Nigeria**, 1st Edition, NewsWatch, 1990
- Named **Outstanding Educator of the Year 1998/99**, Dillard University, New Orleans
- Named **Outstanding Professor of the Year 2001** by Biology Honor Society, SUNO
- Listed in **Who's Who Among America's Teachers®,** 7th Edition, 2002
- **Most Outstanding Grantsman for years 2002-03 and 2004-05 at SUNO**.

Current Research Interests

- Virulence mechanisms of mycoplasmas: variable surface proteins and capsule genes.
- Short tandem repeats in the lipoprotein genes of *Mycoplasma genitalium* and *Ureaplasma urealyticum* (collaborative research with LSU Health Sciences Center, New Orleans).
- Genome of *Mycoplasma genitalium* (collaborative research with LSU Health Sciences Center, New Orleans).

Research Expertise

- Southern and Western blots, hybridization, gene cloning, polymerase chain reaction (PCR), and other Molecular Biology techniques
- Radioimmunoprecipitation using ^{35}S-methionine
- Electron microscopy
- Immunohistochemical diagnostic test techniques
- Cellular and humoral immunological assays
- Production and use of monoclonal antibodies
- Culture of trachea explants, cell lines, alveolar macrophages, neutrophils, and lymphocytes

Computer Training Workshops

1. **TOXNET on the Web:** National Library of Medicine Training Course on the use of the Internet for searching toxicological data and research publications. Hosted by the Deep South Center for Environmental Justice, at Xavier University New Orleans, LA. August 24-25, 2000.
2. **Internet Training for Business: An Introduction to the Internet.** A training provided to SUNO Faculty by the New Orleans Electronic Commerce Resource Center (ECRC). 1999/00.
3. **Academic Computing in the Natural Sciences: Computer Assisted Instruction in the Classroom.** A workshop organized for the Science faculty, Dillard University, February 27-28, 1998.
4. **Computer Technology Workshop and Seminar,** organized by Syllabus Press and Southern Methodist University, Dallas, TX, April 4-6, 1997.

Special Academic Assignments

1. Peer Review of Professorship Candidates and Colleagues, 1986-97.
2. Reviewer of manuscripts for the *Nig. Vet J., J. Anim. Prod. Res., Zariya Vet.*, etc.

3. Invited by Brunnel University, U.K., to supervise the field studies of a Ph.D. candidate (S.A. Garuba); work led to the development of a vaccine for a deadly cattle disease (contagious bovine pleuropneumonia).
4. External Examiner in Microbiology to University of Nigeria, Nsukka (1978/79 to 1980/81; 1985/86 and 1986/87).

Membership of Learned Bodies

1. American Society for Microbiology
2. International Organization for Mycoplasmology
3. American Association for the Advancement of Science
4. American Veterinary Medical Association
5. Nigerian Veterinary Medical Association
6. Association of Southeastern Biologists

Interests

Sports - I play soccer well, and love athletics and basketball.
Study of current affairs, especially the Arab-Israeli conflict.

Publications

Author/co-author of over 60 scientific publications in refereed journals (pg 11-18).

- **Books/Thesis**

1. **Adegboye, D.S.** 1975. Immune mechanisms in *Mycoplasma suipneumoniae* infection of pigs with special reference to cell-mediated immunity. Ph.D. thesis, University of Cambridge, U.K. Published by University Microfilm International, Arbor, Michigan, U.S.A. Publication No. 77, 29,700.

2. Onoviran, O., **Adegboye, D. S.**, Makinde, A.A., and Chima, J.C. 1978. The T1 vaccine used in the control of contagious bovine pleuropneumonia in Nigeria. In: **Vaccinations in the Developing Countries**. Developments in Biological Standardization. Vol, 41, pp. 361-365. S. Karger: Basel, 1978.

3. **Adegboye, D. S.** 1978. Current role of contagious bovine pleuropneumonia in cattle health in Nigeria. In: **Beef Production and Quality Control**, pp. 53-58. Ed. O. Akerejola and Y.O. Aliu. Faculty of Veterinary Medicine, ABU, Zaria, Nigeria.

4. **Adegboye, D. S.** 1996. **Who Else But God - Extraordinary Spiritual Experiences of a Scientist.** 83pp. Brentwood Christian Press, Columbus, Georgia.

5. **Adegboye, D. S.** 2007. Book Chapter Review. **Biology**, By Sylvia S. Mader, McGraw Hill Publisher. General Biology textbook widely adopted by institutions of higher learning in the U.S.

- **Journal Publications**

1. **Adegboye, D.S.** 1976. Histological changes in the pig bronchial lymph during the course of *Mycoplasma suipneumoniae* infection. Proc. Soc. Gen. Microbiol. 3 (4), 171.

2. **Adegboye, D.S.** and Hassan, M.K.J. 1976. Preliminary studies on genital mycoplasmosis in Nigeria: occurrence of ureaplasmas (T mycoplasmas) in urogenital tract of cattle in Zaria. J. Nig. Vet. Med. Assoc. 5 (2), 62-64.

3. Onoviran, O., Princewill, T.J.T., Oyejide, A. and **Adegboye, D.S.** 1977. Clostridial infection superimposed on contagious bovine pleuropneumonia. Br. vet. J. 133 (3), 322-323.

4. **Adegboye, D.S.** 1977. Abstracted summary of Ph.D. Thesis. Vet. Bull. 47 (10), 752.

Also:

Adegboye, D.S. 1978. Abstract of Ph.D. Thesis. Dissertation Abstract International, 38B(7), 3045.

5. **Adegboye, D.S.** 1978. The immunological response of the pig bronchial lymph node to *Mycoplasma suipneumoniae*. J. Comp. Pathol. 88 (1), 97-104.

6. **Adegboye, D.S.** 1978. Mycoplasma-induced immunosuppression: an assessment in the light of recent studies. Zlb. Bakt. Hyg., I. Abs. Orig. A. 241 (2), 219-220.

7. **Adegboye, D.S.** 1978. Attempts to demonstrate cell-mediated immune response during *Mycoplasma suipneumoniae* infection of pigs. Res. Vet. Sci., 25 (3), 323-330.

8. **Adegboye, D.S.** (1978). A review of mycoplasma-induced immunosuppression. Br Vet. J. 134 (6), 556-560.

9. Windsor, R.S., Onoviran, O., Philpott, M., Masiga, W.M. and **Adegboye, D. S.** 1978. A field trial in Nigeria with the comparative intradermal allergic test for the diagnosis of contagious bovine pleuropneumonia. Br. vet. J. 134 (2), 162-165.

10. **Adegboye, D.S.** and Onoviran, O. 1978. Interruption of cattle research by contagious bovine pleuropneumonia. Nig. Vet. J. 7 (1&2), 55-56.

11. **Adegboye, D.S.** 1978. Mycoplasmosis in Zaria area: isolation attempts during the period 1976 to early 1978. Student Veterinarian (ABU), 9, 6-12.

12. **Adegboye, D.S.** and Addo, P.B. 1978. Mycoplasmas from the vagina of a bitch with open cervix pyometra. Vet. Rec. 102 (3), 62-63.

13. **Adegboye, D.S.** and Addo, P.B., Ogunkoya, A.B. and Rose, D.L. 1979
Two colonial morphological forms of *Mycoplasma canis.* Vet. Rec. 104 (26), 611-612.

14. **Adegboye, D.S.** and Kumi-Diaka, J. 1979. The isolation of *Mycoplasma bovigenitalium* from bovine genital tract and semen in Nigeria. Nig. Vet. J. 8(1), 24-46.

15. Mohan, K., **Adegboye, D.S.** and Orajaka, L.J.E. 1979. *Mycoplasma meleagridis* from turkeys: a first report of isolation from Nigeria. Nig.Vet. J. 8 (2), 27-29.

16. Macfarlane, J.T., **Adegboye, D.S.** and Warrell, M. J. 1979. *Mycoplasma pneumoniae* and the aetiology of lobar pneumonia in Northern Nigeria. Thorax 34 (6), 713-719.

17. **Adegboye, D.S.**, Briggs, N. D. And Lister, U. 1979. Cultural examination of female outpatients in Zaria, Nigeria, for genital mycoplasmas. Nig. Med. J. 9 (7-9), 675 - 678.

18. Dada, B.J.O., **Adegboye, D.S.** and Mohammed, A.N. 1979. A survey of gastro-intestinal helminth parasites of stray dogs in Zaria, Nigeria. Vet. Rec. 104(7), 145-146.

19. Dada, B.J.O., **Adegboye, D.S.** and Mohammed, A.N. 1979. The epidemiology of echinococcus infection in Kaduna State, Nigeria. Vet. Rec. 104 (14), 312-313.

20. Dada, B.J.O., **Adegboye, D.S.** and Mohammed, A.N. 1979. The epidemiology of echinococcus infection in Kano State, Nigeria. Annals Trop. Med. Parasitol. 74 (5), 515-517.

22. **Adegboye, D.S.** 1980. Venereal diseases: more than gonorrhea and syphilis. New Nigerian (Health Column).

Part I. 28 February, 1980 issue, p.12
Part II. 13 March, 1980 issue, p. 20
Part III. 29 March, 1980 issue, p.12

22. Dada, B.J.O., **Adegboye, D.S.**, and Mohammed, A.N. 1981. Experience in Northern Nigeria with counter-current immunoelectrophoresis, double gel diffusion, and indirect haemagglutination tests for the diagnosis of hydatid cyst in camel. J. Helminthol. 55 (3), 179-202.

23. Dada, B.J.O., Belino, E.D., **Adegboye, D.S.** and Mohammed, A.N.1981. Experimental transmission of *Echinococcus granulosus* of camel-dog origin to goats, sheep, cattle, and donkeys. Int. J. Zoon. 8, 33-43.

24. Aganga, A.O., Belino E.D., **Adegboye, D.S.** and Ilemobade, A.A. 1981. A serological survey of toxoplasmosis in food animals (cattle, sheep, goats, and swine) in two Northern States of Nigeria. Int. J. Zoon. 9, 57-62.

25. **Adegboye, D.S.** and Fasanya, O.O.A. 1981. Mycoplasmas and related microorganisms from preputial swabs and semen of breeding bulls in Nigeria. J. Egypt. Vet. Med. Assoc. 41(1), 71-75.

26. **Adegboye, D.S.**, Fasanya, O.O.A., Bwala, M.S. and Hassan, M.K. 1982. Preliminary studies on bovine urogenital mycoplasmosis in Nigeria. Bull. Anim. Hlth. Prod. Afr. 30 (2), 95-99.

27. Ilemobade, A.A., **Adegboye, D.S.**, Onoviran, O. and Chima, J.C. 1982. Immunodepressive effects of trypanosomal infection in cattle immunised against contagious bovine pleuropneumonia. Parasit. Immunol. 4, 273-282.

28. **Adegboye, D.S.** and Mohan, K. 1983. Mycoplasmas other than *M. mycoides* members recently documented in Nigeria. Yale J. Biol. Med. 56 (5-6), 931-932.

29. Etukudo, B.O. and **Adegboye D.S.** 1983. Studies on chronic respiratory disease of poultry in Nigeria. I. Documentation of *Mycoplasma gallisepticum* infection by culture and serology. Nig.Vet. J. 12 (1), 61-65.

30. Etukudo, B.O. and **Adegboye, D.S.** 1983. Studies on chronic respiratory disease of poultry in Nigeria. II. Bacteriological examination of clinically diagnosed cases. Nig. Vet. J. 12 (1), 66-69.

31. Abdu, P.A., Bishu, G., Adesiyun, A.A. and **Adegboye, D.S.** 1983. Survey for *Mycoplasma gallisepticum* and *Mycoplasma synoviae* antibodies in chickens in Zaria area. J. Anim. Prod. Res. 3 (1), 63-69.

32. Onoviran, O., Majiyagbe, K.A., Molokwu, J.U., Chima, J.C. and **Adegboye, D.S.** 1984. Experimental infection of goats with *Mycoplasma capri* and Pestes des Petits Ruminantes (PPR) virus. Rev. Elev. Med. Vet. Pays Trop. 37 (1), 16-18.

33. Adesiyun, A.A., Bishu, G. **Adegboye, D.S.** and Abdu, P.A. 1984. Serological survey of *Salmonella pullorum* antibody in chickens around Zaria, Nigeria. Bull. Anim. Hlth. Prod. Afr. 32 (1), 81-85.

34. Isitor, G.N., Delman, H.D., **Adegboye, D.S.**, Ezeokoli, C.D. and Chimeme, C.N. 1984. Ultrastructural evidence for the involvement of pox virions in lesions of bovine dermatophilosis. Trop. Veterinarian 2, 183-189.

35. Isitor. G.N. **Adegboye, D.S.**, and Paulsen, A.O. 1984. Bovine dermatitis associated with Gram-negative bacteria and microfilaria: an ultrastructural observation. Proceedings of the National Conference on Diseases of Ruminants.National Veterinary Research Institute, Vom, Plateau State, Nigeria, Oct. 3-6, pp. 401- 406.

36. Onoviran, O. Hamman, H.J., **Adegboye, D.S.**, Ajufo, J.C., Chima, J.C., Makinde, A.A., Pam, G., and Garba, S.A. 1984. A bacterium pathogenic to tsetse fly (*Glossina palpalis*). Trop. Veterinarian 3, 22-24.

37. Kazeem, H.M., Isitor, G.N., **Adegboye, D.S.**, and Kparevzua, R.K. 1986. Severe outbreak of dermatophilosis in a herd of Santa Gertrudis cattle imported into Nigeria. J. Anim. Prod. Res. 6 (2), 153-159.

38. Isitor, G.N. and **Adegboye, D.S.** 1986. Ultrastructural characteristics of *Dermatophilus congolensis:* an *in vitro* and *in vivo* study. Trop. Veterinarian 4, 15-23.

39. **Adegboye, D.S.** 1986. Current status of the pathogenicity of mycoplasmas for livestock. Zariya Vet. 1, 24-36.

40. Molokwu, J.U., **Adegboye, D.S.** and Emejuaiwe, S.O. 1987. Studies on chronic respiratory disease of poultry in Nigeria. III. Documentation of *Mycoplasm synoviae* and other recently reported avian *Mycoplasma* species by culture and serology. Bull. Anim. Hlth. Prod. Afr. 35, 340-343.

41. Fasanya, O.O.A., Molokwu, E.C.I., **Adegboye, D.S.**, and Dim, N.I. 1987. Gross and histological changes in the postpartum genitalia of the Savannah Brown goat. Anim. Reprod. Sci. 14, 65-74.

42. Fasanya, O.O.A., **Adegboye, D.S.**, Molokwu, E.C.I. and Dim, N.I. 1987. Microbiology of the genitalia of nulliparous and postpartum Savannah Brown goats. Vet. Res. Comm. 11, 191-198.

43. Garba, S.A., Terry, R.J. and **Adegboye, D.S.** 1987. Development of a killed, adjuvanted, vaccine against contagious bovine pleuropneumonia: preparation, and toxicity and potency tests in mice. Indian Vet. J. 64, 187-191.

44. Garba, S.A., Terry, R.J. and **Adegboye, D.S.** 1987. Development of a killed adjuvanted vaccine against contagious bovine pleuropneumonia: preliminary investigation in cattle. Indian Vet J. 64, 728-732.

45. Ibeziako, Uche E., Adekeye, J.O., Adesiyun, A.A. and **Adegboye, D.S.** 1987. Isolation and characterization of *Campylobacter jejuni* from cattle faeces, milk, and milk products. Zariya Vet. 2 (1), 16-23.

46. **Adegboye, D.S.** 1987. *Commercial Livestock Farming: the Task, the Fear, the Reward.* Twenty-seventh Inaugural Lecture Series. University of Ilorin Press. Ilorin, Nigeria.

47. Alafiatayo, Ruth A., **Adegboye, D.S.**, Saror, D.I. and Ezeokoli, C.D. 1988. Demonstration of *Mycoplasma mycoides* subsp. *capri* in thoracic fluid. Zariya Vet. 3 (1), 21-23.

48. Isitor, G.N., Kazeem, H.M., Njoku, C.O., **Adegboye, D.S.** and Delmann, H.D. 1988. Frequency of involvement of pox virons in lesions of bovine dermatophilosis. Trop. Anim. Prod. Hlth. 20, 2-10.

49. Molokwu, J.U. and **Adegboye, D.S.** 1988. *Mycoplasma columborale* and *Mycoplasma columbinum* from pigeons: a first report of their isolation in Nigeria. Rev. Sci. Tech. Off. Int. Epiz. 7(3), 635-638.

50. Molokwu, J.U., **Adegboye, D.S.**, and Emejuaiwe, S.O. 1988. Bacteria isolates from cases of chronic respiratory disease of chickens in Zaria area of Nigeria. Zariya Vet. 3(1), 42-44.

51. Garba, S.A., Terry, R.J., **Adegboye, D.S.**, Lamorde, A.G. and Abalaka, J.A. 1989. The choice of adjuvant in *Mycoplasma* vaccines. Microbios 57, 15-19.

52. Purewal, A.S., Smallwood, A.V., Kaushal, A., **Adegboye, D.S.** and Edington, N. 1992. Identification and control of the cis-acting elements of the immediate early gene of equid herpesvirus type 1. J. Gen. Virol. 73, 513-519.

53. **Adegboye, D.S.,** Raspberry Ulrike, and Rosenbusch, R.F. 1994. Use of monoclonal antibodies for the detection of *Mycoplasma bovis* in cases of calf pneumonia. IOM Letters 3: 483-484.

54. **Adegboye, D.S.**, Rasberry, U., Halbur, P.G., Andrews, J.J., and Rosenbusch, R.F. 1995. Monoclonal antibody-based immunohistochemical technique for the detection of *Mycoplasma bovis* in formalin-fixed, paraffin-embedded calf lung tissues. J. Vet. Diagn. Invest. 7(2), 261-265.

55. **Adegboye, D.S.**, Halbur, P.G., Cavanaugh, D.L., Werdin, R., Chase, C.C.L., Miskimins, D.W., and Rosenbusch, R.F. 1995. Immunohistochemical and pathological study of *Mycoplasma-bovis* - associated lung abscesses in calves. J. Vet. Diagn. Invest. 7 (3), 333-337.

56. Bansal, P., **Adegboye, D.S.**, and Rosenbusch, R.F. 1995. Immune responses to the capsular polysaccharide of *Mycoplasma dispar* in calves and mice. Comp. Immun. Microbiol. Infect. Dis. 18 (4), 259-268.

57. **Adegboye, D.S.**, Halbur, P.G., Nutsch, R.G., Kadlec, R.G., and Rosenbusch, R.F. 1996. *Mycoplasma bovis* - associated pneumonia and arthritis complicated with pyogranulomatous tenosynovitis in calves. J. Amer. Vet. Med. Assoc., 209 (3), 647-649.

58. **Adegboye, D.S.**, Kambhampati, M.S., Mims, L.R., Hardester, L.M., Charbonnet, D., Causey, M., and Clancy, M. 2002. Case study of molecular biology course development at Southern University at New Orleans, SE Biology, 49(2), 216.

59. Sinegar, M.M. and **Adegboye, D.S.** 2002. Reliability of a commercial kit supply for imparting basic molecular biology skills to undergraduates. SE Biology, 49(2), 132-133.

60. Sinegar, M.M. and **Adegboye, D.S.** 2002. Assessment of commercial kits for imparting basic laboratory skills in molecular biology to undergraduates. NSF HBCU-Undergraduate Program, National Research Conference 2002, Abstract #31, pg. 44, Albany State University, Albany, GA, Feb. 14-15, 2002.

61. Kambhampati, H.S., Hardy, R., **Adegboye, D.S.**, Cosby, R., and Mims, L. 2002. Integration of technology into the biology curriculum at Southern University at New Orleans. SE Biology, 49(2), 217.

62. Agbonlahor, I., Kambhampati, M.S., and **Adegboye, D.S.** 2005. Phytogenotoxicity of copper (Cu) in *Ipomoea lacunosa* (Morning glory) seedlings: pilot studies. Refereed Proceedings 6th & 7th Annual DoE EPSCoR HRD and LS-LAMP Student Research Conference 2002, 2003, pg 227-229. ISSN 1554-7604.

63. **Adegboye, D.S.,** Kambhampati, M.S., Devezin, L., Hardester, L., and Clancy, M. 2005. A successful model for integrating high-technology courses for content requirements in science education: molecular biology course development at Southern University at New Orleans, State of Louisiana. J. Urban Edu. 2(1), 151-158.

64. Kambhampati, M.S., **Adegboye, D.S.**, Mims-Devezin, L. and Cosby, R. 2005. Integration of technology into Biology curriculum for teacher preparation at Southern University at New Orleans. J. Urban. Edu. 2(1), 10-18.

65. Olorunshola, I.D., Coker, A.O., **Adegboye, D.S.**, Bawat, E.B., and Lombin, L.H. 2007. Current status of human urogenital ureaplasmosis in Nigeria. Book of Abstracts, pg 67-68. International Conference on Chlamydia and Mycoplasma Human Infections, University of Ferrara, Italy, April 19-20.

66. Mims-Devezin, L., Kambhampati, M., **Adegboye, D.S.** 2007. Integration of technology and virtual laboratories into the biology curriculum at an urban university: impact on students' attitude and response. J. Urban Educ. Focus on Enrichment 4(1): 42-51.

- **Major Conference/Seminar Presentations in the U.S.**

1. McGowin, C.L., Ma, L., Mancuso,M., Jensen,J.S., Hamasuna, R., **Adegboye, D.S.**, and Martin, D.H. 2011. Sequencing of the *Mycoplasma genitalium* genome: A comparative assessment of four geographically diverse strains. Abstract # R-1452, 111th General Meeting of the American Society for Microbiology, May 21-24, 2011, New Orleans, Louisiana.

2. Olorunshola, I., Akitoye, C., **Adegboye, D.,** Anorlu, R., Banwart, E., Egah, D., and Lombin, L. 2010. Speciation of *Ureaplasma* sp from STI patients in Nigeria. Program and Abstract, 18th Conference of International Organization for Mycoplasmology, pg. 138-139. Also: Risk factor assessment and demographic profile of human urogenital mycoplasmosis in Nigeria, pg. 141. Also: Comparison of methods for the detection of human genital mycoplasmas in selected STD patients in Nigeria, pg. 212.

3. Reimonenq, Chantrel L. and **Adegboye, D. S.** (2006). Genetic variation in heat-shocked *Escherichia coli.* Presented at the 7th Annual HBCU-UP National Research Conference, Baltimore Marriot Waterfront. Organized by Bowie State University, February 9-12, 2006.

4. Johnson, Dana F. and **Adegboye, D.S.** (2004). Genetic variation in local strains of *Escherichia coli.* Presented at the LA-LAMP and CCZARS Louisians Research Conference. Hyatt Regency Hotel, New Orleans, LA , October 29-31.

5. Johnson, Dana F. and **Adegboye, D.S.** (2003) Microbial flora of selected water samples and the public health significance. *PESMaCT Summer Research Project Presentation*, Southern University at New Orleans, July 18, 2003.

6. **Adegboye, D.S.** (2003) Molecular Biology: a tool for international development and cooperation. Presented at the *Annual Conference of the African World Network Organization*, Southern University at New Orleans, March 14, 2003.

7. Williams, Tiffany and Adegboye, D.S. (2002) Bacterial flora of human fingernails. Presented at *3rd Bi-annual SUNO Undergraduate Research Day Conference,* December 3, 2002.

8. **Adegboye, D.S.** (2002). Modernizing the Biology curriculum at Southern University at New Orleans. *Faculty and Student Seminar Series,* Oct. 31, 2002

9. Jasmin, Nicole and **Adegboye, D.S.** (2001) Comparison of the undergraduate Biology curriculum in Louisiana universities and colleges with reference to Molecular Biology. Presented at the *2nd Bi-annual SUNO Undergraduate Research Day Conference*, November 28, 2001.

10. Sinegar, Monica and **Adegboye, D.S.** (2001) Assessment of the reliability of a commercial kit supply for imparting basic molecular biology skills to undergraduates. I. Pre- digested DNA specimens. Presented at the *2nd Bi-annual SUNO Undergraduate Research Day Conference*, November 28, 2001.

11. Sinegar, Monica and **Adegboye, D.S.** (2001). Assessment of the reliability of a commercial kit supply for imparting basic molecular biology skills to undergraduates. II. *In situ*-digested DNA specimens. Presented at the *2nd Bi-annual SUNO Undergraduate Research Day Conference*, November 28, 2001.

12. **Adegboye, D.S.** (2001). Molecular Biology. Presented at the *Open House/ Workshop in Molecular Biology*, Clark Building Room 231, March 23, 2001.

13. **Adegboye, D.S.** (2001) The Yoruba Tribe. An invited presentation to *Ms. **McCollum's Humanities for Teachers Class*** **at SUNO, March 21, 2001.**

14. **Adegboye, D.S.** (2000). Department of Biology goals and plans of achievement. Presentation at the *1st symposium on Molecular Biology at SUNO*, Clark Building, Room 231, Oct. 31, 2000.

15. **Adegboye, D. S.** 1997. The extremophiles: life in unusual habitats. Presented at a workshop on *Building A Bridge To Graduate School: Developing Strategies to Recruit Minority Students Into Science, Engineering, and Mathematics Graduate Program.* Graduate School, University of Iowa, Iowa City, Summer 1997.

16. **Adegboye, D. S.** 1997. The variable surface protein gene-switching phenomenon in mycoplasmas. *Faculty Development Seminar Series*, Dillard University, New Orleans. February 26, 1997.

17. Hanford, M., Thomas, S., **Adegboye, D. S.**, and Peeples, T. 1996. Biodegradation of environmental pollutants. (On the potential use of toluene dioxygenase enzyme from *Methylobacterium extorquens*, strain AMI, for cleaning trichloroethylene wastes from the environment). *Faculty Seminar Series*, Department of Chemical and Biochemical Engineering, University of Iowa, Iowa City. Summer, 1996.

18. **Adegboye, D.S.**, Halbur, P.G., and Rosenbusch, R.F. 1995. Diagnostic value of Immunohistochemistry in *Mycoplasma bovis*-associated diseases. *North Central Conference of Veterinary Laboratory Diagnosticians*, Iowa State University, Ames, Iowa, June 13 and 14, 1995.

19. Bansal, P., **Adegboye, D.S.**, and Rosenbusch, R.F. 1994. Immune response in mice to the capsular polysaccharide of *Mycoplasma dispar*. Abstracts of the *94th General Meeting of the American Society for Microbiology*, Las Vegas, #G-19, pg. 169.

20. **Adegboye, D.S.**, Halbur, P.G., and Rosenbusch, R.F. 1994. Immunohistochemical study of *Mycoplasma bovis* – associated lung abscesses in calves. Abstract of papers presented at the *75th Annual Meeting of the Conference of Research Workers in Animal Diseases*, Chicago, IL, #221.

SOLOMON SUNDAY A. ADEKUNLE, PH.D.

Permanent Home Address: 1507 Dublin Street, New Orleans , LA 70118
Work: 504-286-5068, cell: 302-632-5344 Email: ssadekunle@yahoo.com

Status: Naturalized Citizen of the USA

EDUCATION: University of Pittsburgh M.P.H. Course Work,
Molecular Epidemiology, Graduate School of Public Health (1996-1997) Pittsburgh , PA

Boston University Graduate School Boston , MA , Ph.D. Cell and Molecular Biology/Human Cytogenetics, January 1995
Thesis: Study of the Distribution of Interstitial Telomere-Like Sequences in the Human Genome and their Association with Chromosomal Hot Spots.

Boston University Graduate School , Boston , MA . M.A. Pharmacology, January 1986
Thesis: The Pharmacology of Cisplatinum.

Harvard University Medical School (Fall1984) Special Student Fellowship Boston , MA Course: Pathobiology of Disease

Ibadan University , Ibadan , Nigeria B.Sc Pharmacology, (June 1975) Second Class Lower 1975 (Honors)
Loyola College, Ibadan, Nigeria, West African School Certificate, December 1966
3 Distinctions, 5 Very Good Grades.

LICENSURE:
August, 1990 CLSp (CG) [National Certification Agency for Medical Laboratory Practitioners]

March, March 2003, Affiliate Scientist, Clinical Cytogenetics , American Board of Medical Genetics

RESEARCH EXPERIENCE

2007 – Now: Associate Professor of Biology, Southern University of New Orleans , LA 70126 . Cytogenetics Research. Comparative chromosome structure of vertebrates. Molecular epidemiology of the distribution of interstitial telomeres in humans, Role of interstitial telomeres in chromosomal abnormalities

2000 – 2003. Assistant Professor of Biology, Lincoln University , PA 19352
Cytogenetics Research. Comparative chromosome structure of vertebrates. Molecular epidemiology of the distribution of interstitial telomeres in humans Role of interstitial telomeres in chromosomal abnormalities

1996 – 1999: Department of Human Genetics, Graduate School of Public Health University of Pittsburgh, Pittsburgh, PA Postdoctoral Fellow: Molecular
Epidemiological Studies of Osteoporosis • Use of molecular biomarkers in the study of chronic diseases

1992 – 1995: Laboratory of Cytogenetics, FISH and Genotoxicology, Rhode Island Hospital, Providence, RI Department of Pathology, Brown University, Providence,
RI Research Technologist • Fish studies of tumors using telomeric and satellite probes

1988 – 1992: Center for Human Genetics, Boston University Medical Center , Boston , MA
Research Assistant • Study of the distribution of interstitial telomeric sequences in human and mammalian genomes

1987 - 1988 Biology Department, Boston University , Boston , MA
Research Assistant • Tissue culture of murine bone marrow and study of effects of IL-3, erythropoietin and hemin on different blood cell lineages

1985 - 1986 Department of Hematology & Oncology, Boston City Hospital Boston University School of Medicine , Boston , MA
Research Assistant • Human hematopoietic stem cell research

1983 - 1985 Pharmacology Department, Boston University Medical School Boston , MA .
Research Assistant • Tissue culture of tumor cell lines and study of the effects of actinomycin D and cisplatin on tumor cell lines

TEACHING EXPERIENCE

08/2007 – Now: Associate Professor of Biology, Southern University of New Orleans , 6801 Press Drive , Building 40, New Orleans , LA 70126
Teaching Courses in General Biology, Cell Biology, Genetics, Molecular Biology

9/2005 – 07/2007: Substitute Teacher in Brandywine and Red Clay Public Schools , Wilmington , DE

Sept. 2003 - July 2005: Caprivi College , Box 2343 , Katima Mulilo , Namibia .
Visiting Professor, Teachers for Africa Program/International Foundation For Education and Self Help (IFESH, USAID sponsored) Maths And Science Department,
Supervisor: Dr. Julie Sullivan, Tel: 480-443-1800 email: jsul@ifesh.org
Taught teacher educators in training integrated natural science, organized workshops and seminars on fundamental topics like "big bang" to recent topics in science like cloning, origin of the human species, advised to students, mentored students interested in pursuing advanced degrees.

2000 – 2003: Lincoln University , PA 19352 , USA , Assistant Professor.
Taught Human Biology for non-majors, Genetics for Majors, Molecular Genetics for Majors and Graduate Students. Taught Anatomy and Physiology for Majors, Fall 2000. Supervisor: Dr. Bob Henderson, Tel: 610-932-8300/cell: 215-740-8039, email: henderson@lincoln.edu

1987 – 1988: Biology Department, Boston University , Boston , MA
Teaching Assistant: Taught human biology to first year university students

1976 – 1982: Obafemi Awolowo University, (formerly University of Ife), Ile-Ife , Nigeria

Assistant Lecturer in Pharmacology • Taught pharmacology and conducted laboratory classes for Medical and Bachelor of Nursing students

PROFESSIONAL SOCIETIES:
2003 – Affiliate Scientist American College of Medical Genetics
1993 – Affiliate Member American Association for Cancer Research
1988 - Member American Society of Human Genetics

PUBLICATIONS:
Bjornson BH, Harvey JM, **Adekunle SSA**, (1985). Circulating granulocyte committed progenitors (CFU-C) in a neutropenic black population. (Abstract) Exptal Hem, 13 (5), 329.
Adekunle SSA, Milunsky A. and H. Wyandt, (1992). Hybridization of telomeric DNA to interstitial chromosome sites: Correlation with fragile sites and breakpoints of Chromosomal rearrangements. (Abstract) Cyto Cell Genet 60 (3-4), 265.
Adekunle SSA, Wyandt H. and H.F.L. Mark,(1993). Mapping of interstitial telomere sequences in the human genome using conventional and molecular cytogenetics. (Abstract) Am J Human Genet 53 (3):1265.
Adekunle SSA, Wyandt H. and H.F.L. Mark, (1993). Coincidence of chromosomal breakpoints and interstitial telomere sequences. Abstract at the Association of Clinical Scientists Spring Meeting, Newport , RI .
Adekunle SSA, Wyandt H. and H.F.L. Mark, (1993). A study of the distribution of interstitial telomere sequences in the human genome. Abstract at the Association of Cytogenetic Technologists 18th Annual Meeting, Boston , MA .
Adekunle SSA, Wyandt H.and H.F.L. Mark, (1993). The coincidence of breakpoints found in chromosomal structural rearrangements in human cancer and the amplification of interstitial telomere sequences. Abstract at the Fifth Annual Meeting of New England Association for Cancer Research.
Wyandt H. E., Milunsky J., Lerner T., Gusella J.F., Hou A., McDonald M., and **Adekunle S.S.A.**, (1993). Characterization of a duplication in the terminal band of 4p by molecular cytogenetics. Am J Med Genet 46, 72-76.

PRESENTATIONS AT REGIONAL AND NATIONAL MEETINGS
1. A study of the distribution of interstitial telomere sequences in the human genome. Association of Cytogenetic Technologists 18th Annual Meeting, Boston , MA . August, 1993.
2. Coincidence of chromosomal breakpoints and interstitial telomere sequences. Abstract at the Association of Clinical Scientists Spring Meeting, Newport , RI . May, 1993.
3. The coincidence of breakpoints found in chromosomal structural rearrangements in human cancer and the amplification of interstitial telomere sequences. Fifth Annual Meeting of New England Association for Cancer Research, Providence , RI . February, 1993.
4. Hybridization of telomeric DNA to interstitial chromosome sites: Correlation with fragile sites and breakpoints of chromosomal rearrangements. 36th American Cytogenetic Conference, Virginia Beach , VA. March, 1992.
5. Circulating granulocyte committed progenitors (CFU-C) in a neutropenic black population. 14th Annual Meeting of the International Society for Experimental Hematology, Jerusalem , Israel . July, 1985.
6. Anticipation and Repetitive DNA Expansion in Familial Leukemia: The Interstitial Telomere Hypothesis. 5th Annual Retreat of the University of Pittsburgh Cancer Institute; Johnston , PA . June 2-23, 1997
7. Localization of Human Telomere-Like Repeats: Comparison with Interstitial Sites of

Chromosomal Breaks by Diverse Mutagens and Carcinogens. The 5th International Symposium on Chromosomal Abberations: Perspectives for the 21st Century. Awaji Island , Hyogo , Japan . October 26-28, 2001

8. Interstitial Telomere – Like Repeats as Endogenous Sources of Mutations . AACR Special Conference on "The Role of Telomeres and Telomerase in Cancer Research, Hyatt Regency Hotel, San Francisco, CA, December 6 – 9, 2007

9. Correlations Between Religious Narratives and Scientific Facts: A Medical Geneticist's View, The Oxford RoundTable Conference, Harris Manchester College, Oxford University, Oxford, U.K., July 25 – July 30, 2010

MEETINGS AND WORKSHOPS:

1. Gordon Research Conferences: Human Genetics and Genomics, Salve Regina University, Newport, RI . July 17-22, 2011
2. Micro-Array Technology Training, Hampton University, Hampton, VA, June 20-23, 2011
3. Synthetic Biology Workshop, Western Missouri State University, St. Joseph, MO, June 15-18, 2011
4. MathBench Workshop, University of Maryland College Park, MD, June 13-15, 2011
5. National Human Genome Research Institute, National Institute of Health, Bethesda, MD: Summer Workshop in Genomics, August 1 – August 6, 2010
6. The Future of Genomic Medicine 111: Scripps Genomic Medicine in collaboration with J. Craig Venter Institute, The Neurosciences Institute, San Diego, CA, March 4-6, 2010
7. Annual Clinical Genetics Meeting of the American College of Medical Genetics, Tampa Convention Center, Tampa, FL, March 25-29, 2009
8. The Future of Genomic Medicine 11: Scripps Genomic Medicine in collaboration with J. Craig Venter Institute, The Neurosciences Institute, San Diego, California. February 27-28, 2009
9. 58th Annual Meeting of the American Society of Human Genetics, Philadelphia, PA November 11-15, 2008
10. American Association for Cancer Research Special Conference on "The Role of Telomeres and Telomerase in Cancer Research", Hyatt Regency Hotel, San Francisco, December 6 – 9, 2007.
11. NCI Summer Curriculum in Cancer Prevention: Molecular Prevention Course, NIH Neuroscience Building , Rockville . MD 20892. August 5-9, 2002
12. The 5th International Symposium on Chromosomal Aberrations: Perspectives for the 21st Century. Awaji International Conference Center , Awaji Island , Hogo , Japan . October 26-28, 2001.
13. Biomarkers: The Genome and the Individual. Workplace and Medical Implications of a Rapidly Evolving Technology. The Medical University of South Carolina Environmental Hazard Assessment Program. May 4-8, 1997.
14. Histopathobiology of Neoplasia (Workshop) American Association of Cancer Research, Keystone, CO. June 20-27, 1993.
15. American Society of Human Genetics Annual Meetings, 1988, 1989, 1990, 1992, 1993 1994, 1996, 1997, 1998, 1999, 2000, 2001 at various cities in North America respectively.
16. Short Course in Medical and Experimental Mammalian Genetics at the Jackson Laboratory, Bar Harbor Maine . July 1990

HONORS AND AWARDS:

1. Federal Government of Nigeria Undergraduate Scholarship, University of Ibadan, 1969-74
2. Academic Scholarship 1983 - 1986 Oyo State Government of Nigeria , Ibadan , Nigeria to study at Boston University

3. Special Student Fellowship 1984 Harvard University Medical School , Boston , MA
4. Graduate Student Scholarship 1988 – 1992 Boston University, Boston , MA
5. Trainee Award 1993 National Cancer Institute Workshop on Histopathobiology of Neoplasia, Keystone, CO
6. NIH Fellowship, M.P.H. Program 1996 - 1998 National Institutes of Health, Bethesda , MD
7. AACR Minority Serving Institution Faculty Scholar in Cancer Research Award, December 6, 2007
8. Reviewer of Grant Applications for the U. S. Education Department for Science Awards to Historically Black Colleges and Universities, 2003, 2008
9. Reviewer of Grant Applications for the U. S. Education Department for Science Awards for the GAAN Program, 2009

Curriculum vitae

Name	Bashir Mahmoud Rezk Atteia
Birthday	23-01-1972
Place of Birth	Damanhour, El-Behaira, Egypt.
Nationality	Egyptian
Position	Assistant Professor of Biology
Address	Natural Sciences Department Southern University at New Orleans 6400 Press Drive New Orleans, LA. 70126
Tel;	+1 (504) 286-5405
Mobile;	+1 (504) 957-8806
E.mails	batteia@suno.edu bashir.rezk@gmail.com
Marital status	Married
Children	2 Kids
Languages	Arabic, English
Immigrant Status	Permanent Resident

Education and Scientific Qualifications

(1991-1995) B.Sc, Department of Zoology, Faculty of Science, Cairo University, Cairo, Egypt.

(1996-1997) Postgraduate student, Comparative Physiology, Faculty of Science, Cairo University, Cairo, Egypt..

(1996-2000) Biomedical investigator in the Egyptian private clinical laboratories (Evening Shift)

(1997-2000) M.Sc. student, fellowship, Pharmacology and Experimental Oncology Unit, National Cancer Institute, Cairo University
The title of the Master thesis is effect of propionyl-L-carnitine on adriamycin-induced cardiotoxicity. This study was supervised by Assistant Prof. Dr. Mohamed M. Sayed-Ahmed, Prof. Dr. Samia A. Shouman and Prof. Dr. Maher H. Khalifa.

(2000-2001) Fellowship in Pharmacology and Experimental Oncology, National Cancer Institute, Cairo University, Cairo, Egypt.

(2001-2004) PhD student, Department of Pharmacology and Toxicology, Faculty of Medicine, Maastricht University, The Netherlands. The title of PhD thesis is Antioxidants and their metabolites: Some toxicological aspects. The research described in the Ph.D. thesis was supervised by Dr. Guido Haenen, Prof. Dr. Wim van der Vijgh and Prof. Dr. Aalt Bast.

(2005-2008) Postdoctoral Researcher, Department of Pharmacology & Experimental Therapeutics, Louisiana State University Health Sciences Center, New Orleans, Louisiana, USA.

(2008-2010) Postdoctoral Fellow, Heart and Vascular Institute, Tulane University, Faculty of Medicine, New Orleans, Louisiana, USA

(2010-2011) Postdoctoral Fellow, Department of Urology, Tulane University, Faculty of Medicine, New Orleans, Louisiana, USA

(2011-present) Assistant Professor of Biology, Department of Natural Sciences, Southern University at New Orleans, Louisiana, USA

Special Activities and Awards

1. Awarded Presidential Scientific Prize, Arab Republic of Egypt. (1998)
2. Awarded the Prize of Academy of Scientific Research and Technology in the development of the Egyptian villages. (1993)
3. Awarded the Cairo University Prize in the pollution of the Nile River: Problem and Solution. (1994)
4. Awarded Scientific prize of Southern Society for Clinical Investigation and International Academy of Cardiovascular Sciences (2009)
5. A journalist in the Egyptian Press. (1997)
6. Attended an intensive training program in the addiction and clinical toxicology as a lecturer and a student. Faculty of Medicine, Cairo University, Cairo, Egypt. (2005)
7. Attended the conference of the development of the Scientific Research in Egypt under patronage of His Excellency Mr President Mohamed Hosny Mubarak. (2005)
8. Attended American Heart Association meeting 2009. Ernest N. Morial Convention Center - New Orleans, Nov 8-12, 2008
9. Consultant for a funded grant on a selective anticancer agent; alpha-tocopheryl succinate, Pharmacology and Experimental Oncology Unit, Department of Cancer Biology National Cancer Institute, Cairo University, Egypt (2006-present)
10. Reviewer and co-reviewer for several Journals and Grants (2006-present):

Florida Biomedical Research Grants
Kansas Biomedical Research Enhancement Funds
Cardiovascular Research
Hypertension
Circulation Research
Journal of Diabetes and its Complications
Journal of Agriculture and Food Chemistry
Journal of Andrology
Journal of Sexual Medicine

Funded Grants

1- Experimental Evaluation of the Beneficial Effects of 4-hydroxy-2,5,6-triaminopyrimidine on Smooth Muscle Cells and Corpus Cavernosum .

Principal investigator: Bashir Mahmoud Rezk Atteia.

Co-investigators: Prof. Dr. Asim Abd El-mageed and Prof. Dr. Wayne J G **Helstrom, Department of Urology, Tulane University.**

Funded from **Sexual Medicine Society** of North **America, April 2011.**

Memberships

1. American Heart Association (AHA)
2. American Society of Nutrition (ASN)
3. American Association of Anatomists (AAA)
4. American Federation for Medical Research/Southern Society for Clinical Investigation (AFMR/SCCI)
5. Society for Free Radical Biology and Medicine
6. American Society of Andrology

SKILLS

I- **Clinical Research**:

1. Blood Biochemistry, Microbiological and Haematological evaluations
2. Microscopic analysis of Human Semen and Urine samples
3. Microscopic evaluation of prostatic secretion
4. Microscopic evaluation of sperm morphology

II- **Basic Research**:

1. **Cancer and normal cells culture**: Proliferation and apoptosis assays, cell migration and si RNA transfections.
2. **Animal Experimentation**: Bone marrow transplantation; induction of Ehrlich's ascites carcinoma and solid Ehrlich Carcinoma in mice, Creation of Aorto-Caval Fistula (ACF) in rats; Blood Gases; Isolation of rat cardiac myocytes and mitochondria; Angiotensin II infusion; isolation of diaphragmatic skeletal muscle satellite cells and fibroblasts.
3. **Cardiology**: Isolation of Cardiac myocytes and mitochondria
4. **Pathology:** Histology; Immuno-cyto & histo-chemistry; Immunofluorescence; TUNEL assay
5. **Molecular biology**: DNA, RNA and protein extraction; Western blot; 2-D SDS-PAGE, antibody array, RT-PCR.

6. **Biochemistry**: Measurements of oxidative stress; Lipid peroxidation, TEAC, DHE, ESR, GSH/GSSG, and enzyme assays
7. **Pharmacology**: Mitochondrial β-oxidation, HPLC analysis; Drugs, antioxidants measurements and quantification of creatine, creatine phosphate, hypoxanthine, AMP, adenosine, ADP and ATP
8. **Human Toxicology**: Mechanism of actions of several antioxidant and identification of their antioxidant pharmacophores
9. **Experimental Oncology**: Testing of the several natural agents on cancer cells.
10. **Stem Cell and Muscle Wasting Research**
11. **Fluorescence activated cell sorter (FACS) Analysis**
12. **Cell Therapy**

LIST OF PUBLICATIONS

1. Sayed-Ahmed MM, Shouman SA, **Rezk BM**, Khalifa MH, Osman AM, El-Merzabani MM. Propionyl-L-carnitine as potential protective agent against adriamycin-induced impairment of fatty acid beta-oxidation in isolated heart mitochondria. Pharmacol Res. 2000;4: 143-50.

2. **Rezk BM**, Haenen GRMM, van der Vijgh WJF, Bast A. The antioxidant activity of phloretin: the disclosure of a new antioxidant pharmacophore in flavonoids. Biochem Biophys Res Commun. 2002; 295: 9-13.

3. **Rezk BM**, Haenen GRMM, van der Vijgh WJF, Bast A. Tetrahydrofolate and 5-methyltetrahydrofolate are folates with high antioxidant activity. Identification of the antioxidant pharmacophore. FEBS Lett. 2003; 555: 601-5.

4. **Rezk BM**, Haenen GRMM, van der Vijgh WJF, Bast A. Lipoic acid protects efficiently only against a specific form of peroxynitrite-induced damage. J Biol Chem. 2004; 279: 9693-7.

5. **Rezk BM**, Haenen GRMM, van der Vijgh WJF, Bast A. The extraordinary antioxidant activity of vitamin E phosphate. Biochim Biophys Acta. 2004; 1683: 16-21.

6. Rocic P, **Rezk B**, Lucchesi PA. PPAR-gamma agonists decrease hyperhomcysteinemia and cardiac dysfunction: new hope for ailing diabetic hearts? Am J Physiol Heart Circ Physiol. 2006 Jul;291(1):H26-8.

7. **Rezk BM**, van der Vijgh WJF, Bast A, Haenen GRMM. Alpha-tocopheryl phosphate is a novel apoptotic agent. Front Biosci. 2007 Jan 1;12:2013-9.

8. Su J, Lucchesi PA, Suzuki Y, Palen DI, **Rezk BM**, Boulares HA, Matrougui K. Role of Advanced Glycation End Products with Oxidative Stress in Resistance Artery Dysfunction in Type 2 Diabetic mice. Arterioscler Thromb Vasc Biol. 2008 Aug;28(8):1432-8.

9. Naura A, Datta R, Hans C, Zerfaoui M, **Rezk BM**, Errami Y, Oumouna M and Boulares H. Reciprocal regulation between inducible NO synthase and Poly(ADP-ribose)polymerase during allergen-induced airway inflammation: requirement versus dispensability. Eur Respir J. 2009 Feb;33(2):252-62.

10. Zerfaoui M, Naura AS, Errami Y, Hans CP, **Rezk BM**, Park J, Elsegeiny W, Lord K, Kim JG, and Boulares AH. Effects of PARP-1–deficiency on airway inflammatory cell recruitment in response to LPS or TNF-α: Differential effects on CXCR2 ligands and Duffy antigen receptor for chemokines. J Leukoc Biol. 2009 Sep 9

11. Chetan P. Hans, Yumei Feng, Amarjit S. Naura, Mourad Zerfaoui, **Bashir M Rezk**, Huijing Xia, Alan D. Kaye, Khalid Matrougui, Eric Lazartigues, and A. Hamid Boulares. Protective Effects of PARP-1 Deficiency on Dyslipidemia-Induced Autonomic and Vascular Dysfunction in $ApoE^{-/-}$ mice: Role of eNOS Activation and Oxidative Stress. PLoS One. 2009 Oct 13;4(10):e7430

12. Laura C. Semprun-Prieto, Sergiy Sukhanov, Tadashi Yoshida, **Bashir M Rezk**, Romer A. Gonzalez-Villalobos, Charlotte Vaughn, A. Michael Tabony, and Patrice Delafontaine. Angiotensin II induced catabolic effect and muscle atrophy are redox dependent. Biochemical and Biophysical Research Communications, 2011 Jun 3;409(2):217-21

Book Chapters

1- **Bashir M. Rezk** & Sikka, S. Developmental and reproductive disorders: Role of endocrine disruptors in testicular toxicity. **Reproductive and developmental toxicology** (pp. 903-912). March, 2011. San Diego: Academic Press. doi:DOI: 10.1016/B978-0-12-382032-7.10069-4

Published Book

1- Antioxidants and their metabolites: some toxicological aspects (2004). Author, **Rezk, Bashir Mahmoud**. Degree grantor, Maastricht University. Date, 2004. Type, doctoral Thesis. **Publisher: Universiteit Maastricht**. ISBN: 9052784396.

Published Abstracts

1- Beneficial effects of folic acid supplementation on left ventricular volume overload. **BM Rezk**, KC Lord, RE Reed, KR Hutchinson, C ... - The FASEB Journal, 2008 – FASEB. Cardiovascular disease is the major cause of worldwide morbidity and mortality. This is the first study to investigate the cardioprotective effects of folic acid (FA) on left

ventricular remodeling in response to acute volume overload generated by aorto-caval fistula (ACF) Adult male ...

2- Proliferative and apoptotic activities of homocysteine: new mechanisms of action in vascular smooth muscle cells. **BM Rezk**, RE Reed, JJ Guidry, PA Lucchesi - The FASEB Journal, 2008 - FASEB
Hyperhomocysteinemia is a risk factor for atherosclerosis. This study investigated molecular mechanisms by which homocysteine alters rat aortic vascular smooth muscle cell (VSMC) function. Low-passage VSMC were treated for 24 hr with a pathophysiological level of ...

3- Antioxidant activity of folic acid: From mechanism of action to clinical application.**BMR Atteia**, AEAA El-Kak, PA Lucchesi, P ... - The FASEB Journal, 2009 – FASEB.The presumed protective effect of folic acid (FA) on the pathogenesis of cardiovascular, hematological and neurological diseases and cancer has been associated with the antioxidant activity of FA. The actual antioxidant activity of FA depends on its consumption and reduction into its ...

4- Upregulation of Sca-1 in satellite cells during diaphragmatic skeletal muscle regeneration: Potential novel mechanism of skeletal muscle regeneration.**BM Rezk**, T Yoshida, L Semprun-Prieto, S Sukhanov, ... - The FASEB Journal, 2010 – FASEB. Stem cell antigen-1 (Sca-1) is an 18kDa glycosyl phosphatidylinositol-anchored cell surface protein of the Ly-6 family that is involved in cell activation, proliferation and differentiation. Regeneration of skeletal muscle is a multifactorial process which includes proliferation and ...

5- Sergiy Sukhanov, Laura Semrpun-Prieto, Tadashi Yoshida, **Bashir Atteia**, Romer Gonzalez-Villalobos, Charlotte Vaughn, Michael Tabony, and Patrick Delafontaine. **ANOREXIGENIC AND CATABOLIC EFFECTS OF ANGIOTENSIN II ARE REDOX DEPENDENT: POTENTIAL MECHANISM OF CONGESTIVE HEART FAILURE-ASSOCIATED SKELETAL MUSCLE WASTING.** J. Am. Coll. Cardiol., April 5, 2011; 57: E366.

Article citations

(www.scholar.google.com)

Tetrahydrofolate and 5-methyltetrahydrofolate are folates with high antioxidant ...
BM Rezk, GRMM Haenen, WJF van der Vijgh, A Bast - FEBS letters, 2003 - Elsevier
The presumed protective effect of folic acid on the pathogenesis of cardiovascular, hematological
and neurological diseases and cancer has been associated with the antioxidant activity of folic acid. Peroxynitrite (PON) scavenging activity and inhibition of lipid peroxidation (LPO) of ...
Cited by 49 - Related articles - All 9 versions

The antioxidant activity of phloretin: the disclosure of a new antioxidant ...
BM Rezk, GRMM Haenen, WJF van der Vijgh, A ... - Biochemical and ..., 2002 - Elsevier
Generation of reactive oxygen species and reactive nitrogen species in vivo are involved in a wide range of human diseases, including cancer, cardiovascular, pulmonary, and neurological diseases [1]. Hence, agents with the ability to protect against these reactive species may ...
Cited by 38 - Related articles - BL Direct - All 7 versions

Propionyl-L-carnitine as potential protective agent against adriamycin-induced ...
MM SAYED-AHMED, SA SHOUMAN, **BM REZK** ... - Pharmacological ..., 2000 - Elsevier
Propionyl- -carnitine (PLC), a natural short-chain derivative of -carnitine, has been tested in this study as a potential protective agent against adriamycin (ADR)-induced cardiotoxicity in isolated rat heart myocytes and mitochondria. In cardiac myocytes, ADR (0.5 m) caused a ...
Cited by 24 - Related articles - BL Direct - All 10 versions

Lipoic acid protects efficiently only against a specific form of peroxynitrite-induced ...
BM Rezk, GRMM Haenen, WJF van der Vijgh, A ... - Journal of Biological ..., 2004 - ASBMB
The ability of the sulfur-containing compounds glutathione (GSH), glutathione disulphide (GSSG), S-methylglutathione (GSMe), lipoic acid (LA), and dihydrolipoic acid (DHLA) to protect against hypochlorous acid (HOCl)-mediated damage and peroxynitrite (ONOOH)-induced ...
Cited by 18 - Related articles - BL Direct - All 4 versions

The extraordinary antioxidant activity of vitamin E phosphate
BM Rezk, GRMM Haenen, WJF van der Vijgh, A ... - BBA-Molecular and Cell ..., 2004 - Elsevier
The antioxidant activities of RRR-vitamin E (VE), all-rac-vitamin E (all-rac-VE), trolox, RRR-vitamin E acetate (VEA), all-rac-vitamin E phosphate (VEP) and RRR-vitamin E succinate (VES) were compared. In this study, the rank order in the inhibition of lipid peroxidation (LPO) of VE ...
Cited by 16 - Related articles - All 7 versions

Role of advanced glycation end products with oxidative stress in resistance artery ...
... Gonzalez-Villalobos, DI Palen, **BM Rezk**, ... - ... , and vascular biology, 2008 - Am Heart Assoc
Methods and Results— Type 2 diabetic db – /db – (diabetic) and nondiabetic db – /db + (control) mice were treated with the AGE inhibitor (aminoguanidine: 50 mg/Kg/d) for 3 months. Isolated mesenteric resistance arteries (MRAs) were mounted in an arteriograph. ...
Cited by 30 - Related articles - All 10 versions

Reciprocal regulation of iNOS and PARP-1 during allergen-induced eosinophilia
... Hans, M Zerfaoui, **BM Rezk**, Y Errami, M ... - European ..., 2009 - Eur Respiratory Soc
The present results demonstrate a reciprocal relationship between inducible nitric oxide synthase
and poly(ADP-ribose) polymerase-1 and suggest that expression of inducible nitric oxide synthase may be dispensable for eosinophilia after interleukin-5 production. Inducible nitric oxide ...
Cited by 12 - Related articles - All 7 versions

Alpha-tocopheryl phosphate is a novel apoptotic agent
BM Rezk, WJ van der Vijgh, A Bast, GR Haenen - Front. Biosci, 2007 - bioscience.org
1 Department of Pharmacology & Experimental Therapeutics, Louisiana State University Health Sciences Center, 1901 Perdido St., Suite 7103, New Orleans, LA. 70112-1393, 2 Department of Pharmacology and Toxicology, Faculty of Medicine, Universiteit Maastricht, PO Box ...
Cited by 4 - Related articles - View as HTML - All 2 versions

Protective Effects of PARP-1 Knockout on Dyslipidemia-Induced Autonomic and Vascular Dysfunction in ApoE−/− Mice: Effects on eNOS and Oxidative Stress

nih.gov [HTML]... , Y Feng, AS Naura, M Zerfaoui, **BM Rezk**, H Xia, AD ... - 2009 - ncbi.nlm.nih.gov
The aims of this study were to investigate the role of poly(ADP-ribose) polymerase (PARP)-1 in dyslipidemia-associated vascular dysfunction as well as autonomic nervous system dysregulation. Apolipoprotein (ApoE) −/− mice fed a high-fat diet were used as a model of ...
Cited by 3 - Related articles - All 6 versions

Effects of PARP-1 deficiency on airway inflammatory cell recruitment in response to LPS or TNF: differential effects on CXCR2 ligands and Duffy antigen receptor for ...
... Errami, CP Hans, **BM Rezk**, J Park, W ... - Journal of ..., 2009 - Soc Leukocyte Biology
We reported that PARP-1 exhibits differential roles in expression of inflammatory factors. Here, we show that PARP-1 deletion was associated with a significant reduction in inflammatory cell recruitment to mouse airways upon intratracheal administration of LPS. However, ...
Cited by 2 - Related articles - All 4 versions

PPAR-agonists decrease hyperhomcysteinemia and cardiac dysfunction: ...
P Rocic, **B Rezk**, PA Lucchesi - American Journal of ..., 2006 - Am Physiological Soc
THE PEROXISOME proliferator-activated receptor- (PPAR-) family of nuclear hormone receptors has been extensively studied due to its antidiabetic, anti-inflammatory, and antiatherosclerotic actions. PPAR- heterodimerizes with the retinoid X receptor to regulate transcription of ...
Cited by 1 - **Related articles** - **BL Direct** - **All 2 versions**

Poster presentations

1. **Rezk BM**, Haenen GRMM, Van Der Vijgh WJF, Bast A. The extraordinary antioxidant activity of vitamin E phosphate. Proceedings of the annual meeting of the Cardiovascular Research Institute Maastricht (CARIM) (28 November 2001)
2. **Rezk BM**, Haenen GRMM, van der Vijgh WJF, Bast A. The antioxidant activity of phloretin: the disclosure of a new antioxidant pharmacophore in flavonoids. 1st workshop, European Graduate School, Molecular Mechanisms of Food Toxicology (7-8 November 2002)
3. **Rezk BM**, Haenen GRMM, van der Vijgh WJF, Bast A. Identification of the antioxidant pharmacophore in tetrahydrofolate and 5-methyltetrahydrofolate. Proceedings, 2nd Seminar, European Graduate School of Toxicology. 28 October 2003
4. **Rezk BM,** Haenen GRMM, van der Vijgh WJF, Bast A. Lipoic acid protects efficiently only against a specific form of peroxynitrite-induced damage. Proceedings of the Jubilee Annual Meeting of the Netherlands Society of Toxicology, 10-11 June 2004
5. **Rezk BM,** Lucchesi PA. Upregulation of Galectin-1 by homocysteine in vascular smooth muscle cells: Disclosure of a new therapeutic target for atherosclerosis. Experimental Biology 2008 April 5-9, 2008. San Diego, California.
6. **Rezk BM**, Lord K, Reed RE. Hutchinson K, Espinoza C, McIlwain E, Abd Elmageed ZY, Varner K, El-Kak AA, Lucchesi PA. Folic Acid Attenuates Left Ventricular Remodeling and Endothelial Apoptosis in Response to Acute Volume Overload. Experimental Biology 2008 April 5-9, 2008. San Diego, California.
7. **Rezk BM,** Delafontaine P. Upregulation of Sca-1 in satellite cells during diaphragmatic skeletal muscle regeneration: Potential novel mechanism of skeletal muscle regeneration. Experimental Biology 2010 April 24-28, Anaheim,, California.

Oral presentations

1. **Rezk BM**, van der Vijgh WJF, Bast A, Haenen GRMM. Vitamin E phosphate is a novel apoptotic agent. The International Union Against Cancer (UICC). National Cancer Institute of Cairo's Conference on "Cancer in the Developing World" Cairo, Egypt. 21-25 March, 2005.
2. **Rezk BM**, Reed RE, Varner K, Lucchesi PA. Role of copper in diabetes and cardiovascular Disease: Is there a future. Pan Arab Conference on Diabetes (PACD 11) March 27 - 30, 2007, Concorde-Salam Hotel, Heliopolis, Cairo, Egypt.
3. **Atteia BM,** Delafontaine P, Lucchesi PA. Upregulation of Galectin-1 by Homocysteine in Vascular Smooth Muscle Cells: A Potential New Therapeutic Target for Atherosclerosis. Southern Society for Clinical Investigation and International Academy of Cardiovascular Sciences. Hotel Inter-Continental, New Orleans, Louisiana February 12-14, 2009. (SAFMR/SSCI Trainee Research Award Winner)

4. **Rezk Atteia BM**, El-Kak AA, Lucchessi PA, Delafontaine P. Antioxidant activity of folic acid: From mechanism of action to clinical application. 10th international conference on Chemistry and its role in development (10ICCRD), Mansoura University-Sharm El-Sheikh Egypt March 16-21, 2009.

5. **Rezk Atteia BM**, El-Kak AA, Lucchessi PA, Delafontaine P. Antioxidant activity of folic acid: From mechanism of action to clinical application. Experimental Biology Meeting 2009. New Orleans, Louisiana, USA. April 18-22, 2009.

6. **Rezk BM,** Delafontaine P. Upregulation of Sca-1 in satellite cells during diaphragmatic skeletal muscle regeneration: Potential novel mechanism of skeletal muscle regeneration. Southern Society for Clinical Investigation and International Academy of Cardiovascular Sciences. Hotel Inter-Continental, New Orleans, Louisiana February 25-27, 2010. (SAFMR/SSCI Trainee Research Award Winner)

7. **Rezk BM.** Homocysteine reduces sperm motility via elevation of mitochondrial superoxide anions in normal and subfertile subjects: Potential effect of co-treatment with folic acid. Society for Free Radical and Biology Meeting, November, 2010, Orlando, FL. (Travel Award)
   http://www.sfrbm.org/pdf/DotFall2010.pdf

Professional Resume

A.

BIOGRAPHICAL SKETCH			
Name: Alvin F. Bopp	***Position: Professor of Chemistry***		
Institution & Location	**Degree**	**Year Conferred**	**Field of study**
• Louisiana State University – New Orleans	BS	1970	Chemistry
• University of New Orleans	Ph.D.	1974	Chemistry

B. PROFESSIONAL EXPERIENCE

	INSTITUTION	DATE
•Course Councilor and Coordinator MOS-92D	US Army Ordnance Center and School	1975-1976
•Visiting Assistant Professor	University of New Orleans	1977-1978
•Research Chemist	US Air Force Wright Aeronautical Laboratories	1978-1981
•Scientist/Senior Scientist	Martin Marietta Laboratories	1981-1990
•Senior Chemist	Shell Development Corporation	1991-1992
•Associate Professor/Professor	Southern University – New Orleans	1996-Present
•Visiting Scientist	US Department of Agriculture; Southern Regional Research Center	1998 – Present

C. MAJOR RESEARCH INTERESTS

Current recent research on the rational design of chemically modified cotton materials for use as wound dressings. This work, in collaboration with the US Department of Agriculture, has focused on developing bandages for a range of chronic wounds ranging from non-healing wounds, burns, as well as anti-microbial and hemostatic uses. Within the program, most efforts have been analytical, especially determining activity. In addition, there is an active interest in developing a Chemistry in Art collaboration with SUNO art faculty leading ultimately to developing a course in Chemistry in Art and investigating analytical methods to assist in the restoration/conservation of storm damaged pieces.

D. PUBLICATIONS (short list)

• J.V. Edwards, A.F. Bopp, et. al., "Human Neutrophil Elastase Inhibition with a Novel Cotton-Alginate Wound Dressing Formulation", Journal of Biomedical Materials Research, Part A, **66A**, 433-440 (2003).

• J.V. Edwards, A.F. Bopp, et. al., "Design, Preparation and Assessment of Citrate-Linked Monosaccharide Cellulose Conjugates with Elastase Lowering Activity," Carbohydrate Polymers, 50, 305-314 (2002).

E. CONFERENCE PRESENTATIONS (Short list)

• "Immobilization of Lysozyme on Cotton Fabrics: Synthesis, Characterization and Activity," J. Vincent Edwards, Alvin Bopp, et. al., 239th American Chemical Society National Meeting and Exposition, March 21-25, 2010, San Francisco, CA

• "Research and Development of Active Cotton Wound Dressings For Chronic Wound Healing", 2004 Beltwide Cotton Conference, San Antonio, p 2851-2885.

F. GRANTS AWARDED (short list)

• Louisiana Board of Regents, "Enhanced Workforce Development, Student Success and College Access for Chemistry, Biochemistry and Biotechnology," $48,200, 2011.

• US Department of Education Minority Science and Engineering Improvement Program (MSEIP); $72,000; 2001.

• National Science Foundation/Board of Regents Joint Faculty Appointment Program; $460,000; 2000.

G. MEMBERSHIPS

• American Chemical Society

• Friends of City Park

• New Orleans Museum of Art

• Preservation Resource Center

H. COMMUNITY SERVICE

• Active member of the Louisiana Section of the American Chemical Society (ACS). Held numerous leadership positions, including presently being the Section's Councilor (section representative on the national governing body).

Bopp is presently an Associate on the ACS Committee on Chemistry and Public Affairs. He has been active in Committee work and most recently participated in Congressional Visits Day through which members visit their Congressmen (women) or Senators in a dual role as constituent and scientist to emphasize the importance of funding for basic research.

• As a member of the local ACS Section, volunteered and performed chemical demonstrations at the New Orleans Children's Museum during the Museums' Super Science Saturday program.

• Board of Directors; Pin Oak Village Homeowner's Association; Katy, TX 1993-1995
• Board of Managing Directors; Western YMCA; Catonsville, MD 1989-1990

BIOGRAPHICAL SKETCH

Provide the following information for the project director, co-project director, and other key personnel/consultants. Begin with the principal investigator/program director. Photocopy this page for each person.

Name: Ibrahim Ekaidi, MD	Position Title: Associate Professor of Biology

EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.

INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Craiova University School of Medicine, Craiova, Romania	MD	1992	Medicine,(Physiology, Microbiology, Molecular Biology, Gross Anatomy, Embryology,Histology,Pathophysiology,Pharmcology)

Teaching Experience

Southern University at New Orleans, LA Aug 2007–Present
Tenure Track Associate Professor of Anatomy, Physiology and Biology

New Mexico State University, Las Cruces, NM Jan 2006 – Jul 2007
Tenure Track Assistant Professor of Anatomy, Physiology, Pathophysiology and Medical Terminology.

El Paso Community College, El Paso TX Aug 2006 – Jul 2007
Teaching Anatomy and Physiology Courses with Labs

Keiser College, Lakeland, FL May 2005 – Dec 2005
Taught courses and labs of Anatomy and Physiology in the Nursing Program.

Saba University School of Medicine, Saba Island, NA Aug 2004 – Dec 2004
Associate professor of gross Anatomy and Embryology

Central Florida College, Orlando, FL Jan 2004 –Aug 2004
Full-time Assistant Professor Taught Anatomy and Physiology I and II with labs

Florida Hospital College of Health Sciences, Orlando, FL Jan 2002 – Aug 2003
Taught Anatomy and Physiology I and II with labs Part-time

Valencia Community College, Orlando, FL Apr 1999 –Jun 2003
Taught Anatomy, Physiology I and II and Human Biology with labs Part-time

Keiser College, Daytona Beach, FL Apr 1999 –Nov 2000
Full-time Assistant Professor. Taught courses in Human Biology and Advanced Biology with labs

Concord College, Ft. Lauderdale, FL Jan 1998 –Apr 1999
Full-time Assistant Professor. Taught Anatomy, Physiology and Laboratory Procedures

Medical Experience

North Broward Hospital, Fort Lauderdale, FL Sep 1997 – Jan 1999
Monitored Telemetry unit-cardiology and followed up patients during pre and post operative state.

Aleppo University Hospital, Aleppo, Syria Aug 1993 – Jun 1996
Residency in Internal Medicine

Petre Georgescu Cardiology Clinic, Craiova, Romania Dec 1992 – May 1993

Worked as a Cardiology trainee, performed physical exams & histories, diagnosed and treated patients under supervision.

Research, Publications

Preoperative Parathyroid Needle Localization: A Minimally Invasive Novel Technique in re-operative Settings	Minimally Invasive Surgery	June 30, 2011

Research in Progress:

Topic A " PDZK1 Expression is age-phasic in human breast cancer and growth-promoting factor that is indirectly regulated by estrogen through IGF-1R"

Topic B *Apoptotic DNA fragmentation may be a cooperative activity between capase-activated dnase and DNAS1L3, an ER-localized endonuclease that translocates to the nucleus during apoptosis"*

Topic C *Minocycline blocks allergen-induced airway eosinophilia and production of Th2 cytokines and IgE in a PARP-independent manner: Specific effects on NF-kB signal transduction.*

Presentations

Title	Organization	Location & Date	National Regional, State, Local
Independent Assortment and Random Segregation	Star Scientific Assessment and Resources	Baton Rouge 2010	State
Model Lesson for Anatomy And Physiology	5th Annual J. K. Haynes Teacher Preparation	Baton Rouge 2008	State
Fundamentals of Biology I: Using The Scientific Method	4th Annual J. K. Haynes Teacher Preparation	Baton Rouge 2007	State

Membership:
American Heart Association
Human Anatomy and Physiology Society
Board Advisory Member of HIMS

Honors and certificate of participations
Valencia community college 1996 Orlando, Florida (Effective Teaching)
Continuous Medical Educations (CME) 1997 LSU New Orleans (Treatment of arrhythmias)
Contiguous Medical Educations (CME) 1997 Daytona Beach, Florida (Bipolar treatment
New Mexico State University 2007 Las Croces, NM Using New Technology in Teaching Anatomy and Physiology Laboratory

Professional Resume

A.

BIOGRAPHICAL SKETCH			
Name: *Carl P. Johnson*	***Position:*** *Professor of Chemistry*		
Institution & Location	**Degree**	**Year Conferred**	**Field of study**
Alabama State University	BS	1989	Chemistry
University of Alabama	Ph.D.	1995	Organic/Inorganic Chemistry
University of Pittsburgh	Post-doctoral Studies	1996	Organic Chemistry

B. PROFESSIONAL EXPERIENCE	**INSTITUTION**	**DATE**
Professor of Chemistry	Southern University at New Orleans	January 2007 – Present
Associate Professor of Chemistry	Southern University at New Orleans	January 2006 – January 2007
Associate Professor and Chair of Chemistry	Southern University at New Orleans	January 2003 – January 2006
Assistant Professor of Chemistry	Southern University at New Orleans	August 1996 – January 2002
Visiting Scientist Summer Program (Organic Chemistry	Oak Ridge National Laboratory, Oak Ridge, Tennessee	May 1997 - July 1997
Junior Chemist (Environmental/ Product Improvement)	Grace Specialty Chemicals, Deere Park, Texas	December 1989 - July 1991

C. MAJOR RESEARCH INTERESTS

"The Advanced Synthesis of Calixarene Compounds for Supramolecular Studies."
"Green Chemistry: Natural Pesticides, Alternative/Bio Fuels & Natural Filtration Systems"

D. PUBLICATIONS *(Short list)*

"Effective Methods in Science and Mathematics Education for Urban Students," *J. Urban Education* **2004**, *1*, 78.
The University Freshman Textbook entitled: "The Freshman Course Book, Road Map to College Success". Co-Contributor/Author for three editions.

"Second SUNO Undergraduate Research Day: Students's Contributions at Southern University at New Orleans," *Council on Undergraduate Research Quarterly,* September, **2002**.

E. GRANTS AWARDED (short list)

July 1, 2009

National Science Foundation-"Program of Enhancement, Enrichment and Excellence in Mathematics and Science" ($1.75M). I serve as a co-author, co-principal investigator and co-project manager for the project.

July 1, 2008

National Science Foundation-"Scholarships for Excellence in Natural Sciences" ($598,974). I serve as a co-author and co-principal investigator for the project.

June 1, 2005

Louisiana Board of Regents-"Computer Resource and Technology Laboratory: A Vital Tool for Enhancing an Undergraduate Curriculum" ($30,000).

January 1, 2003

National Science Foundation-"Graduate Alliance for Education in Louisiana" ($61,972). I serve as a co-author, co-principal investigator and co-project manager for the project.

June 6, 2002

Louisiana Board of Regents-"The Enhancement of an Undergraduate Curriculum With Infrared Spectroscopy" ($30,000).

June 1, 2001

National Science Foundation-"Program of Excellence in Science, Mathematics and Computer Technology" ($2.5M). I serve as a co-author, co-principal investigator and co-project manager for the project.

June 1, 2000

Southern University at New Orleans Technology Funds-"The Enhancement of an Undergraduate Curriculum via Instrumentation and Technology" ($65,000).

June 1, 1999

Louisiana Board of Regents-"The Enhancement of an Undergraduate Curriculum via Instrumentation and Technology" ($65,000).

F. MEMBERSHIPS

American Chemical Society
Beta Kappa Chi

G. COMMUNITY SERVICE

•I serve as the Chair for an annual golf tournament. The funds are used to support scholarships, talent hunt competition and mentoring programs.

H. CONFERENCES (Short list)

•Beta Kappa Chi National Conference–New Orleans, LA (March 2010)

•Educational Advancement Alliance, Inc.– Birmingham, AL (November 21, 2009)
•Educational Advancement Alliance, Inc.– Philadelphia, PA (February 6-8, 2009)

BIOGRAPHICAL SKETCH			
Name: Murty S. Kambhampati		Position Title: Professor of Biology Contact Info.: 504-286-5069	
EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.			
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Andhra University, India Andhra University, India Andhra University, India Andhra University, India Jackson State University, Jackson, MS	BS MS Diploma Ph.D. Ph.D.	1979 1981 1983 1988 1999	Biology Botany Statistics Ecology Environmental Science

A. Positions and Employment

6/91 - January 1994	JSU/NASA/EOS Project Manager in the Department of Biology
Feb. '94 - August 94	Research Associate in math department at Jackson State University
Aug. '94 - August 2001	Assistant Professor of Biology, Southern University at New Orleans
Summer 1995	Faculty Research Participant (FRP) at Argonne National Laboratory, Chicago
Summer 1996	Biology Instructor at SUNO
Summer 1997	Biology Instructor in NSF/LaCEPT Workshop high school teachers
Summer 1998	Visiting Research Fellow in Tulane LAMP Program
Summer 1999-01	Research Mentor at LUMCON, Cocodrie, LA
August 2001- July 04	Associate Professor of Biology, Southern University at New Orleans
Summer 2002-05	Biology Coordinator in the NSF funded PESMaCT
Summer 2006;07;08;09;10;11	DOE/NSF Faculty and Student Team, Brookhaven National Laboratory, NY
August 2004-	Professor of Biology, Southern University at New Orleans

B. Classes Taught (Both Lecture and Laboratory):

Biol 100	Biology Seminar
Biol 105	Introduction to Biology I
Biol 105L	Introduction to Biology Lab I
Biol 106	Introduction to Biology II
Biol 106L	Introduction to Biology Lab II
Biol 124	General Biology I
Biol 124L	General Biology Lab I
Biol 125	General Biology II
Biol 125L	General Biology Lab II
Biol 124	General Biology I on-line
Biol 125	General Biology II on-line
Biol 202	Environmental Science Awareness
Biol 202L	Environmental Science Awareness Lab
Biol 204	Plant Diversity
Biol 204L	Plant Diversity Lab
Biol 216	Morphology of Vascular Plants
Biol 216L	Morphology of Vascular Plants Lab
Biol 302	Genetics
Biol 302L	Genetics Lab
Biol 315	Plant Physiology
Biol 315L	Plant Physiology Lab
Biol 341	Principles of Ecology
Biol 341L	Principles of Ecology Lab
Biol 410	Advances in Ecology
Biol 410L	Advances in Ecology Lab
Biol 494	Senior Seminar I
Biol 495	Senior Seminar II
Biol 496	Senior Comprehensive Exam

C. New Courses Developed:

(i) Advances in Ecology (funding agency: LA-BoR)
(ii) Environmental Biotechnology (funding agency: USEd)
(iii) Environmental Science Awareness (funding agency: NSF)
(iv) General Biology I on-line course
(v) General Biology II on-line course

D. Research Interests:

1. Phytoremediation
2. Environmental Toxicology
3. Environmental Biotechnology
4. Environmental Microbiology
5. Limnology

E. Publications:

K.W. Jones, S. Bronson, P. Brink, C. Gordon, K. Mosher-Smith, M. Brown, S. Chaudhry, A. Rizzo, R. Sigismondi, M. Whitehurst, A. Lukaszewski, D. Kranz, K. Bland, D. Gordan, J. Lobel, J. Sullivan, M. Metzger, C. O'Shea, C. Harris, R. Arezzo and **M.S. Kambhampati**. 2009. "Bivalve Characterization Using Synchrotron Micro X-Ray Fluorescence" published in Acta Physica Polonica A. 115(2): 477-481.

Kambhampati M. S., H. St. Cyr*, L. Stemley*, and T. Green, 2007. "Environmental Health of Peconic River Headwaters: Sediment Chemistry," Battelle Press Paper A-052. ISBN 978-1-57477-159-6.

Omar, A., **Kambhampati, M. S.**, Omojola, J., et al. 2006. The Program of Excellence in Science, Math, and Computer Technology at Southern University at New Orleans, Journal of Instruction Delivery System, Spring 2006, V20, #2

Murty S. Kambhampati, Gregorio B. Begonia, Maria F.T. Begonia, Yolanda Bufford*. 2005. Morphological and Physiological Responses of Morning Glory (*Ipomoea lacunosa* L.) Grown in Lead- and Chelate-Amended Soil. *Int. J. Environ. Res. Public. Health.* 2(2): 299-303.

Adegboye, D.S., **Kambhampati, M.S.**, Mims-Devezin, L. Hardester, L.M., and Clancy, M.J. 2004. A successful model for integrating high-technology courses for content requirements in science education. Presented at *First System-wide J.K. Haynes Teacher Preparation Conference.* Southern University System, Baton Rouge, LA. *J.Urban Edu.* 2(1): 151-158.

Kambhampati, M., Adegboye, D.S., Mims-Devezin, L. and Cosby, R. 2004. Integration of Technology into Biology curriculum for teacher preparation at Southern University at New Orleans. Presented at *First System-wide J.K. Haynes Teacher Preparation Conference.* Southern University System, Baton Rouge, LA. *J.Urban Edu.* 2(1): 10-18.

Kambhampati, M.S., Omojola, J., Omar, A., Miranda, D., Singleton, C., Esmail, A., and Thibodeaux, A. 2004. Interdisciplinary Science, Mathematics, and Technology Course Modules for Praxis II: a necessity at Southern University at New Orleans. Presented at *First System-wide J.K. Haynes Teacher Preparation Conference.* Southern University System, Baton Rouge, LA. *J.Urban Edu.* **2**(1): 89-96.

Itohan Agbonlahor*, **Murty S. Kambhampati**, and David S. Adegboye. 2004. Phytogenotoxicity of Copper (Cu) and Lead (Pb) in *Ipomoea* lacunosa (L.) (morningglory) seedlings: Pilot Studies. 7th Annual LS-LAMP-DOE-EPSCoR Conference Peer Review Proceedings.

Laura Pauline* and **Murty S. Kambhampati**. 2003. Accumulation of Cadmium in Grass Shrimp (*Palaeomonetes pugio*). 6th Annual LAMP-EPSCoR-DOE Conference Peer Reviewed Proceedings.

M.S. Kambhampati, G.B. Begonia, M.F.T. Begonia, Y. Bufford*. 2003. Phytoremediation of Lead-Contaminated Soil Using Morning Glory (*Ipomoea lacunosa* L.): Effects of Synthetic Chelate. *The Bulletin of Environmental Contamination and Toxicology.* 71(2) 379-386.

Kambhampati, M.S. and Johnson, D*. 2001. Phytoremediation of lead-contaminated soils using *Zea mays. Phytoremediation, Wetlands, and Sediments* (Eds. Andrea Leeson, Eric A. Foote, M. Katherine Banks, and Victor S. Mager). The Sixth International In-Situ and On-Site Bioremediation Symposium. San Diego, California, June 4-7, 2001. Battelle Press, Columbia.Richland. 6(5): 151-156.

Kambhampati, M.S. and Williams, L*. 2001. Phytoremediation of lead-contaminated soils using *Mirabilis jalapa. Phytoremediation, Wetlands, and Sediments* (Eds. Andrea Leeson, Eric A. Foote, M. Katherine Banks, and Victor S. Mager). The Sixth International In-Situ and On-Site Bioremediation Symposium. San Diego, California, June 4-7, 2001. Battelle Press, Columbia, Richland. 6(5): 145-150.

Begonia, G.B., M.T. Begonia, G.L. Miller*, and **M.S. Kambhampati**. 2000. Phytoremediation of metal-contaminated soils: Jackson State University Research Initiatives. *In: Metal Ions in Biology and Medicine* (eds. Cenleno, J.A., Callery, G.V., Finkelman, H.G., and Ehenne, J.C.). **6**: pp 672-674. John Libbey Eurotext. Paris.

* ***Undergraduate students (mentees) as co-authors***

F. **Research Abstracts**: Approximately 65 research abstracts published in national and international research conferences for the past 13 years (with undergraduate research mentees as primary or co-authors).

G. Grants Awarded (for the past ten years):

2009-2014: Implementation of Enrichment, Excellence, and Enhancement in Natural Sciences (E^3MaS; $1.75M; **Co-PI**), NSF

2008-2012: Scholarships for Excellence in Natural Sciences (S-STEM-SENS; $558,900; **PI**), NSF

2011 Supplemental Grant to E^3MaS-HBCU-UP for FaST&SULI 2011 stipends at BNL (~31K; **PI**), NSF

2010 Supplemental Grant to E^3MaS-HBCU-UP for FaST&SULI 2010 stipends at BNL (~41K; **PI**), NSF

2009: Supplemental Grant to PESMaCT for FaST&SULI 2009 stipends at BNL (~32K; **PI**), NSF

2008: Supplemental Grant to PESMaCT for FaST&SULI 2008 stipends at BNL (~31K; **PI**), NSF

2005-2008: Development of Environmental Biotechnology Lab at SUNO ($263,000; **PI**), US Ed.

2007: Supplemental Grant to PESMaCT for FaST&SULI 2007 stipends at BNL (~29K; **PI**), NSF

2006-2007: Enhancement of Biology Computer Laboratory at SUNO (~50K; **Co-PI**), LA-BoR

2006-2007: Enhancement of Microbiology, Molecular Biology, and Ecology Laboratory Instruction at SUNO (~30K; **Co-PI**), LA-BoR

2006: Supplemental Grant to PESMaCT to replace equipment (100K; **Co-PI**), NSF

2006: Supplemental Grant to PESMaCT for FaST 2006 stipends at BNL (~21K; **PI**), NSF

2003-2004: Enhancement of Microbiology Teaching and Research Infrastructure ($53,497; **Co-PI**), LA-BoR

2001-2008: Program for Excellence in Science, Mathematics, and Computer Technology (PESMaCT), ($ 2,600,000; **Co-PI**), NSF

2001-2004: Biomedical Research Infrastructure Network (BRIN) multi-campus proposal. Dr. E. Williams Wischusen (PI) at LSU, Baton Rouge ($4.949 millions; **Co-PI**; SUNO Share ~$600K), NIH

2001-2002: Enhancement of Laboratory Instruction through Technology in the Department of Biology at SUNO. ($41,954, **PI**), LA-BoR

2000-2001: Enhancement of Laboratory Instruction in Biology at SUNO. ($40,000, **PI**), LA-BoR

2000-2001: Enhancement of Undergraduate Curriculum by the Integration of Molecular Biology at Southern University at New Orleans. ($49,374; **Co-PI**), LA-BoR

H. Research Mentoring: Mentored more than 65 undergraduate students (environmental toxicology, phytoremediation, limnology, environmental microbiology, and plant science research projects, independently and or in collaboration with colleagues, for the past 13 years; some of my mentees won awards in regional/national conferences).

I. Membership:

- American Chemical Society (ACS)
- American Association for the Advancement of Science (AAAS)
- Smithsonian Institution
- World Wildlife Fund (WWF)
- Nature Conservancy
- Beta Beta Beta Biological Honor Society
- Beta Kappa Chi National Scientific Honor Society
- National Institute of Science

J. Honors and Awards (short list):

- 2008 Minority Access, Inc. National Faculty Role Model Award
- Several Chancellor's, Grantsmanship, and Dean's Awards for Excellence in Mentoring, Teaching, Service, and Grants secured for SUNO (consistently for the past several years).
- Listed in **Who's Who Among America's Teachers®**, 2004 and 2005.
- Chancellor's Scholarship Cash Award ($500.00) for the Year 2005-2006
- National Society of Toxicology (SOT) Undergraduate Student Advisor Award 2006-07
- Southern University System Faculty Excellence Award, 2007

K. Reviewer

- NSF Grants
- DoE Undergraduate Journal
- Campbell Biology
- Biology Lab Manual
- International Journal of Environmental Health

Lisa Mims-Devezin

7558 Marquis St., New Orleans, LA 70128
(504) 246-9552
lmims@suno.edu

Improving Performance • Enhancing Programs • Inspiring Systemic Change

EXPERIENCED EDUCATOR

...dedicated to guiding diverse learners to succeed while inspiring an insatiable passion for teaching, research, mentoring and service

Visionary Leader, Bridge Builder and Committed Educator with an earned doctorate in Science/Math Education coupled with over 15 years' experience instructing diverse learners, securing resources, and implementing an effective program in Health Information Managements Systems.

SUMMARY OF QUALIFICATIONS

- An **enthusiastic, creative, and passionate educator**, mentor and advisor who believes that all individuals can learn and thrive in a learning environment that is stimulating, comforting and conducive to the overall infrastructure of each students' unique talents and abilities.
- **Instructional Leadership** - Use a balanced blend of motivational and targeted instruction methodologies to enhance curricula in the area of biology.
- **Leverage Resources / Strategic Collaborations** – Work closely with the Board of Regents and other institutions to ensure that SUNO had/has involvement and strong educational alliances with other institutions.

EDUCATION

INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Southern Univ. A&M College, Baton Rouge, LA	Ph.D.	2004	Science/Math Ed.
Southern Univ. A&M College, Baton Rouge, LA	M.S.	1993	Biology/Microbiology
Southern Univ. at New Orleans N. O., LA **Graduated Cum Laude**	B.S.	1991	Biology/Pre-Med

HIGHLIGHTED PROFESSIONAL TEACHING EXPERIENCE

SOUTHERN UNIV. AT NEW ORLEANS, NEW ORLEANS, LA **2006 – present**

Associate Dean, College of Arts and Sciences

- Assisting in the leadership of seeing that the entire program of the college is advanced to the highest possible level of excellence.
- Insuring the participation of department chairs, faculty, and students in decisions which affect them.
- Encouraging maximum participation of faculty and students in professional activities.
- Encouraging maximum participation of faculty and students in community affairs.
- Promoting the professional growth of department chairs
- Meeting monthly with department chairpersons, individually or collectively.
- Coordinating, collecting and submitting teaching loads, summer faculty recommendations, and all other reports requested by the Vice Chancellor for Academic Affairs.
- Providing leadership in student development
- Providing leadership in research and planning
- Using innovative methods and materials to produce effective learning experiences including cooperative learning, thematic instruction, and differentiation.
- Serve as Liaison for SUNO on the LA Board of Regents State Articulation Committee for the past eighteen (18) years.
- Serve as Liaison for SUNO and the Southern University System on the LA Board of Regents General Education Council and State Articulation Transfer Council.
- Serve as a Leadership Team member on the LA Board of Regents Statewide Partnership for Assessment of Readiness for College and Careers (PARCC) assessments Committee.

Highlighted Achievements

- Contributed to a significant increase in on-line learning and articulation agreements between two-year institutions.
- Encouraged faculty participation in research, grant-writing, recruitment, and mentoring efforts.
- Mentored and coached students to help boost their confidence and competencies, as evidence by research capabilities.

SOUTHERN UNIV. AT NEW ORLEANS, NEW ORLEANS, LA **2010 – present**

Professor of Biology, Natural Science Dept.

- Classroom and laboratory instruction in General Biology for majors, non majors, General Microbiology, and Animal Diversity; assessment of student performance
- Course coordinator for General Biology for majors
- Student advising
- Departmental and University committee work including assisting in the development of an Honors college course in Science and Ethics,
- LaCept program for Science and Education reform in Louisiana
- Biology Professor for SUNO's Early Start/Dual Enrollment Program

SOUTHERN UNIV. AT NEW ORLEANS, NEW ORLEANS, LA
2004 – 2010

Associate Professor of Biology, Natural Science Dept.

- Classroom and laboratory instruction in General Biology for majors, non majors, General Microbiology, and Animal Diversity; assessment of student performance
- Course coordinator for General Biology for majors
- Student advising
- Departmental and University committee work including assisting in the development of an Honors college course in Science and Ethics,
- LaCept program for Science and Education reform in Louisiana
- Outreach coordinator for Orleans Parish elementary and middle schools

SOUTHERN UNIV. AT NEW ORLEANS, NEW ORLEANS, LA
1993 – 2004

Assistant Professor of Biology, Natural Science Dept.

- Classroom and laboratory instruction in General Biology for majors, non majors, General Microbiology, and Animal Diversity; assessment of student performance
- Course coordinator for General Biology for majors
- Student advising
- Departmental and University committee work including assisting in the development of an Honors college course in Science and Ethics, LaCept program for Science and Education reform in Louisiana
- Outreach coordinator for Orleans Parish elementary and middle schools

UNIVERSITY OF IOWA, Iowa City, IA **1997**

Temporary Adjunct Assistant Professor

- As a summer faculty research scientist in the Department of Biology and Microbiology, participated on a project involving the identification of strains of *Pseudomonas aeruginosa found in Ascaris suum,*
- Isolation and Cultivation of organisms
- Plating for isolation
- CHEF Analysis
- Plating for isolation

LOUISIANA STATE UNIVERSITY, New Orleans, LA **1995**

Temporary Adjunct Assistant Professor

- As a faculty research assistant, through the SUNO/LSU CRISB (Collaborative Research In Biology), in the Department of Endocrinology, participated on a project with Dr. Chandan Prasad involving the use of Cyclo-HisPro to reduce the amount of fat and carbohydrate intake.Isolation and Cultivation of organisms
- Radioimmunoassay
- ELISA Test
- Radiation seminar

COURSE CURRENTLY TEACHING & TAUGHT

Fall 2008	Spring 2008	Fall 2007	Spring 2007
Intro to Bio 105/L (4 cr)	BIOL 217/L (4 cr)	BIOL 105/105L	BIOL 217/217L
Intro.to Bio. 105 (4c r)	BIOL 105/105L	BIOL 105/105L	BIOL 217/217L
BIOL 105/105L	BIOL 105/105L	BIOL 105/105L	BIOL 105/105L

Fall 2006	Spring 2006	Fall 2005	Spring 2005
Gen. Micro. 217 (4 cr)	BIOL 217	BIOL 217	BIOL 217
Intro.to Bio. 105 (4c r)	BIOL 217	BIOL 217	BIOL 217
BIOL 105	BIOL 105	BIOL 105	BIOL 105
	BIOL 105		
	BIOL 105		
	BIOL 105		
	BIOL 105		
	BIOL 105		

Fall 2004	Spring 2004	Fall 2003	Spring 2003
Gen. Micro. 217 (4 cr)	BIOL 217	BIOL 217	BIOL 217
Intro.to Bio. 105 (4c r)	BIOL 217	BIOL 217	BIOL 217
BIOL 105	BIOL 105	BIOL 105	BIOL 105

NEW COURSES DEVELOPED

2006	Introduction to BIOL 105 On-Line Course, Southern University at New Orleans
2006	Introduction to BIOL 105 Lab On-Line Course, Southern University at New Orleans
2006	Introduction to BIOL 106 On-Line Course, Southern University at New Orleans
2006 Orleans	Introduction to BIOL 106 Lab On-Line Course, Southern University at New
2006 Orleans	General Microbiology BIOL 217 On-Line Course, Southern University at New
2006 Orleans	General Microbiology BIOL 217 Lab On-Line Course, Southern University at New

RESEARCH INTEREST

Microbiology and Environmental Microbiology

PUBLICATIONS (SHORT LIST)

2009	Mims-Devezin, L.R. General Biology: A Modified Aprroach Laboratory Manual. Lulu Publishing Company,

2007	Mims-Devezin, L, Kambhampati, M.SI, Adegboye, D.S., Integration of Technology and Virtual Laboratories Into the Biology Curriculum at an Urban University: Impact on Students' Attitude and Response . Journal of Urban Education 4(1), 42 – 51.
2005	Adegboye, D. S., Kambhampati, M. S., Mims, L. R., Hardester, L. M., Causey, M., and Clancy, A Successful model for integrating high technology courses for content requirements in science education: molecular biology course development at Southern University at New Orleans, State of Louisiana. Journal of Urban Education 2(1), 151 – 158.
2005	Kambhampati, M.S., Adegboye, D.S., Mims-Devezin, L, and Cosby, R. Integration of Technology into biology curriculum for teacher preparation at Southern University at New Orleans. Journal of Urban Education 2(1), 10 – 18.
2004	Mims-Devezin, College Students' Perceptions, Attitudes, and Preconceived Notions about Biology . Southern University A&M College, Southern Univ. Dissertation
2004	A Successful Model for Integrating High-Technology Courses for Content Requirements in Science Education. Presented at the First System-wide J.K. Haynes Teacher Preparation Conference, Southern University – Baton Rouge, LA.
2001	Adegboye, D. S., Kambhampati, M. S., Mims, L. R., Hardester, L. M., Charbonnet, D., Causey, M., and Clancy, M. Southern University at New Orleans, and University of New Orleans. Case study of molecular biology course development at Southern University at New Orleans. SE Biology, 49 (2), 216.
1998	Mims, L.R. General Biology Laboratory Manual. Wm. C. Brown Publishing Company, Dubuque, IA

RESEARCH ABSTRACTS

2004	Adegboye, D. S., Kambhampati, M. S., Mims, L. R., Hardester, L. M., Causey, M., and Clancy, A Successful model for integrating high technology courses for content requirements in science education: molecular biology course development at Southern University at New Orleans, SE Biology, 49 (2), 216.
2001	Adegboye, D. S., Kambhampati, M. S., Mims, L. R., Hardester, L. M., Charbonnet, D., Causey, M., and Clancy, M. Southern University at New Orleans, and University of New Orleans. Case study of molecular biology course development at Southern University at New Orleans. SE Biology, 49 (2), 216.

GRANTS AWARDED (FOR THE PAST TEN YEARS)

2007	Mims-Devezin, Adegboye, and Kambhampati, M. S. and Scineaux, S. Enhancement of Biology Research and Instruction at SUNO through acquisition of the Riboprinter. SUNO Enhancement Funds ($150,000.00)

2006	Mims-Devezin, Adegboye, and Kambhampati, M. S. and Scineaux, S. Enhancement of the Computer Lab for Biology Instruction at SUNO. LA Board of Regents ($50,000.00)
2006	Mims-Devezin, Adegboye, and Kambhampati, M. S. and Scineaux, S. Enhancement of Microbiology, Cell and Molecular Biology, and Ecology Teaching and Research Infrastructure at SUNO. LA Board of Regents ($38,632.00)
2004	Adegboye, D.S., Mims-Devezin, L and Kambhampati, M. S. Enhancement of Microbiology Teaching and Research Infrastructure at SUNO. LA Board of Regents ($53,497.00)
2002	Adegboye, D. S., Mims, L. R., Ogra, M., and Kambhampati, M. S. Enhancement of the Infrastructure for Pathogenic Microbiology Teaching Research.
2000-2001	Modernizing the Biology Curriculum at Southern University at New Orleans. Department of Defense Infrastructure Support Program for HBCU/MI, ($ 194,298.00)

RESEARCH MENTORING

2007-Present	Mentor	SUNO/ LAMP (Leadership and Mentoring Program)
2004-Present	Mentor	SUNO/ LAMP (Louisiana Alliance for Minority Participation)
1997-Present	Mentor	SUNO/ Department of Biology/Beta Beta Biological Honor Society

MEMBERSHIP

2007	Peer Reviewer	Quality Matters: Institutional Quality Assurance in Online Learning
2007	Member	HBCU Faculty Development Network
2006	Member	American Society for Microbiology
2006	Member/Evaluator	Southern Association of Colleges and Schools
2005	Member	National Institute of Sciences
2001	Trainer for Marco Polo	Marco Polo/ QUEST
2000	Member	National Science Teachers Association
2000	Member	Society for College Science Teachers
1996	Member	Beta Kappa Chi Sci. Honor Society
1991	Member / Advisor	Beta Beta Beta Biological Honor Society
1990	Member	Alpha Kappa Alpha Sorority, inc.

ACADEMIC/RESEARCH ORGANIZATION(S) MEMBERSHIP(S):

Beta Beta Beta Biological Honor Society, Bet Kappa Chi Scientific Honor Society, Alpha Kappa Alpha Sorority, Inc., National Science Teachers Association, National Association for Research in Science Teaching, American Society for Microbiology, National Institute of Science.

STUDENT CLUBS/SPONSOR

Advisor/Sponsor of Beta Beta Beta Biological Honor Society

DEPARTMENTAL/UNIVERSITY COMMITTEES

1. Land Grant Initiative Committee (System wide) (Chair for SUNO)
2. Senior Exit Exam Committee (Co-Chair)
3. Political Science Endowed Chair Committee, (Chair)
4. L.A. Board of Regents State Articulation Officer (SUNO)
5. Council of Deans
6. Commencement Committee
7. SACS Compliance Task Force Committee
8. Judicial Appeals Committee
9. Honors Program Committee
10. Early Start Program Committee

HONORS AND AWARDS

2009	Thurgood Marshall Distinguished Faculty Award
2008	Cambridge Who's Who Registry Among Executive and Professional Women
2008	Southern University at New Orleans, Certificate of Appreciation, Mathematics and Science Kamp for Beginners (MSKB)
2007	Temple's Preschool of Math & Science, New Orleans, Guest Speaker, Culminating Activity
2007	MGE@MSA Arizona Student Research Conference, Judge, Tempe, AZ
2007	Who's Who Among American Teachers, Southern University at New Orleans
2007	Southern University at New Orleans, Certificate of Grantsmanship Participation, New Orleans, 2006 Southern University at New Orleans, Certificate of Successful Grantsmanship and Winning grants Award, New Orleans
2005	Southern University at New Orleans, College of Science, Award for Excellence in Mentoring
2005	Southern University at New Orleans, Who's Who Among Teachers in American Colleges and Universities.
2004	Southern University at New Orleans, College of Science, Award for Excellence in Teaching
2004	Southern University at New Orleans, Certificate of Grantsmanship Participation, New Orleans, LA
2003	Southern University at New Orleans, Certificate of Outstanding Grantsmanship, New Orleans
2001	Southern University at New Orleans, Certificate of Successful Grantsmanship and Winning Grants Award, New Orleans

OTHER RELEVANT INFORMATION

*** Wrote, defended, and developed the Health Information Management Systems Program and the Course Curriculum for the Health Information Management Systems Program, at Southern University at New Orleans. ***

Also identified a partner, Richard's Disposal, Inc. for Southern University at New Orleans' IWTP (Incumbent Workers Training Program).

Date Of Presentation	Presentation	Conference/Group
2011	E-focused! Enhancing student Learning in Online Courses by Improving Institutional Readiness SLOAN Consortium, San Jose, CA	Conference
2008	Benefits of Joining Professional Organizations Presented at the Honors Program Seminar Southern University at New Orleans – New Orleans, LA.	University
2008	Implementing Learning Communities Presented at the National Summer Institute On Learning Communities, The Evergreen State College – Olympia, WA.	Conference
2008	More Than Just a General Studies Degree Motivational Workshop Southern University at New Orleans General Studies Program New Orleans, LA	Group
2006	Teaching Biology On-Line/ Online Resources available for Instruction Southern University at New Orleans New Orleans, LA	Group
2005	Integration of Technology and Virtual Labs into the Biology Curriculum at SUNO: Impact on Attitude in Learning Biology Presented at The 2nd Annual J.K. Haynes Teacher Preparation Conference, Southern University, Baton Rouge, LA	Conference
2004	A Successful Model for Integrating High-Technology Courses for Content Requirements in Science Education. Presented at the First System-wide J.K. Haynes Teacher Preparation Conference, Southern University – Baton Rouge, LA.	Conference
2002	Case Study of Molecular Biology Course Development at Southern Univ. @ N. O.	Group
1997	*Pseudomonas aeruginosa* in the cuticle of *Ascaris suum*, a nematode found in the intestinal tract of swine.	Conference

TONYE E. NUMBERE, Ph.D.	127 Morningside Drive ▪ Mandeville, Louisiana 70448 H: 985-778-0552 ▪ C: 573-465-4004 tenumbere@gmail.com

PROFILE

Experienced, enthusiastic, exemplary, and detail-oriented teacher. Possess extensive teaching experience as university professor. Emphasize maintaining high standards of teaching and learning, and have extensive research experience. Utilize excellent writing aptitude in creating reports, publications, and proposals as well as reviewing proposals and biology textbooks. Adept at employing oral and written communication skills in delivering presentations to students in both lecture and laboratory courses, and providing excellent hands-on laboratory experience. Advise students during freshmen orientation, international students on curriculum matters and university regulations, and on academic and career issues for biology majors.

Areas of Expertise

Faculty Advisor / Mentor / Counselor
Plant Growth Regulation ▪ Bioassays ▪ Medicinal Plants ▪ Health & Nutrition ▪ Environmental
Microscopy ▪ Hydroponics ▪ Biotechnology ▪ Trace Elements ▪ Chromatography (TLC, HPLC)
Spectroscopy (ICP-OES, ICP-MS, Scintillation Counter, Spectronic 20) ▪ Recombinant DNA Techniques

EDUCATION

KANSAS STATE UNIVERSITY, Manhattan, Kansas
Doctorate in Physiology and Biochemistry of Plant Hormones 1990
Master of Science in Horticulture 1986

FLORIDA A&M UNIVERSITY, Tallahassee, Florida
Bachelor of Science in Horticulture; summa cum laude
1982

ACADEMIC EXPERIENCE

SOUTHERN UNIVERSITY AT NEW ORLEANS
Assistant Professor - Department of Natural Sciences
2009 – Present

- Teaching General Biology (lectures and laboratory)for Majors; Introduction to Biology (lecture and laboratory)for Non-Majors.
- Serve as coordinator for lecture and laboratory courses including syllabi review and examinations
- Serve as laboratory prep coordinator and oversee stock room management
- Academic Advisor for biology majors (55 students).
- Supervised and served as mentor for biology undergraduate students in the LAMP and SENS programs.
- Register students using SIS Plus program.
- Register students using Banner program.
- Created and presented workshops titled: Protein Digestion by Enzymes, Presented to 3rd to 5th graders in the GEMS Summer Program.

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY (FORMERLY UNIVERSITY OF MISSOURI, Rolla)
Associate Teaching Professor - Biological Sciences Department 2006 – 2008

- Developed and taught courses in Majors and Non-majors General Biology (lectures and laboratory); Plant Biology (lecture and laboratory); Principles of Human Nutrition; Nutritional and Medicinal Properties of Plants; Epidemiology; and Team taught Cell Biology.
- Made decisions on lecture and laboratory texts, and coordinated laboratory preps and supply orders
- Supervised and mentored undergraduate and graduate Laboratory Teaching Assistants.
- Faculty Advisor and mentor/counselor to 15-18 biology undergraduate students/semester.
- Served on Graduate Committees for one Ph.D. candidates (Chemistry): 2005 to 2008

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY (FORMERLY UNIVERSITY OF MISSOURI, Rolla)
Lecturer - Biological Sciences Department 1996 – 2006

- Developed and taught courses in Majors and Non-majors General Biology (lectures and laboratory); Plant Biology (lecture and laboratory); Principles of Human Nutrition; Nutritional and Medicinal Properties of Plants; Team taught Cell Biology.
- Made decisions on lecture and laboratory texts; laboratory prep coordinator, and oversaw stockroom management.
- Supervised and mentored undergraduate and graduate Teaching Assistants.
- Faculty Advisor and mentor/counselor to 12-15 biology undergraduate students/semester: 1998 – 2008
- Served on Graduate Committees for two M.S. degrees candidates (Chemical Engineering and Mathematics) and two Ph.D. candidates (Chemistry): 1999 – 2000, 2001 – 2003, and 2004 to 2007
- Created and presented workshops entitled "Biology: What a Gas" and "Five Amazing Senses" for Expanding Your Horizon program in science, mathematics, engineering, and technology – a conference for 7th and 8th grade girls in Missouri (2003-2006).

LABORATORY EXPERIENCE

Phytochemicals Laboratory - Biological Sciences Department 2006 - 2007
Research interests include:

- Characterize bioactive secondary metabolites in Vernonia amygdalina.
- Effects of bioactive compounds in V. amygdalina (Bitter Leaf plant) on blood sugar levels.

- Effects of V. amygdalina whole extracts on fat emulsification as bile substitute in animals.
- Study antioxidant biosynthesis in some Brassica species.
- Role of organosulfur compounds in Allium species in lowering plasma cholesterol levels, and their modes of action.

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY (FORMERLY UNIVERSITY OF MISSOURI, Rolla)
Senior Research Specialist/Lecturer- Biological Sciences Department 1996 – 2007

- Responsible for all laboratory material orders and preparations for exercises and coordinated all class sections.
- Taught and trained all laboratory teaching assistants (undergraduate and graduate students).
- Conducted experiments on susceptibility of Brassica rapa grown hydroponically to various concentrations of herbicide (2, 4-D) treatments.
- Investigated effects of various nutrient concentrations on life cycle of Brassica rapa.
- Conducted experiments using recombinant DNA technology techniques (Electrophoresis and PCR techniques) for teaching.

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY (FORMERLY UNIVERSITY OF MISSOURI, Rolla)
Manager/ Senior Research Specialist - Environmental Trace Substances Research Center1992 – 1998
Inductively Coupled Plasma Spectroscopy (ICP) and ICP-Mass Spectrometer Laboratory

- Executed trace elemental analyses by ICP-OES and ICP-MS; taught and trained students, chemists, and technicians.
- Oversaw daily operations, including sample preparation, data analyses, and acquisition as well as wrote and submitted monthly and yearly reports.
- Wrote standard operating procedures for ICP-OES and ICP-MS laboratories.
- Carried out analytical studies using ICP-MS on etiologies of Alzheimer's and Parkinson's diseases using human brain tissues.

KANSAS STATE UNIVERSITY, Manhattan, Kansas
Graduate Research Assistant - Department of Horticulture 1985 – 1990

- Performed bioassays and established oxidation procedures for whole apple tree tissues from radio-tracer (14C) experiments using Scintillation Spectrophotometer for detection and counts of radioactivity in apple tree tissues.
- Conducted studies using chromatographic techniques (TLC, HPLC) for separation and detection of metabolites using whole apple tree tissues.
- Completed post-harvest evaluations of developmental and quality parameters on pre- and post-storage apples.
- Assessed and analyzed strawberry quality after exposure to various storage conditions.
- Conducted post-harvest evaluations of various strawberry cultivars' responses to herbicides treatments.
- Evaluated strawberry plants from short-term cold storage and fungicide treatments.
- Performed pre-/post-storage strawberry plant tissue cultures and microbial isolations and identification studies.

Field / Greenhouse Experience

Kansas State University, Manhattan, Kansas
Department of Horticulture 1983 – 1989

- Directed studies on effects plant growth regulators (Paclobutrazol, Flurprimidol and Uniconazol) on apple trees with emphasis on vegetative growth reduction, enhancing mineral elements status, and improving storage quality of fruits.
- Involved in University Extension Services; visited and assisted fruit growers around the state of Kansas.
- Performed apple tree training, pruning, and data collection from growth parameters and yield.
- Conducted studies on strawberry cultivar and herbicide evaluations as well as strawberry plant short-term storage; evaluated storage temperature and fungicide treatments.
- Conducted with herbicide trials on strawberry plants, strawberry cultivars evaluation studies, strawberry plant spacing trials, and apple rootstock winter damage assessment.
- Conducted hydroponic and radiotracer (^{14}C) studies using plant growth retardants on two-year old apple trees.
- Evaluated strawberry plants stored at various temperatures in controlled environment using plant growth chambers and pre-storage fungicide treatment of strawberry plant growth.
- Supervised field and research crew (undergraduates) on project maintenance and data collection procedures.

University Services

- Serve on College of Arts and Sciences News letter committee: 2011
- Involved in University recruiting services: 2010 to present
- Faculty Advisor and mentor/counselor to undergraduate students in Biology and other disciplines: 2009 - Present
- Equality Aid to the Equal Opportunity and Affirmative Action Office: 1997 – 2008
- Faculty Advisor and mentor/counselor to 12-15 biology undergraduate students/semester: 1998 – 2008
- Served on Graduate Committees for two M.S. degrees (Chemical Engineering and Mathematics) and three Ph.D.s (Chemistry): 1999 – 2000, 2001 – 2003, and 2004 to 2007
- Involved in freshman orientation program, mentoring new students on how to adjust and adapt to college life: 2000 – 2007
- Serve on Development, Student Affairs, Scholarships, and Undergraduate Studies committees: 2004 – 2008
- Served on Scholarships, Development, and Environment committees: 2004 – 2006
- Served on committees for new faculty hires: 1998, 2001, 2003, and 2004
- Served on Search Committee for Dean of College of Arts and Sciences: 2002
- Co-wrote proposal for development of Master of Science program in biological sciences, which has been established and produced several Master degree holders: 2001

AWARDS / HONORS

Abbot Laboratories Best Research Publication Award, 1992
Pi Alpha Zi Honor Society in Horticulture High Scholastic Achievement in Horticulture Induction, 1986.

GRANTS AWARDED

- P. I., Mel Ruppell, Co PIs -- Lynn Hartman, Lee Yu, Tonye E. Numbere, Environmental Trace Substances Research Center, 1995 USDI Grant for $5,000,000.00 (5 years).
- P. I., Alvin Bopp, Co P.Is. -- Tonye E. Numbere and Yolanda Youngblood, Southern University at New Orleans. Board of Reagents Grant 2011 ($48,200.00).
- P.I., Tonye E. Numbere, Southern University at New Orleans. E3MaS, LAMP, SENS Seed Grant (Pending).

PROFESSIONAL AFFILIATIONS

Plant Growth Regulator Society of America ▪ American Society for Horticultural Science
Sigma Xi Scientific Society of America ▪ American Society for the Advancement of Science
Alternative Therapies in Health and Medicine

PUBLICATIONS

Numbere, Daopu T., Catherine A. Riordan and T. E. Numbere. 2000. Enhancing Diversity through Information Technology. TEGEV.

Radd, F.J., T.E. Numbere, and L. Yu. 1998. Analytical Studies on the Etiologies of Alzheimer's and Parkinson's Diseases. E.T.S.R.C.

Numbere, T.E., F.D. Morrison and R.W. Campbell. 1992. Effects of Uniconazol, Paclobutrazol, and Flurprimidol on the control of young apple tree growth. PGRSA QUARTERLY 20:65-75.

Numbere, T.E., H. Moser, F.D. Morrison and R.W. Campbell. 1990. Uptake, translocation, and metabolism of Uniconazol in apple trees- II. (ASHS).

Numbere, T.E., H. Moser, F.D. Morrison and R.W. Campbell. 1988. Uptake, translocation, and metabolism of Uniconazol in apple trees- I. Presented at the 86th Annual International meeting for ASHS, (Abstract).

Numbere, T.E., F.D. Morrison and R.W. Campbell. 1988. Long-term response of Delicious and Golden Delicious apple trees to some plant growth retardants. Presented, Kansas Fruit Growers Association Conference, Manhattan, Kansas.

Numbere, T.E., F.D. Morrison and R.W. Campbell. 1988. Evaluation of the potential of foliar and soil applied Uniconazol on bearing apple trees. Presented, North Western Regional Horticultural Society Meeting, Manhattan, Kansas.

Morrison, F.D., M. Allison, and T.E. Numbere. Fruit tree rootstock research. In 1988 Fruit Research Progress Report. Agric. Experiment Station, Kansas State University. Report No. 558.

Morrison, F.D., T.E. Numbere and M. Allison. Strawberry Cultivars. In 1988 Fruit Research Progress Report. Agricultural Experiment Station. Kansas State University. Report No. 558.

Numbere, T.E. and F.D. Morrison. Apple growth retardant study. In 1987 Fruit research field guide. Wichita Research Center, Department of Horticulture. Contirb. No. 88-76E. Agricultural Experiment Station, Kansas State University.

Numbere, T.E. and F.D. Morrison. Apple growth retardant study. In 1987 Fruit research field guide. Wichita Research Center, Department of Horticulture. Contirb. No. 88-76E. Agricultural Experiment Station, Kansas State University.

Morrison, F.D. and T.E. Higgwe (Numbere). 1987. In season-- Kansas fruits from May to November. Cooperative Extension Service, Kansas State University, Brochure.

Morrison, F.D., T.E. Numbere, M. Allison and N.A. Tisserat. Fruit Rootstock Research. In 1987 Fruit Research Report. Department of Horticulture. Contrib. No. 88-193D, Agricultural Experiment Station, Kansas State University.

Morrison, F.D., T.E. Higgwe (Numbere), J. Nickels and M. Allison. Strawberry cultivar trials. 1987 Fruit Research Report. Department of Horticulture. Contrib. No. 88-193D, Agricultural Experiment Station, Kansas State University.

Morrison, F.D., M. Allison, T.E. Higgwe (Numbere) and N.A.Tisserat. Apple and peach research. 1986 Fruit Research Report. Department of Horticulture, Kansas State University.

Higgwe (Numbere), T.E, F.D. Morrison and N.A. Tisserat. The effects of strawberry plant handling on growth after Transplanting. 1986 Fruit Research Report. Department of Horticulture, Kansas State University.

Morrison, F.D. and T.E. Higgwe (Numbere). Strawberry cultivar yields. 1986 Fruit Research Report. Department of Horticulture, Kansas State University.

Higgwe (Numbere), T.E., N.A.Tisserat and F.D. Morrison. Effects of plant source, prestorage fungicide dip, and storage temperature on poststorage quality and survival of strawberry plants. 1985. Presented, North Western Regional Horticultural Society Meeting, Manhattan, Kansas.

Reviewer Experience:

Several chapters in Discover Biology, 4e. Cain et al. for W. W. Norton & Co. Publishers2007

Several chapters in Biology: Science for life, 2e. Belk/Borden for Prentice Hall Publishers2004

Research proposals for University of Missouri Research Board. 1998, 2000, 2006, and 2007

Special Project:

Currently authoring book entitled, Nutritional and Medicinal Properties of Plants.

JOSEPH O. OLUBADEWO, Ph. D.

PERSONAL

NAME: Joseph Olanrewaju Olubadewo

ADDRESS: 13510 Dwyer Boulevard,
New Orleans, LA 70129

WORK PLACE: Department of Natural Sciences,
Southern University at New Orleans
6801 Press Drive
New Orleans, LA 70126

CONTACT:

Home Phone: 504-253-5026

Cell Phone (best contact) 504-432-0969

Email Addresses: josepholubadewo@bellsouth.net

badewoj58@netzero.com

EDUCATION

Degree	Year	Institution
Ph.D.	1976	Vanderbilt University Graduate School Nashville, TN 37232 Major: Pharmacology
B.Sc (Hons)	1970	Ahmadu Bello University, Zaria, Kaduna State, Nigeria Major: Chemistry Minor: Biochemistry
HSC	1967	S.U.M. Boys' High School Gindiri, Plateau State, Nigeria Majors: Botany, Zoology, Chemistry
WASC	1964	Titcombe College, Secondary School for Boys, Egbe, Kwara State, Nigeria
FSLC	1959	S. I. M. Elementary School, Oro Ago, Kwara State, Nigeria.

PROFESSIONAL EXPERIENCE

August 2008- Present:	Associate Professor of Biology, Southern University at New Orleans, Department of Biology, New Orleans, LA 70126
May 2007 –May 2008:	Professor of Pharmacology, Our Lady of the Lake College, Masters in Nurse Anesthetics Program, Baton Rouge, LA 70808
1999-Present:	Research Professor (Gratis), Department of Physiology, LSU_HSC, New Orleans, LA 70112.
1991-2005:	Professor of Pharmacology, Xavier University of Louisiana, College of Pharmacy, New Orleans, LA 70125.
1985-1991:	Associate Professor, Xavier University of Louisiana, College of Pharmacy, New Orleans, LA 70125.
1981-1985:	Research Scientist, Instructor, Assistant Professor, Department of Pharmacology, University of Tennessee Center for the Health Sciences, Memphis, TN 38163.
1975-1980:	Lecturer II, then Lecturer I, then Senior Lecturer, Ahmadu Bello University, Zaria, Kaduna State, Nigeria.

DESCRIPTION OF RESPONSIBILITIES:

Primary responsibilities as an Associate professor of Biology, is teaching undergraduate biology, education research of teaching effectiveness and student retention, and service to the university and community. Teaching an undergraduate course in pharmacology is also among my assignments. I am also furthering my research on trauma hemorrhage, and exploring the effects of crude oil and oil dispersant on sea urchin development and limb regeneration.

As an Associate Professor, and then as a Professor, I have been involved in team teaching Pharmacology to undergraduate students in Pharmacy and graduate students in nurse anesthesia. I did establish a research laboratory for research in metabolism-linked disorders of diabetes mellitus, thyroid dysfunction, and smooth muscle function in cardiovascular disorders. The teaching of Pharmacology to students involved didactic lecture of pharmacological principles and the running of a Pharmacology Laboratory.

During my professional experience as a Research Scientist through Assistant Professor, 1980-1985, I taught nursing students and participated in conduction of Pharmacology Laboratory for medical and pharmacy students. My research during this period involved studies of the influence of thyroid hormones on hepatic metabolism of free fatty acid.

From 1975-1990, I taught Pharmacology to students of pharmacy, medicine and nursing. I participated in conducting Pharmacology Laboratory for medical and pharmacy students. My research activities revolved around histaminergic and cholinergic mechanisms in smooth muscles. I have also conducted research on metabolic disorders of diabetes and thyroid functions as well as cardiovascular disorders.

From 1970-1975, I taught advanced level Chemistry to pre-pharmacy students. At the end of the academic year 1970-1971, I proceeded on a Study Leave for graduate studies at Vanderbilt School of Medicine, Nashville, TN. My dissertation project was on aspects of acetylcholine as a component of the cholinergic system in the human placenta.

RESEARCH TRAINING:

I was trained in the use of standard laboratory equipment and techniques. The primary pieces of equipment and techniques include: gas chromatograph, liquid scintillation spectrometer, general purpose centrifuge, ultracentrifuge, liver perfusion system, hepatocyte preparation techniques, organ bath, phyisograph, surgical implantation of arterial and venous cannulas in rats, blood pressure measurement, cytokine bioassay, etc.

HONORS AND PROFESSIONAL SOCIETIES

Imperial Chemical Company Award for Best Graduating student in Chemistry, 1970.

AFGRAD Pre-doctoral Fellowship of African-American Institute and Vanderbilt University, Nashville, TN, 1971-1975.

Postdoctoral Fellow of American Heart Association- Tennessee Affiliate, 1983-1984.

Society Memberships in :

Human Anatomy and Physiology Society
American Society for Pharmacology and Experimental Therapeutics;
Federation of American Societies for Experimental Biology;
South East Pharmacology Society (Life Member);
American Association for the Advancement of Science (on and off);
American Association of Colleges of Pharmacy;
West African Society for Pharmacology (Life Member);
New York Academy of Sciences;

NIH Study Section Reviewer:

Ad Hoc Committee for review of abstracts for the MBRS Symposium 1986
NIH-Review Site Visit Panel to Drew University Medical School, Los Angeles, CA, 1990
NIH-RCMI Metabolism Site Visit Panel to Tennessee State University, Nashville, TN, 1991
NIH Metabolism Study Section October, 1989, 1990, 1991, 1992;
NIH-MBRS Review Panel February/March 1990.

Listed in Who's Who in Science in the South, 1991-present;
Listed in Who's Who in Science and Technology, 1992-rpesent.

BIBLIOGRAPHY/MANUSCRIPTS

FULL PAPERS:

Olubadewo, JO. 2011. The Pharm. D. Degree And The Title By Which Pharmacists Are Addressed. Letter to Editor, submitted to Amer J Pharmaceut Educ (under revision).

Mathis, KW, Zambell, K, **Olubadewo, JO**, Molina PE. (2006). Altered hemodynamic counter-regulation to hemorrhage by acute moderate alcohol intoxication. Shock 26: 55-61.

Olubadewo JO, Ochillo, RF. (2007). Application of an ultraviolet (UV) spectroscopic method for measuring lipoprotein cholesterol in diabetic and hypothyroid rats. Cell Molec Biol 53: 75-80

Olubadewo, J. O. and Spitzer, J. A. (2003). Immune response modulation in acutely alcohol intoxicated, acutely diabetic male and female rats. *Alcohol 31: 137-147.*

Olubadewo, J. O., Tsai, C. S., Oke, T. O., Tam, C. W., and Ochillo, R. F. (2003). The effect of regular alcohol use on the management of noninsulin diabetes mellitus. *Cellular and Molecular Biology*

Olubadewo, J. O., Wingard, M. A., Tsai, C. S., Robinson, T. J. and Ochillo, R. F. (1997). Modification of the portal vein spontaneous contraction by sorbitol. Pharmacology.

Olubadewo, J. O., Wingard, M. A., Washington, B. T., Tsai, C. S., Robinson, T. J. and Ochillo, R. F. (1994). The effects of transportation stress on lipoproteins and catecholamines in rats. Cell. Molec. Biol. 40: 1201-1206.

Olubadewo, J. O., Lee, N. A., Otieno, R. O., Wingard, M. A., Robinson, T. J., and Ochillo, R. F. (1994). CCl_4 as an environmental pollutant: Does Ca^{2+} play a role in the pathogenesis of CCl_4-induced fatty liver? IN: *Hazardous Waste and Public Health: International Congress on Health Effects of Hazardous Waste Proceedings*. J. S. Andrews, H. Franklin, B. L. Johnson, et al, (eds); Princeton Scientific Publishing Co.; Princeton, NJ, pp. 616-622.

Robinson, T. J., Ochillo, R. F., Tsai, C.S., Pugh, D. A., Douglas, N. A., Smith, M. O. and **Olubadewo, J. O**. (1993). Autoradiographic demonstration of the distribution of diacylglycerol in the gastric muscularis muscle of *Buffo marinus*: Is diacylglycerol one of the second messengers in the muscularis muscle? *Cell. Molec . Biol. 39: 599-606.*

Olubadewo, J. O. and Heimberg, M. (1993). The effects of adrenergic agonists and antagonists on metabolism of (1-^{14}C)oleate by rat hepatocytes. Biochem. Pharmacol. 45: 2441-2447.

Crockett, C. O., Guede-Gina, F., Pugh, D., Vangah-Manda, M., Robinson, T. J. **Olubadewo, J. O**. and Ochillo, R. F. (1992). *Cassia alata* and the preclinical search for therapeutic agents for the treatment of opportunistic infection in AIDS patients. Cell. Molec. Biol. 38: 799-802.

Ochillo, R. F., T. J. Robinson, C. S. Tsai, M. O. Smith, B. Washington, D. E. English, and **J. O. Olubadewo**. (1991) Muscarinic receptors of the Muscularis muscle of *Bufo marinus*: Relationship with biogenic amines and inositol trisphosphate in the manifestation of the automaticity. Recent Advances in Cellular and Molecular Biology. 3: 239-249.

Robinson, T. J., C. S. Tsai, M. O. Smith, J. L. Bovastro, D. A. Pugh, **J. O. Olubadewo** and R. F. Ochillo. (1991). Demonstration of the relationship between a change in the binding sites of gamma-melanocyte stimulating hormone (MSH) in the development of hypertension. Recent Advances in Cellular and Molecular Biology. 4: 111-120.

Olubadewo, J. O., M. A. Wingard, T. J. Robinson, C. S. Tsai, M. O. Smith, and R. F. Ochillo. (1991). Direct effect of sorbitol on spontaneous contractions of portal vein and carbachol-initiated contractions of tracheal smooth muscle. Recent Advances in Cellular and Molecular Biology 5: 79-88.

Olubadewo, J. O. and Ochillo, R. F. (1994). A working hypothesis of the direct sorbitol-induced analgesia in diabetes. Medical Hypothesis (accepted).

Olubadewo, J. O., Robinson, T. J., Wingard, M. A., Lee, N., James, P. A. and Ochillo, R. F. (1991). Hypothyroidism alters lipoprotein metabolism and peroxidation in a way that enhances lipid deposition in arterial walls. Ninth International Symposium on Atherosclerosis, Chicago, IL, October 6-11.

Olubadewo, J. O., Wingard, M. A., Chaudhuri, B. Doan, C. and Ochillo, R. F. (1999). Development of an ultraviolet (UV) spectrophotometric method for measuring lipoprotein cholesterol and its application to investigate the effects of diabetes and hypothyroidism on lipoprotein cholesterol. Submitted to Cell. Molec. Biol.

Washington, B., Smith, M. O., Robinson, T. J., **Olubadewo, J. O.** and Ochillo, R. F. (1991). A rapid and quantitative method for the assy of histamine in small volume of plasma. J. Liquid Chromatogr. 14: 2189-2200.

Robinson, t. j., Tsai, C. S., Smith, M. O., Bovastro, J. L., Pugh, D., **Olubadewo, J. O.** and Ochillo, R. F. (1999). Hypertension and the distribution of gamma-2-melanocyte stimulating hormone (MSH) binding in the brain. J. Cell Molec. Biol.

Olubadewo, J. O., Cook, G. K. and Heimberg, M. (1988). The effect of 8-(N, N-dimethylamino-octyl)-3, 4, 5-trimethoxy-benzoate (TMB-8) HCl and verapamil on the metabolism of free fatty acid by hepatocytes. Biochem. Pharmacol. 37: 1463-1471.

Olubadewo, J. O. and Ikponwonba, A. (1988). Profile of prescription medications in a pediatric population. Drug Intel. Clin. Pharm. 22: 999-1002.

Tsai, C. S., Ochillo, R. F. and **Olubadewo, J. O.** (1986). Drug utilization in nursing homes: An emerging tool in assessment of shortcomings in medical care for the elderly. III World Congress on Clinical Pharmacology and Therapeutics, Stockholm, Sweden.

Olubadewo, J. O. and Heimberg, M. (1985). Requirements of glycerol and fatty acid for triglyceride synthesis and ketogenesis by hepatocytes from normal and triiodothyronine-treated rats. Biochem. Biophys. Res. Commun. 132: 1001-1007.

Olubadewo, J. O., Wilcox, H. G. and Heimberg, M. (1985). Differential effects of alanine on ketogenesis and triacylglycerol formation by isolated perfused livers from euthyroid and hyperthyroid rats. Metabolism 34: 1139-1145.

Heimberg, M., **Olubadewo, J. O.** and Wilcox, H. G. (1985). Plasma lipoproteins and regulation of hepatic metabolism of fatty acids in altered thyroid states. Endocrinol Rev. 6: 590-607.

Olubadewo, J. O., Wilcox, H. G. and Heimberg, M. (1984). Modulation by glycerol of hepatic glycerol-3-phosphate concentration, ketogenesis and output of triglyceride and glucose in perfused livers from hyperthyroid and euthyroid rats. J. Biol. Chem. 259: 8857-8862.

Olubadewo, J. O., Morgan, D. W. and Heimberg, M. (1983). Effects of triiodothyronine on biosynthesis and secretion of triglyceride by livers perfused in vitro with (3H)oleate and (14C)glycerol. J. Biol. Chem. 258: 938-945.

Olubadewo, J. O. and Bodhankar, S. L. (1982). A study of histamine tachyphylaxis on isolated chick oesophagus. Pharmacol. Res. Commun. 14: 551-565.

Olubadewo, J. O. (1980). The effect of imipramine on rat detrusor muscle contractility. Arch. Int Pharmacodyn. Therap. 245:84-94.

Olubadewo, J. O. and Sastry B. V. (1978). Human placental cholinergic system: stimulation-secretion coupling for the release of acetylcholine from isolated human placental villi. J. Pharmacol. Expt. Therap. 204: 433-445.

Sastry, B. V. Rama, **Olubadewo, J. O.** and Boehm, F. H. (1977). Effects of nicotine and cocaine on the release of acetylcholine from isolated placental villus. Arch Int. Pharmacodyn. Therap. 229: 23-26.

Sastry, B.V. Rama, **Olubadewo, J. O.**, Harbinson, R. D. and Scmidt, D. E. (1976). Human placental cholinergic system: occurrence, distribution and variation with gestational age of acetylcholine in human placenta. Biochem. Pharmacol. 25: 425-431.

Harbison, R. D., **Olubadewo, J.,** Dwivedi, C. and Rama Sastry, B. V. (1975). Proposed role of a placental cholinergic system in regulation of fetal growth and development. IN: *Basic and Therapeutic Aspects of Perinatal Pharmacology.* (P. L. Moreselli, S. Grattini and F. Serene, Eds.) Raven Press, New York, pp. 107-117.

ABSTRACTS OF PRESENTATIONS

McMahon, K, Nichols, L, Stout, S, Suniga, R, **Olubadewo, J**, Yoshida, G, Penefather-O'Brien, E, Brozanski, B and Frank, F: (2010). Case studies in safety. Presented by HAPS Safety Committee at the 24th Annual HAPS Conference, May 29th-June 3rd, Denver, CO.

McMahon, K, Nichols, L, Brozanski, B, Frrank, F, **Olubadewo, J**, Sobat, T, Stout, S, Suniga, R, Wake, L, Yoshida, G. (2011). Products and practices to promote safety in the Human A&P Laboratory. Presented by the HAPS Safety Committee at the 25th Annual Conference, May 28th-June 2nd, 2011 in Victoria, BC, Canada.

Williams K, **Olubadewo J**, Zambell K, Vande Stouwe C, Carnal J, Molina PE. (2004). Short term moderate alcohol intoxication impairs hemodynamic and immune response to hemorrhagic shock. Presentation at a satellite meeting (Alcohol and Immunology Research Group) of the Society of Leukocyte Biology meeting in October 2004 in Toronto, Canada.

Olubadewo JO, Tsai CS, Oke TO, Tam CW, Ochillo RF. (2003). Effect of regular alcohol use on management of diabetes mellitus. Presentation at the 26th Annual Meeting of the Research Society on Alcoholism, Fort Lauderdale, FL, June 21-26, 2003

Olubadewo JO, Spitzer JA. (2002). Influence of gender and acute alcohol (EtOH) intoxication on chemokine generation in the diabetic state. FASEB J 16: A396 Abstr #359.4

Olubadewo JO and Spitzer JA. (2001). Gender-dependent modulation of alcohol-induced alteration of immune mechanisms in diabetes. Alcoholism: Clin Exper Res 25 (Suppl) 29A, Abstr #136.

Obih PO, Onuh CA, Olubadewo JO. (2000). Comparative study on the effect of nicotine and ethanol on the onset of diabetes in rats. FASEB J 14: 190, Abstr #II-512.8

Obih PO, Igbo IN, Onuh CA, Olubadewo JO. (1998). Impact of ethanol on streptozotocin-induced diabetes in rats. Naunyn-Schmeid Arch Pharmacol 358 (Suppl 2), R550.

Olubadewo JO, Graves KA, Robinson TJ, Ochillo RF. (1998). Glucoprivation and analgesia in diabetic rats. Naunyn Schmeid Arch Pharmacol 358 (Suppl 2), R554

Obih P, Igbo I, Olubadewo J. (1997). Acutely administered ethanol prevents streptozotocin-induced diabetes in rats. FASEB J 11: A156, #907.

Robinson TJ, Ochillo RF, Smith MO, Tsai C, Hughes C, Olubadewo JO. (1996). The effect of different agonists and antagonists on the activities of synaptosomal protein kinase A (PKA) and protein kinase C (PKC) from regions of the brain of animals stressed by sleep deprivation. FASEB J 10: A606, #3497.

Olubadewo JO, Otieno RA, Lee NA, Wingard MA, Robinson, TJ, Smith MA, Tsai CS, Ochillo RF. (1996). CCl4 hepatotoxicity: Novel effects of very low levels of CCl4. The Toxicologist 30: 291, #1492.

Tsai CS, Smith MO, Bovastro JL, Olubadewo JO, Ochillo RF. (1995). The effects of sleep deprivation on the acetylcholinesterase (AChE) activities in the fore-, mid- and hind-brain of Sprague-Dawley rats. FASEB J 9: A682, #3956.

Olubadewo JO, Graves KA, Smith MO, Tsai CS, Robinson TJ, Ochillo RF. (1995). Analgesic effect of 8-OH-DPAT, a 5-HT_{1A} receptor agonist was coupled to glucose elevation in normal, but not in the diabetic rats. FASEB J 9: A379 #2196.

Olubadewo JO, Otieno RA, Robinson TJ, Smith MO, Tsai CS, Ochillo RF. (1994). Histochemical demonstration of CCl4 hepatotoxicity. Can J Pharmacol 72: 603 (p. 22.3.32).

Ochillo RF, Tsai CS, Smith MO, Washington B, Robinson TJ, Olubadewo JO. (1994). Histamine and stress: The implications in acute stress-induced hypotension and hypertension. Can J Pharmacol 72: 136 (p 1.8.86).

Olubadewo JO, Graves KA, Tsai CS, Smith MO, Ochillo RF. (1994). Glucose elevating effect and analgesic potential of UK-14304, an alpha-2 adrenoceptor agonist, in diabetic rats. FASEB J : A637 #3648.

Obih PO, Wingard MA, Olubadewo JO. (1994). Comparative studies on the effect of routes of administration of vanadyl sulfate. FASEB J 8: A637 #3692.

Tsai CS, Olubadewo JO, Smith MO, Robinson TJ, Ochillo RF. (1994). The role of cytidine diphosphate 1,2-diacylglycerol (CDP-DAG) on the acetylcholine-initiated tonic and spontaneous contractions of gastric muscularis of *Bufo marinus*. FASEB J 8: A92 #534.

Robinson TJ, Ochillo RF, Tsai Cs, Bovastro JL, Smith MO, Pugh D, Olubadewo JO. (1993). The effects of stress on the activities of synaptosomal protein kinase A (PKA) and protein kinase C (PKC) from rat brain. Amer Soc Cell Biol Meeting, Dec 11-15, New Orleans, LA.

Olubadewo JO, Wingard MA, Otieno RA, Smith MO, Tsai CS, Robinson TJ, Ochillo RF. (1993). Male-female differences in response by rats fed a high-fat, high-cholesterol diet. 14th Southeastern Pharmacol Soc Meeting.

Olubadewo JO, Robinson TJ, Wingard MA, Lee N, Smith MO, Ochillo RF. (1993). Hyperthyroidism induced different lipoprotein profiles in males and female rats. Proceedings of the 75th Annual Meeting of the Endocrine Society, Las Vegas, NV, July 1993, #1777.

Olubadewo JO, Lee NA Otieno RA, Wingard MA, Robinson TJ, Ochillo RF. (1993). CCl4 as an environmental pollutant: Does Ca2+ play a role in the pathogenesis of CCl4-induced fatty liver? International Congress on the Health Effects of Hazardous Waste, Atlanta, GA, May 3-6.

Ochillo RF, Tsai CS, Washington B, Smith MO, Robinson TJ, Olubadewo JO. (1993). Pharmacodynamic basis of acute stress-induced hypotension. RCMI Spring Symposium, Nashville, TN, April 15-17.

Oke TO, Shield M, Olubadewo JO. (1992). Similarities and differences in the medication profiles of an elderly ambulatory care patient population with gastroenterological and rheumatological disorders. American Society of Consultant Pharmacists, 23rd Annual Meeting, Orlando, FL, Nov 11-15.

Duncan YD, Wingard MA, Robinson TJ, Ochillo RF, Olubadewo JO. (1993). Alteration by 2-deoxyglucose of response to pain stimulus by diabetic rats. FASEB J 7: A485.

Obih PO, Wingard MA, Olubadewo JO. (1993). Vanadyl sulfate induces hypoglycemia in normal rats. FASEB J 7: A847.

Robinson TJ, Pugh DA, Bovastro J, Smith MO, Washington B, Tsai CS, Olubadewo JO, Ochillo RF. (1993). Pharmaconeurotoxic basis of methylmercury (MeHg) poisoning at the muscarinic receptors and acetylcholinesterase in the brain of rats. FASEB J 7: A698.

Tsai CS, Smith MO, Robinson TJ, Olubadewo JO, Ochillo RF. (1993). Pharmacodynamic basis of the therapeutic use of phenytoin to manage alcohol withdrawal syndrome. FASEB J 7: A255.

Smith MO, Tsai CS, Washington B, Robinson TJ, Olubadewo JO, Ochillo RF. (1993). The role of histamine in the hypotensive effects of berberine in rats. FASEB J 7: A250.

Olubadewo JO, Duncan YD, Robinson TJ, Ochillo RF. (1992). Potentiation of codeine (COD) toxicity and lethality in the diabetic state. Pharmacologist 34: 175.

Tsai CS, Smith MO, Olubadewo JO, Ochillo RF. (1992). Characterization of after-response elicited by muscarine and selected muscarinic receptor agonists using muscarinic antagonists. The Pharmacologist 34: 186.

Robinson TJ, Tsai CS, Bovastro JL, Pugh D, Smith MO, Crockett CO, Olubadewo JO, Ochillo RF. (1992). Lithium chloride (LiCl) potentiates acetylcholine (ACh)-initiated contractions of isolated gastric muscularis muscle of *Bufo marinus.* The Pharmacologist 34: 187.

Obih PO, Wingard MA, Olubadewo JO. (1992). Vanadyl sulfate (VS) inhibits streptozotocin (STZ)-induced diabetes in rats. The Pharmacologist 34: 194.

Olubadewo JO, Duncan YD, Robinson TJ, Smith MO, Ochillo RF. (1992). Alteration of glucose levels produced by codeine in diabetic rats subjected to hot plate analgesic tests. 13th Annual Meeting of the Southeastern Pharmacology Society.

Ochillo RF, Crockett CO, Pugh DA, Guede-Gina F, Vangah-Manda M, Smith MO, Robinson TJ, Olubadewo JO. (1992). A comparative investigation of water and methanol extracts of *Cassia alata* (*C alata*) against *Candida albicans* (*C albicans*), a common microorganism found in opportunistic infections of AIDS patients. 3rd Annual RCMI International AIDS Symposium, Atlanta, GA, Nov 22-24.

Obih P, Wingard M, Olubadewo J. (1992). Effectiveness of Alzet osmotic minipump for administration of vanadyl sulfate in prevention of streptozotocin-induced diabetes. FASEB J 6: A1591.

Olubadewo JO, Duncan YD, Robinson TJ, Smith MO, Ochillo RF. (1992). Hot-plate-induced seizure in diabetic (DM) rats injected with codeine-plus-sorbitol. FASEB J 6: A1300

Ochillo RF, Robinson TJ, Tsai CS, Bovastro JL, Smith MO, Olubadewo JO. (1992). Inositol trisphosphate is coupled to muscarinic receptors in the manifestation of the automaticity of muscularis muscle of Bufo marinus. FASEB J 6: A1283.

Robinson TJ, Ochillo RF, Pugh DA, Smith MO,Olubadewo JO. (1992). The distribution of CDP-diacylglycerol (CDP-DAG) in gastric muscularis muscle of *Bufo marinus*. FASEB J 6 A1284.

Olubadewo JO, Robinson TJ, Ochillo RF. (1991). A new concept in the pathogenesis of diabetic complications: The role of sorbitol. Symposium on Diabetes in Minorities, RCMI Pacific Biomed Research Ctr, Honolulu, HI November 14-16.

Ochillo RF, Robinson TJ, Tsai CS, Smith MO, Washington B, English DE Olubadewo JO. (1991). Muscarinic receptors of the muscularis muscle of *Bufo marinus:* Relationship with biogenic amines and inositol trisphosphate in the manifestation of the automaticity. Proceeding of First World Congress of Cellular and Molecular Biology. 1: 443 #23.1.1

Robinson TJ, Tsai CS, Smith MO, Bovastro JL, Pugh DA, Olubadewo JO, Ochillo RF (1991). Demonstration of the relationship between a change in the binding sites of gamma-melanocyte stimulating hormone (MSH) in the brain and development of hypertension. Proceeding of First World Congress of Cellular and Molecular Biology 1: 128 #5.2

Olubadewo JO, Wingard MA, Robinson TJ, Tsai CS, Smith MO, Ochillo RF (1991). Direct effects of sorbitol on spontaneous contractions of portal vein and carbachol-initiated

contractions of tracheal smooth muscle. Proceeding of First World Congress on Cellular and Molecular Biology 1: 357 #18.2.5

Olubadewo JO, Wingard MA, Robinson TJ, Ochillo RF. (1991). Influence of sorbitol on the inhibitory effect of verapamil on the spontaneous contractions of isolated portal vein from normal and diabetic rats. 12th Annual Meeting of Southeastern Pharmacology Society.

Obih PO, Wingard MA, Olubadewo JO. (1991). Effect of vanadyl sulfate on the induction of diabetes mellitus with streptozotocin. 12th Annual Meeting of Southeastern Pharmacology Society.

Robinson TJ, Ochillo RF Bovastro JL, Douglas A, Pugh D, Smith MO, Olubadewo JO. Distribution of the intracellular second messenger, diacylglycerol (DAG) in the gastric muscularis muscle of *Bufo marinus*. 12th Annual Meeting of Southeastern Pharmacology Society.

Ochillo RF, Robinson TJ, Tsai CS, Bovastro JL, Smith MO, Olubadewo JO. (1991). Inositol trisphosphate (IP3) as a second messenger in the automaticity of isolated muscularis muscle of Bufo marinus. 12th Annual Meeting of Southeastern Pharmacology Society.

Olubadewo JO, Wingard MA, Tsai CS, Ochillo RF. (1991). Sorbitol-induced alteration of contractility of bladder and tracheal muscle strips from normal and diabetic (DM) rats. FASEB J 5: A1601.

Olubadewo JO, Wingard MA, Tsai CS, Smith MO, Robinson TJ, Ochillo RF. (1991). Sorbitol-induced enhancement of contractility of portal veins (PV) from diabetic (DM) rats. The Pharmacologist 33: 224

William-Scott SA, Clark ED, Olubadewo JO, Ochillo RF. (1991). The in vivo and in vitro effects of xanthurenic acid (XA) on glucose metabolism in nnormal and diabetic rats. The Pharmacologist 33: 202.

Ochillo RF, Tsai CS, Smith MO, Robinson TJ, Olubadewo JO. (1991). Is pharmacodynamic basis of the use of berberine in the treatment of diarrhea mediated through muscarinic receptors? Proceeding United State Agency for International Development (USAID) Symposium, Atlanta, GA, February 15-16.

William-Scott SA, Olubadewo JO, Ochillo RF. (1991). Influence of xanthurenic acid (XA) on hepatic gluconeogenesis in male normal and diabetic (DM) rats. The FASEB J 5: A911.

Shields M, Oke T, Olubadewo JO. (1990) Occurrence of polypharmacy in a population of gastroenterology and rheumatology patients. NIH-MBRS Sympo 18: 87

Ochillo RF, Smith MO, Tsai CS, Washington B, Robinson TJ, Olubadewo JO. (1990). Pharmacological basis of stress-induced hypotension. Europ J Pharmacol 183: 862 #192.

Robinson TJ, Bovastro JL, Tsai CS, Smith MO, Batraville JD, Olubadewo JO, Ochillo RF. (1990). Does hypertension alter gamma-melanocyte stimulating hormone binding sites in the brain of rats? J Cell Biol 110: 208a.

Washington B, Smith M, Robinson TJ, Olubadewo JO, Ochillo RF. (1990). A novel rapid quatitative microassay of underivated histamine in small plasma volume. Europ J Pharmacol 183: 707.

Crockett CO, Olubadewo JO, Ochillo RF. (1990) Changes in the acute phase proteins and serum cholesterol in experimental septicemia. Toxicologist 10: 142.

Olubadewo JO, Wingard M, Washington B, Ochillo RF. (1990). The effect of transportation-induced stress on plasma lipoproteins (LPS) and catecholamine (CA). The FASEB J 4: A925.

Olubadewo JO, Duncan YD, William-Scott SA, Ochillo RF. (1990). Effects of sorbitol (SOR) and glucose (GLU) on codeine (COD) analgesia in diabetic (DM) rats. The Pharmacologist 32: 151.

Smith MO, Washington B, Tsai CS, Robinson TJ, Olubadewo JO, Ochillo RF. (1989). Irreversible consequences of gentamicin underdosing and failure to interprete and use plasma levels effectively. 11th Annual Meeting of Southeastern Pharmacology Society (SEPS).

Crockett C, Olubadewo JO, Ochillo RF. (1989). Changes in plasma cholesterol, alpha and gamma globulis induced by experimental septicemia and septic shock. 11th Annual Meeting of Southeastern Pharmacology Society, Augusta, GA, September 14-15, #32.

Olubadewo JO. (1989). Altered smooth muscle responsiveness to carbachol by streptozotocin-induced diabetes. The FASEB J 3: A259.

Doan C, Wingard MA, Chaudhuri B, Ochillo RF, Olubadewo JO. (1989). Determination of cholesterol in lipoprotein fractions of normal rat plasma by ultraviolet spectophotometry. NIH-MBRS Symposium 17: 72.

Starks, RM, Olubadewo JO. (1989). Influence of diabetes on Ca2+ uptake and responsiveness of ileal and hepatic vein smooth muscle. 17th Annual NIH-MBRS Symposium, Houston, TX, October 5-8.

Olubadewo JO. (1988). Reversal of reserpine-induced supersensitivty. The Pharmacologist 31: 144.

Olubadewo JO, Heimberg M. (1986). Antiketogenic effects of verapamil and TMB-8. Proceeding III World Congress on Clinical Pharmacology and Therapeutics, Stockholm, Sweden.

Olubadewo JO. (1985). Effect of imipramine-N-oxide on the contractility of strips of isolated urinary bladder. Fed Proc 45: #3569.

Olubadewo J, Heimberg M. (1985). Diminished triglyceride (TG) production by hepatocytes from hyperthyroid (T3) rats. Fed Proc 44: #1892.

Olubadewo JO, Wilcox HG, Heimberg M. (1983). Effects of glycerol on oleate metabolism by liver from triiodothyronine (T3)-treated and euthyroid (EU) rats. Endocrinology 112 (Suppl): 201.

Kau ST, Olubadewo J, Rama Sastry BV. (1976). Human placental cholinergic system. Distribution of alpha-bungarotoxin binding proteins and the components of cholinergic system in the term placental. Fed Proc 35: #800.

Olubadewo JO, Rama Sastry BV. (1976). Effect of nicotine on the release of human placental acetylcholine and its significance to fetal growth. Toxicol Appl Pharmacol 37: #126.

Olubadewo JO, Rama Sastry BV. (1976). Antagonism of cocaine on the release of acetylcholine from human placental villus. The Pharmacologist 18: #146.

Sastry BV Rama, Olubadewo JO, Harbison RD. (1974). Placental cholinergic system: Occurrence, distribution, formation and variation with gestational age of acetylcholine in human placenta. Proc Intern Union Physiol Sci Vol II.

Olubadewo JO, Stevens MW, Sastry BV, Harbison RD. (1973). Studies on the role of endogenous acetylcholine in placental transport. The Pharmacologist 15: #199.

Sastry BV Rama, Olubadewo JO, Scmidt DE. (1973). Placental cholinergic system and occurrence of acetylcholine in human placenta. Fed Proc 32: #742.

UNPUB LISHED MANUSCRIPT

Olubadewo JO, Gamaniel K. (1999). The influence of verapamil on the reserpine-induced supersensitivity in the smooth muscle of chick intestine.

Smith MO, Washington B, Tsai CS, Robinson TJ, Olubadewo JO, Ochillo RF. (1999). Consequences of gentamicin under-dosing: A retrospective study.

Ph.D. THESIS.

Olubadewo JO. (1976). Human Placental Cholinergic System: Occurrence, Distribution, Variation with Gestational Age and Release of Acetylcholine. Dissertation submitted to the Faculty of the Graduate School of Vanderbilt University in partial fulfillment for the requirements for the degree of Doctor of Philosophy.

RESEARCH INTERESTS

1. Investigation of the existence of acetylcholine in human placenta: its variation with gestational age and modification of its release by nicotine, cocaine, atropine and electrolytes.

2. Investigation of the mechanism by which imipramine is effective in management of nocturnal enuresis.

3. Aspects of the regulation of lipid and lipoprotein metabolism in conditions of altered thyroid function.

4. The role of transportation stress on lipoprotein metabolism: A re-examination of the duration of quarantine of the rats prior to their being used in experimental protocols.

5. Examination of the involvement of calcium in hepatocyte metabolism of free fatty acid and its modification by calcium channel blockers using normal and diabetic rats.

6. Establishing a linkage between vascular and non-vascular smooth muscle contractility and plasma lipoprotein metabolism and also the polyol pathway.

7. Examination of effects of very low levels of environmental pollutants, especially halogenated hydrocarbons, on lipid metabolism

8. Studies on the polyol pathway hypothesis as a basis for the late complications of diabetes.

9. Influence of gender and acute alcohol intoxication on factors that mediate immune response mechanisms in acute diabetic state.

10. Modulation of neurochemical, immunochemical and hemodynamic responses to trauma hemorrhage in Sprague-Dawley rats treated with marijuana and/or intoxicating doses of ethanol..

SIGNIFICANT RESEARCH ACCOMPLISHMENTS:

1. PLACENTAL CHOLINERGIC SYSTEM: Gas-liquid chromatography was used to establish the authenticity of acetylcholine as a component of the cholinergic system of the human placenta. The tissue level of acetylcholine increased with gestational age, peaking at 20-22 weeks and falling to initial level at parturition. Acetylcholine release was inhibited by nicotine and cocaine thus leading us to speculate that these drugs of abuse cause small-for-gestational-age babies by obstructing acetylcholine-dependent regulation of nutrient transport through the placenta.

2. IMIPRAMINE IN ENURESIS: Established that the rapidity of antienuretic effect of imipramine was due to a direct musculotropic effect on the urinary bladder, causing relaxation thus enhancing the capacity of the bladder to retain urine. This report formed the basis of the current therapy of conditions involving poor bladder control.

3. THYROID STATUS AND LIPID METABOLISM: We established that hyperthyroidism in male rats was associated with diminished output of triglyceride from isolated perfused liver into which free fatty was infused. The plasma levels of lipoproteins and the in vitro production by isolated perfused livers were also diminished. The basis for the diminished production of triglyceride in the hyperthyroid state was attributed to: (1) increased diversion of free fatty acid to the oxidative pathway for the production of ketone bodies; and (2) depletion of glycero-3-phosphate, an obligatory intermediary metabolite for triglyceride synthesis.

In the majority of parameters measured, the findings for the hypothyroid state were opposite those of the hyperthyroid.

More recently, we have established that the hyperthyroid state altered in vivo lipoprotein profile in the female rats differently from the way it did in the male rats. Specifically hyperthyroidism in the female rats caused an increase, when compared to the control rats, of both VLDL triglyceride as well as total cholesterol, with the highest increase of cholesterol occurring in the VLDL and LDL fractions. Hyperthyroidism also caused increased peroxidation of the lipoproteins.

4. Ca ANTAGONISTS AND FATTY ACID OXIDATION: Established that verapamil and TMB-8 exerted dose-dependent inhibition of hepatocyte oxidation of long-chain free fatty acids. This inhibitory effect was not due to interaction of verapamil or TMB-8 with calcium. Rather the Ca-antagonists appeared to depress the activity of carnitine-palmitoyl-CoA transferase (CPT) a rate-limiting mitochondrial enzyme responsible for controlling influx of long chain free fatty acid for beta oxidation. The interaction of carnitine and palmitoylcarnitine with hepatocyte uptake of Ca2+ is also being studied.

5. LOW LEVELS OF CARBON TETRACHLORIDE AND LIPOPROTEIN METABOLISM: We have demonstrated that very low levels of carbon tetrachloride, CCl_4, does not produce fatty liver in rats. Rather, there was an increased level of plasma total triglyceride and cholesterol. Higher levels of CCl_4 however produced slight fatty liver and the plasma total triglyceride and cholesterol were decreased. The elevation of plasma triglyceride and cholesterol appear to provide support for the hypothesis that low levels of halogenated hydrocarbon toxicants enhance the transition of hepatocytes from G_0 to G_2 phase of the cell-cycle. This accelerated entry cells into the G_2 phase means more new cells and this probably accounted for the increase of plasma triglyceride and cholesterol.

6. SORBITOL IN NEUROPATHY OF DIABETES MELLITUS: We have demonstrated that sorbitol, a polyol classically regarded as biologically inert, does possess significant biological activity. Sorbitol suppressed amplitude of spontaneous contractions of portal veins from normal rats whereas it enhanced that of veins from diabetic rats. Sorbitol also enhanced the oxidizability of lipoprotein fractions of plasma obtained from diabetic rats. Our most extensive study was on the neuropathic complications of diabetes. In this case we demonstrated that sorbitol exerted differential effects on responses of normal and diabetic rats the pain stimulus induced by hot-plate. Sorbitol enhanced the time the diabetic rats stayed on the hot-plate to a greater extent than the time that the normal rats remained on the hot-plate. Furthermore, sorbitol enhanced the analgesic effect of codeine in both normal and diabetic rats, but to a greater extent in the diabetic rats. Along with the enhanced analgesic effect, sorbitol also enhanced the toxicity and lethality of codeine in the diabetic rats while in the normal rats there was no enhancement of the toxicity or lethality of codeine. The enhanced analgesia appears to be mediated by alteration of plasma glucose level.

7. GENDER DIFFERENCES AND ALCOHOL INTOXICATION IN DIABETES IMMUNE RESPONSES: Factors measured included hepatocyte and Kupffer cell production of nitric oxide (NO), CINC (cytokine induced neutrophil chemoattractant), RANTES, neutrophil function measured as phagocytosis and MCR. The diabetic state suppressed the production of NO and RANTES but increased the generation of CINC. When diabetic animal was subjected to endotoxin treatment, the production of NO was increased, but the generation of RANTES and CINC were depressed. The significance of these observations are still being assessed.

8. MARIJUANA AND ALCOHOL INTOXICATION MODULATION OF TRAUMA HEMORRHAGE: Ongoing.

MY PHILOSOPHY OF TEACHING: A SUMMARY

In my over thirty years of college teaching, I have developed a two-pronged approach to ensuring that I facilitate student learning. The two-pronged approach consists of:

Teacher-centered preparation

Student-centered presentation.

I enter the classroom only when I am fully prepared. I am armed with up-to-date information on the topic(s) to be taught. To do this, I review and research the subject matter by following the latest literature findings in library journals and web-based reports. I familiarize myself with the recommended textbooks. My teaching is bolstered by my research activities in the sense that I apply the scientific method of rational and critical analytical thinking that facilitates data interpretation to what I present to my students. I am also conversant with the latest findings through attendance and participation in national, regional and international conferences as well as seminars and workshops. From this maze of information, I sort out what is pertinent to student learning and incorporate it into my lecture presentation.

As a first step in facilitating student learning, I visualize myself as a student and picture how the numerous pieces of information must be knit together in order to make sense. My lectures challenge students to periodically reminisce on what has been said and link current statement to previous ones. This enhances retention. I encourage the information linkage by asking questions on newly presented information, and also pre-emptive questions on information about to be presented.

The next student-centered learning approach is to encourage study groups. Students learn from one another very easily. As part of student study group activities, I encourage students to formulate questions patterned after sample test and exam questions that have been given. Sample questions are scattered throughout the handouts. During the lectures, students are encouraged to ask questions about lecture materials with which they encounter difficulties or lack of clarity. In addition, students are assigned reading articles requiring library journals or web sites. After reading the assigned text, students are required to express their level of understanding of what they read by submitting a summarized report of the text. Assessment of student performance is a crucial aspect of learning, and right now, the standard objective questions are used to assess student performance.

BIOGRAPHICAL SKETCH			
Name: Quincy A. Quick		Position Title: Assistant Professor of Biology Contact Info.: 504-284-5406	
EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.			
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Ferrum College, Ferrum, VA	BS	1994	Biology
Virginia State Univerisity, Petersburg, VA	MS PhD	1996 2001	Biology Biology
New Mexico State Univ, Las Cruces, NM	Postdoc	2002-2003	Molecular Pharmacology and Biochemistry
Univ of Massachusetts Medical School Worcester, MA Medical College of VA Richmond, VA	Postdoc	2003-2006	Pharmacology and Toxicology
Univ of Toronto (Sunnybrooke Hospital) Toronto, ON (Canada)	Postdoc	2006	Radiation and Biophysics

A. Positions and Employment

8/2006-9/2010 Assistant Professor of Cell and Molecular Biology, Grambling State University Ernest E. Just Endowed Professor of Biology Department of Biological Sciences Grambling, LA

1/2008-1/2010 Adjunct Graduate Assistant Professor of Biology Louisiana Tech University Department of Biological Sciences, Ruston, LA

6/2008-6/2010 Visiting Professor, Louisiana State University Health Sciences Center Department of Anatomy and Cellular Biology, Shreveport, LA

1/2011-5/2001 Visiting Research Professor, Virginia State University Department of Biology, Colonial Heights, VA

8/2011-present Assistant Professor of Biology, Southern University at New Orleans Department of Natural Sciences, New Orleans, LA

B. <u>Classes Taught (Both Lecture and Laboratory):</u>

- Introductory Biology Majors and Non-Majors (Lecture)
- Introductory Biology Majors and Non-Majors (Laboratory)

- Cellular and Molecular Biology (Lecture)
- Cellular and Molecular Biology (Laboratory)
- Biological Research
- Animal Diversity (Lecture)
- Animal Diversity (Laboratory)

C. **New Courses Developed**:
Cellular and Molecular Biology
Nanotechnology

D. **Research Interests:**
Experimental therapeutics of brain tumors

E. **Publications (short list)**

Quick, QA and Gewirtz, DA Enhancement of radiation sensitivity, delay of proliferative recovery after radiation and abrogation of MAPK (p44/42) signaling by imatinib in glioblastoma cells.
Int J Oncol. 2006 Aug;29(2):407-12.

Quick, QA and Gewirtz, DA An accelerated senescence response to radiation in wild-type p53 glioblastoma multiforme cells. J Neurosurg. 2006 Jul;105(1):111-8.

Quick, QA and Serrano, EE Cell proliferation during the early compartmentalization of the *Xenopus laevis* inner ear. Int J Dev Biol. 2007;51(3):201-9.

Quick, QA Epothilone B induces cell death in glioblastoma cells via down-regulation of survivin. Experimental Oncology. Journal of Experimental Oncology. 2008 Sep;30(3):195-201.

Quick Q, Skalli O. Alpha-actinin 1 and alpha-actinin 4: contrasting roles in the survival, motility, and RhoA signaling of astrocytoma cells. Exp Cell Res. 2010 Apr 15;316(7):1137-47.

Henry W*, Dubois J*, **Quick Q** The microtubule inhibiting agent, Epothilone B, antagonizes glioma cell motility associated with reorganization of the actin-binding protein, α-actinin 4. Oncol Rep. 2011 Mar; 25 (3):887-93. Epub 2011 Jan 13.

Quick, Q, Faison M. CHOP and caspase 3 induction underlie glioblastoma cell death in response to endoplasmic reticulum stress. Submitted under review. Journal of Experimental and Therapeutic Medicine Sept 2011

F. Research Abstracts:

Cicero, S.A., Lopez-Anaya, V.L., **Quick, Q.A.**, Doyon, W.M., and Serrano, E.E. (1999). Developmental innervation patterns and morphology of the utricle in *Xenopus laevis*. Association for Research in Otolaryngolgy Abst.22:759

Quick, Q.A, and Serrano, E.E. (1999). Formation of the sensory epithelium of the inner ear during *Xenopus laevis* development.

Society for Neuroscience. Abst.Vol.25:297.9

Serrano, E.E. and **Quick, Q.A.** (2000). Confocal laser scanning microscopy of *Xenopus* inner ear organs during larval development.
Society for Developmental Biology.

Q.A. Quick and Serrano, E.E. (2000). Cell proliferation during inner ear development in *Xenopus laevis*.
Society for Neuroscience.

Quick, Q.A. and Gewirt, D.A. (2004) Senescence arrest and lack of apoptosis as elements contributing to radioresistance in glioblastoma cells.
American Association for Cancer Research

Quick, Q. A. (2008) Epothilone B induces glioblastoma cell death via survivin down regulation and tubulin redistribution
American Association for Cancer Research
Quick Q, O. Skalli (2008) Alpha-actinin Promotes PI3 Kinase Associated Growth Arrest in Astrocytoma Cells.
American Society for Cell Biology

G. Grants Awarded (for the past ten years):

2008 American Society for Cell Biology Visiting Professor Award- Funded
American Society for Cell Biology

2009 American Society for Cell Biology Visiting Professor Award- Funded
American Society for Cell Biology

H. Research Mentoring:

2007-2010 Research Initiative for Scientific Enhancement Mentor

2007-2008 National Institute of Mental Health Career Opportunities in Research Mentor

2008- 2010 Research Apprentice Mentor

2008-2010 Rising Sophomore Academy Coordinator

I. Membership:

- Society for Neuroscience
- American Society for Cell Biology
- American Association for Cancer Research

J. **Honors and Awards**:

2008 American Association for Cancer Research (MICR) Minority Serving Institution Faculty Scholar in Cancer Research Award Recipient
American Association for Cancer Research

2008 American Society for Cell Biology Visiting Professor Award
American Society for Cell Biology

2009 American Association for Cancer Research (MICR) Minority Serving Institution Faculty Scholar in Cancer Research Award Recipient
American Association for Cancer Research

2009 American Society for Cell Biology Visiting Professor Award
American Society for Cell Biology

2009-10 Ernest E. Just Endowed Professor of Biology (Grambling State University)

BIOGRAPHICAL SKETCH			
Name: Illya Tietzel (Ph.D.)		Position Title: Assistant Professor of Biology Contact Info.: 504-286-5111	
EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.			
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Johannes Gutenberg University, Mainz, Germany	B.S. M.S.	1993 1998	Zoology, Botany Immunology, Genetics, Zoology,
University of Maryland, College Park	Ph.D.	2001	Immunology (Genetics, Zoology)
University of Louisville, Kentucky	Post-doctoral training Post-doctoral training	2003 2006 to 2008	Immunology, signaling Immunology, Aging, *M. tuberculosis* Microbiology, *Chlamydia*

A. Positions and Employment

2008-present Assistant Professor, tenure track, Dept. of Natural Sciences, SUNO, New Orleans, LA

July 2008 Postdoctoral Research Associate. PI Professor Yousef Abu Kwaik, Baumgardner Endowed Chair in Molecular Pathogenesis, Dept. of Microbiology & Immunology, University of Louisville, KY.

2006-2008 Postdoctoral Research Associate. PI Assistant Professor Reynaldo Carabeo, Dept. of Microbiology & Immunology, University of Louisville, KY.

2003-2006 Postdoctoral Research Associate. PI Professor Robert D. Stout, Chair. Dept. of Microbiology & Immunology, University of Louisville, KY

2001-2003 Faculty Research Assistant. PI Professor David M Mosser. Dept. of Cell Biology & Molecular Genetics, University of Maryland, College Park.

1998-2001 Ph.D. student. Professor Ernst Rude, Chair. Institute of Immunology, University of Mainz, Germany. Co-Assignment Prof. Tieno Germann, R&D Immunology department, Grunenthal GmbH, Aachen.

1997-1998 Scientific technician. Institute of Immunology, University of Mainz, Mainz, Germany

1993-1998 Nurse. Intensive care unit of cardiology, University Hospital Mainz, Mainz, Germany

1991-1998 Undergraduate and graduate student. Dept. of Biology, University of Mainz, Mainz, Germany

1987-1991 Education as a registered nurse at municipal hospitals Hannover, Germany

B. Classes Taught (Both Lecture and Laboratory): Introduction to Biology I; General Biology I; Pathogenic Microbiology & Immunology, General Microbiology, Molecular Biology, Special Problems in Marine Science.

C. New Courses Developed: (1) BIOL409: Special Problems in Marine Science (Summer 2010 & Summer 2011); (2) biology labs for 3rd to 5th grader as part of GEMS (Gateway to Excellence in Math and Sciences) at Southern University at New Orleans, LA (summer 2011); (3) two-week biology labs for 3rd to 5th grader as part of GEMS (Gateway to Excellence in Math and Sciences) at Southern University at New Orleans, LA (summer 2009)

D. Research Interests: Host Pathogen Interactions, Immunology, Microbiology, Chlamydia, Molecular Biology, Marine Ecology.

E. Honors and Awards:

2011	Undergraduate Advisor Travel & Conference Award, Society of Toxicology 50th meeting, Washington DC
2010	SUNO Mentorship Award for outstanding service, hard work dedication as mentor
2009	SUNO Award for Most Submitted Proposals 2008 to 2009-Category Notables
2009	Elected for oral presentation at the 4th biennial Meeting of the Chlamydia Basic Research Society (CBRS). Mar 20-23 in Little Rock, Arkansas.
2008	awarded Bio Proposal Delevopment Workshop by Quality Education for Minorities (QEM) Network Nov 13-14 in Washington DC
2008	Elected for oral presentation at the Sixth Meeting of the European Society for Chlamydia Research in Aarhus, Denmark about host pathogen interactions between alternatively activated macrophages and *Chlamydia trachomatis.*
2006	Nomination by the University of Louisville, Kentucky as the exclusive candidate to apply for a national fellowship of the Brookdale foundation in aging research.
2001	Doctoral degree, Magna cum laude. Johannes Gutenberg University, Mainz, Germany.

F. Publications (short list)

(1) I. Tietzel, C. El-Haibi, and RA. Carabeo. Human guanylate binding proteins potentiate the anti-chlamydia effects of interferon-gamma. PLoS One. 2009 Aug 4;4(8):e6499

(2) Stout RD, Jiang C, Matta B, Tietzel I, Watkins SK, Suttles J. Macrophages sequentially change their functional phenotype in response to changes in microenvironmental influences. J Immunol. 2005 Jul 1;175(1):342-9.

(3) Tietzel I and DM Mosser. The modulation of macrophage activation by tyrosine phosphorylation. Front Biosci. 2002 Jun 1;7:d1494-502.

G. Research Abstracts & Conferences: (only selected and recent listed)

(1) 2011 June 14-17 33rd Annual Association for Biology Laboratory Education (ABLE) meeting, NMSU, Las Cruces, NM. The Effectiveness of Carrot Seed Oil and Citronella as Repellents of Bean Beetles, *Callosobruchus maculatus*. G. Onor & I. Tietzel

(2) 2011 May 21- 24 American Society of Microbiology 111th General Meeting, New Orleans, LA. "Attenuation of Mediators of Anti-chlamydial Activity in Classically Activated Macrophages and Immunomodulatory Cytokines". I. Tietzel, A. Quayle, R. Carabeo.

(3) 2011 May 6 Mobile, AL 36602'Gulf Coast Ecosystem Restoration Task Force Meeting'

(4) 2011 Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM) in February 24, 25, and 26 of 2011, Washington DC: (a)" The Influence of Hurricanes on Mycobacteria in Killifish " C. Green & I. Tietzel Poster

presentation and won travel award. (b)" The Influence of Hurricanes on *Aeromonas* and *Pfiesteria* in Gulf Menhaden " Poster presentation and won travel award. (c) " Effects of Gravitational Changes on Transposable Elements in Eukaryotes " T. Edovia & I. Tietzel. Poster presentation and won travel award.

(5) 2011 Jan 21-23 "Attenuation of Mediators of Anti-chlamydial Activity in Classically Activated Macrophages" at the 9th Annual Meeting of the Louisiana Biomedical Research Network (LBRN), Baton Rouge

(6) 2010 Jan 5-7 Scientific Teaching, Assessment and Resources Mini-Institute. LSU, Baton Rouge

(7) 2009 Oct29-Nov1 National HBCU-UP conference in Washington DC: (1) "Louisiana's Trachinocephalus myops and Pathogenic Microbes". R. Johnson & I. Tietzel, (2) "Pfiesteria and Mycobacteria in Gulf Menhaden Fish". D. Henry & I. Tietzel

(8) 2009 Mar20-23 4th Biennial Meeting of the Chlamydia Basic Research Society. Little Rock, AR. " Alternatively Activated Macrophages as a Niche for Chlamydia and its Impact on Classically Activated Macrophages". I. Tietzel & R. Carabeo

(9) 2008 Jul 1-4 Sixth Meeting of the European Society for Chlamydia Research, Aarhus, Denmark. " Alternatively Activated Macrophages as Novel Host Cells for Chlamydia " I. Tietzel, S. Belkaya & R. Carabeo

(10) 2007 Sept 15-19 Cold Spring Harbor Laboratory Meeting Microbial Pathogenesis & Host Response Alternatively Activated Macrophages as Novel Host Cells for Chlamydia " I. Tietzel, & R. Carabeo

(11) 2005 Sept 21-24 38th Annual Meeting of the Society for Leukocyte Biology, Oxford, England. " Age-associated Changes in MAP kinase signaling in macrophages" I. Tietzel & R. D. Stout

H. Grants Awarded (for the past seven years):
(1) NSF # DBI-1040966 Collaborative Research: URM: UNO/SUNO Partnership in Mentoring Undergraduates in the Biological Sciences. 2010-2014

(2) NSF # MCB-1051237 RAPID: Oil spills and (evolutionary) changes in intestinal microbiota of fish. 2010-2011

(3) Louisiana Biomedical Research Network (LBRN) Summer Faculty Program "Role of alternatively activated macrophages for chlamydial pathogenesis." I. Tietzel (PI): (a) SUNO - IDeA Networks of Biomedical Research Excellence (INBRE) subaward 51408 (NIH);(b) LEQSF-INBRE-Match subcontract 51185

(4) Louisiana Space Consortium CSG/URP grant: "Effects of gravitational changes on transposable elements of
prokaryotes and eukaryotes" I. Tietzel (PI) 2009 - 2010 NASA/LEQSF-LaSPACE Subcontract No. 43709

(5) Intra-mural travel grant of SUNO for participation & career development, March 2009

I. Mentoring - Research and Student Development:

Mr. Gawain Kiffin- biology undergraduate at SUNO and mentee of Dr. Tietzel of NSF RAPID Oil spill grant

- 55th Wind River Conference on Prokaryotic Biology, Estes Park, CO, June 8-12, 2011 won award for poster presentation entitled "Detection of Alkane Hydroxylase Gene (alkB) after Oil Spills in Intestinal Microbes of Fish"; won travel award

Mr. Darrell Hayward- biology undergraduate at SUNO and mentee of Dr. Tietzel

- 55th Wind River Conference on Prokaryotic Biology, Estes Park, CO, June 8-12, 2011 award poster presentation entitled "Terminal Restriction Fragment Length Polymorphisms of Intestinal Microbiota of Fish from Gulf Coast "; won travel award

Ms. Ciara Green- biology undergraduate at SUNO and mentee of Dr. Tietzel of NSF URM SUNO grant

- Awarded highly competitive Undergraduate Research and Mentoring Award (URM) funded by a National Sciences Foundation(NSF) Grant with annual stipend a for a total of $15,000/year
- Completed the UNO Bios 2090 course, Special Topics in biological sciences for sophomore 4 credits hours.
- 2011 Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM) in February 24, 25, and 26 of 2011, Washington D.C :" The Influence of Hurricanes on Mycobacteria in Killifish " Poster presentation and won travel award.
- 68th Joint Annual Meeting of Beta Kappa Chi (BKX) and The National Institute of Science (NIS) March 23-27, 2011 at Fort Valley State University in conjunction with the Office of Graduate Studies at Clark Atlanta University , Poster "The Influence of Hurricanes on Mycobacteria in Killifish"
- Invited to present her undergraduate research poster at the fourth installment of the "Undergraduate & Graduate Student Research Training Workshop Series" sponsored by LSU's Office of Undergraduate Research, LSU's Office of Strategic Initiatives and Southern University. At the meeting, key note speaker Dr. J. K. Haynes, dean of science and mathematics at Morehouse College in Atlanta, Ga., reviewed the presented poster before his talk.
- 2nd Place Biology Presentation for Talk:" The Influence of Hurricanes on Mycobacteria in Killifish." SUNO Research day, Nov 23rd, 2010

Ms. Aurellia Whitmore- biology undergraduate at SUNO and mentee of Dr. Tietzel

- 2011 Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM) in February 24, 25, and 26 of 2011, Washington D.C:" The Influence of Hurricanes on *Aeromonas* and *Pfiesteria* in Gulf Menhaden " Poster presentation and won travel award.
- 68th Joint Annual Meeting of Beta Kappa Chi (BKX) and The National Institute of Science (NIS) March 23-27, 2011 at Fort Valley State University in conjunction with the Office of Graduate Studies at Clark Atlanta University , Poster "*Aeromonas salmonidae* and *Pfisteria piscicida* in Gulf Menhaden and the Influence of Hurricanes"
- 2nd Place Biology Presentation for Talk:" *Aeromonas salmonidae* and *Pfisteria piscicida* in Gulf Menhaden and the Influence of Hurricanes" SUNO Research day, Nov 23rd, 2010

Gabriel Onor - high school student, Benjamin Franklin High School, New Orleans, LA 70122, USA

- 2011 June 14-17 33rd Annual Association for Biology Laboratory Education (ABLE) meeting, NMSU, Las Cruces, NM. The Effectiveness of Carrot Seed Oil and Citronella as Repellents of Bean Beetles, *Callosobruchus maculatus.*

- Bean beetle research Fall/Winter 2010 and during Summer Enrichment Program (SEP) of 2011 at SUNO

Mrs. R. Johnson- biology undergraduate at SUNO and mentee of Dr. Tietzel

- 2010 Mar 24-28 The 67th Joint Annual Meeting of The National Institute of Science (NIS) & Beta Kappa Chi (BKX), New Orleans- 1st prize poster presentation titled "Louisiana's *Trachinocephalus myops* and Pathogenic Microbes"
- 2010 Feb 26- 28, 24th Annual Graduate Opportunities Conference, Philadelphia, PA - Poster presentation
- 2010 Jan 28th MGE at MSA/WAESO Student Research Conference in Tempe, Arizona - Poster
- 2009 Oct29-Nov1 Poster presentation at National HBCU-UP conference in Washington DC.
- 2009-June 1 - July31st Summer research with Dr. Tietzel : " Louisiana's *Trachinocephalus myops* and Pathogenic Microbes" at SUNO, LA

Ms. D. Henry- biology undergraduate at SUNO and mentee of Dr. Tietzel

- 2010 Mar 24-28 The 67th Joint Annual Meeting of NIS and BKX, New Orleans, Poster presentation titled "Pfiesteria and Mycobacteria in Gulf Menhaden Fish"
- 2010 Feb 26- 28, 24th Annual Graduate Opportunities Conference, Philadelphia, PA - Poster presentation
- 2010 Jan 28th MGE at MSA/WAESO Student Research Conference in Tempe, Arizona- 2nd place Poster
- 2009 Oct29-Nov1 Poster presentation at National HBCU-UP conference in Washington DC.
- 2009-June 1 - July31st Summer research with Dr. Tietzel : "Pfiesteria and Mycobacteria in Gulf Menhaden Fish" at SUNO, LA
- Recommendation and Recipient of academic scholarship LS-LAMP at SUNO Fall 2009 & Spring 2010

Mr. T. Edovia- biology undergraduate at SUNO and mentee of Dr. Tietzel

- 2011 Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM) in February 24, 25, and 26 of 2011, Washington D.C:" Effects of Gravitational Changes on Transposable Elements in Eukaryotes " Poster presentation and won travel award.
- 2010 Mar 6-8 Undergraduate Education Program Award, Annual Meeting Society of Toxicology
- 2010 Feb 26- 28, 24th Annual Graduate Opportunities Conference/ Fattah Conference on Higher Education, Philadelphia, PA

Mohammed M. Elaasar - high school student, Haynes Academy for Advanced Studies, Metairie, LA 70005, USA

- 2010 Mar 24-28 The 67th Joint Annual Meeting of NIS & BKX, New Orleans, 1st prize poster
-

J. Membership: EMDS, ISCB, ASM, SLB, CBRS, NABT, NSTA, ABLE

K. Reviewing activities: ad hoc reviewer for NSF/MCB/cellular system cluster

L: Other Professional activities (1)2009 Member Website Task force within the national Society of Leukocyte Biology (SLB) for web content of the SLB; (2) 2011 Co-creator & Co-Administrator of Facebook and LinkedIn companion sites

Yolander Renea Youngblood, Ph.D.
20260 Charles Ory Drive
Plaquemine, LA 70764
(225) 687-9415 (home)
(225) 400-3314 (cell)
yolanderyoungblood@ymail.com

EDUCATION

Ph.D. in Botany **August 1999**
UNIVERSITY OF FLORIDA (UF), Gainesville, Florida
Dissertation: "Systematic Survey of the *Coryphoid* Palms Using Foliar Epicuticular Wax and Anatomical Characteristics". Both SEM and light microscopy were necessary tools used to complete this study.

M.S. in Botany **August 1995**
UNIVERSITY OF SOUTH FLORIDA (USF), Tampa, Florida
Thesis: "Comparative Study of Distribution and Leaf Surface Anatomy of Silver and Green *Serenoa repens*." The leaf surface was viewed using SEM and light microscopy.

B.S. in Biological Sciences, Botany Emphasis **May 1990**
UNIVERSITY OF SOUTHERN MISSISSIPPI (USM), Hattiesburg, Mississippi

High School Diploma, Class Valedictorian **May 1986**
BUCKATUNNA HIGH SCHOOL, Buckatunna, Mississippi

WORK EXPERIENCE
Teaching/Laboratory

Assistant Professor (tenure-track): **August 2010 - present**
SOUTHERN UNIVERSITY AT NEW ORLEANS, New Orleans, LA
Responsibilities include teaching(General Biology courses), student research, grant writing, and advising in the Natural Sciences Department. Awarded $48,000 in grants.

Science Faculty (non-tenure track): **August 2009 – August 2010**
WALDEN UNIVERISTY, On-line. Facilitated On-line learning for teachers in the M.S. Education Science Specialty Program. Course responsibilities included Introduction to Educational Research, Creating an Effective Classroom, and Designing Curriculum Instruction and Assessment.

Charter Faculty & Associate Professor(non-tenure track):January 2005 – July 2009
HARRISBURG UNIVERSITY OF SCIENCE AND TECHNOLOGY, Harrisburg, PA
As Charter Faculty for the Biotechnology Program responsibilities included initial organization and institution of the program as well as

teaching(Microbiology, Introductory Biotechnology, and The Scientific Mind) and advising students. I also wrote grants in excess of $500,000.

Work experience teaching cont...

Assistant Professor(non-tenure track): August 2002 – December 2004

PENN STATE Capital College, Harrisburg and Schuylkill Campuses, School of Science Engineering and Technology. Course responsibilities include teaching General Biology, Environmental Science, and Microbiology.

Assistant Professor(tenure-track): August 1999-May 2002

XAVIER UNIVERSITY, Biology Department, New Orleans, Louisiana
Course responsibilities included teaching General Biology, Botany, Environmental Biology, and Evolution, Ecology, & Diversity. Also served as PRAXIS Review Instructor.

Graduate Teaching Assistant: August 1995-May 1999

UNIVERSITY OF FLORIDA, Botany and Biology Departments,
Gainesville, Florida
Courses taught include the following: Lecture: Evolution, Ecology, and Behavior (for non science majors). Laboratories: Integrated Principles of Biology, General Botany, Plant Taxonomy, and Plants & Human Affairs.

Adjunct Instructor: August 1997 – May 1998

SANTA FE COMMUNITY COLLEGE
Natural Science Department, Gainesville, Florida
Developed syllabus and prepared lectures for General Biology. Since laboratory experience is important to biology, laboratory exercises were incorporated into the three-hour course without using extra time.

Graduate Teaching Assistant: July-December 1994
Graduate Research Assistant: August 1993-May 1994

UNIVERSITY OF SOUTH FLORIDA, Biology Department, Tampa, Florida
Prepared the laboratories and maintained cultures, prepared lectures, and graded assignments for the Microbiology and General Biology laboratories.

Lab Instructor / Adjunct Faculty Member: August 1993-June 1994

HILLSBOROUGH COMMUNITY COLLEGE
Biological Sciences Department, Dale Mabry Campus, Tampa, Florida
Taught Anatomy & Physiology, General Biology, Human Biology, and Man & Nutrition courses.

Lab Instructor: August 1990-May 1993

XAVIER UNIVERSITY, Biology Department, New Orleans, Louisiana
Taught General Biology (for freshman Biology majors and non-majors) and Botany laboratories. Other faculty responsibilities included advising students.

Lab Scientist: **June-August 1991**

STATE OF LOUISIANA, Chemistry Department, New Orleans, Louisiana
Analyzed safety and quality of consumer products as determined by guidelines.

WORK EXPERIENCE
Administration

Director: **2006- 2009**

CAPITAL AREA BIOTECHNOLOGY PARTNERSHIP (CABP) – Harrisburg, PA.
As Director I was in charge of recruiting and retaining students in an effort to facilitate their movement into the workforce via internships and employment. I used the Moodle course management system as a means of communicating and providing material. I also provided support for student/faculty research relevant to the biotechnology program and created and produced the signature event, "Biotechnology Showcase". Teachers, students, and counselors from an eight county region attended.

Liaison: **2007 - 2008**

HU Biotech Corporate Faculty –Harrisburg, PA. Recruited corporate faculty and served as liaison for them with HU administration. Facilitated the first Biotech Corporate Faculty Orientation and provided much needed material and information. This included ensuring (this included training) that everyone was comfortable using Moodle.

Reviewer: **October 2008 & November 2009**

NATIONAL SCIENCE FOUNDATION, Washington, D.C.
Reviewed proposals for NSF's Science Technology, and Engineering Scholars Award Program.

Campus Administrator: **Fall 2005**

PENNSYLVANIA SCHOLARS IN RESIDENCE AWARDS PROGRAM
Harrisburg, PA.
Liaison for Harrisburg University (HU) students who received the $1250 award. Co wrote proposal with Harrisburg Area Community College (HACC).

Team Leader: **Summer 2005**

SCIENCE EDUCATION FOR NEW CIVIC ENGAGEMENTS AND RESPONSIBILITIES (SENCER), Harrisburg PA. Served as team leader for HU, HACC, and SciTech High School's multi school team. Were awarded $3500. As a result we developed initial proposal for the CABP.

Faculty liaison: **Fall 2000 – 2002**

UNITED NEGRO COLLEGE FUND'S SPECIAL PROGRAM FOR HIV/AIDS ORIENTATION AND PROFESSIONAL EDUCATION (HOPE), Fairfax VA.
Served as liaison for Xavier University of Louisiana (XU).

GRANTS AND AWARDS

E3MAs Seed Grant sponsored by Southern University at New Orleans' National Science Foundation grant. Project Title " Effect of BP oil spill on shapes and patterns of foliar epicuticular wax found on *Serenoa repens* and other plants in the Gulf Coast region of Louisiana using Scanning Electron Microscopy" ($1500)

Louisiana Board of Regents Enhancement Grant Program (TR & UG) Proposal title: Enhanced Workforce Development, Student Success and College Access for Chemistry, Biochemistry and Biotechnology (ENH-00004809-2010, awarded April 2011 $48,000.00)

Workforce Leadership Grant sponsored by the Pennsylvania Department of Community and Economic Development (2006 - 2009 - $535,000)

Whitaker Foundation grant for Enhancing Communities – (July 2005 - $7500)

Pennsylvania Scholars in Residence Award Program – (2005/2006 12 awards at $1250/award)

HONORS

Institute for Cultural Partnership 2007 Nominee for Champion of Diversity Award.
Delta Sigma Theta (New Orleans Alumnae Chapter) Community Service Award 2001 & 2002.
Beta Beta Beta Biological Honor Society 2000
U. Florida Black Graduate Student Organization Legacy Award 1999.
National Blue Key Honor Society 1998.
U. Florida Minority Graduate Student Fellowship 1995 – 1998.
UNCF/NCEA Faculty Development Fellowship 1995 – 1996.
U. South Florida Graduate Educational Opportunity Grant 1993 – 1995.

SCHOLARSHIP

Publications:

Taylor, Y. R., Bhatia, S., Brown, R., Greene-McDowelle, D., Mullins, T., Cocson, J., Colby, C., Miller, K., Nguyen, S.T., Goral, B., Heroux, K., Quinn, C., Whang, K., McCoy, S.L., and Zoorob, G. 2001. Polymers: for the non-science major. (Submitted to Northwestern University Materials Research Center for the Materials World Modules Program.)

Greene-McDowelle, D. Mullins, T., Zoorob, G., Taylor, Y. R., Bhatia, S., Stevens, P.W., McCoy, S.L., and Brown, R. 2001. Biosensors: for the non-science major. (Submitted to Northwestern University Materials Research Center for the Materials World Modules Program.)

Essig, F., Taylor, Y.R., and Te Strake, D. 2000. "Florida's Wax Palm: The Silver Form of *Serenoa repens.* (Arecaceae)". Florida Scientist. 63(1):13-16.

Micrograph:

Taylor, Y. R. 1999. Micrograph of Strelitzia type epicuticular wax in *Latania*. In Plant Systematics: A Phylogenetic Approach. Eds. Judd, W.S., Campbell, C. S., Kellogg, E. A., Stevens, P. F. Sinaer Associates, Sunderland, Mass. p. 73.

Presentations:

Youngblood, Y. R. 2008 "Capital Area Biotechnology partnership". Science Education for New Civic Engagements and Responsibilities' Posters on the Hill Symposium. Washington, D.C. April 14, 2008. (This was a National Science Foundation Sponsored event.)

Youngblood, Y.R., Burton, M., Omolo, E. 2007. "Capital Area Biotechnology Partnership – A workforce pipeline". Pennsylvania Association of Vocational Administrators conference. Hershey, PA February 28, 2007.

Presentations cont...

Taylor, Y.R. 2000. "Systematic Survey of the *Coryphoid* Palms Using Foliar Epicuticular Wax and Anatomical Characteristics." Journal Club meeting. USDA-ARS Southern Regional Research Center, New Orleans, La.

Taylor, Y.R. 1999. The use of epicuticular wax characters in a cladistic study of the palms. Annual Southeastern Microscopy Meeting, Gainesville, Fl.

Taylor, Y.R. 1995. Comparative study of the distribution patterns, leaf anatomy,
and morphology of silver and green forms of the saw palmetto *Serenoa repens*.
USF Black Graduate and Professional Students Association Presentation series.

PROFESSIONAL MEMBERSHIPS

Council on Undergraduate Research, Member 2007 - present
National Science Teachers Association, Member 2001- present.
International Palm Society, Member 1995-present.
Florida Native Plant Society, Member 1995-1999.

OTHER MEMBERSHIPS

Delta Sigma Theta Sorority, Inc., Gainesville Alumnae Chapter, Spring 1999.
Tri-Parish Alumnae Chapter, 2010 - present.
EMBODI committee member.
Nominating committee member.
Harrisburg Alumnae 2002-2009.
Harrisburg Alumnae Founders Day Celebration – Chair 2006 event.
Alumnae Betty Shabazz Delta Academy – Science
Workshop presenter (2000 – 2006).
Alumnae Jabberwock – Co chair 2004 event.
New Orleans Alumnae Fall 1999 – 2002.

Iberville Elementary School PTA, (Plaquemine, LA) - member 2010 - present.
Milton Hershey School (Hershey, PA) Horticulture Program Advisory Board member, 2005 – 2008.

CONFERENCES ATTENDED

Collaboration 2008, Pennsylvania Department of Community and Economic Development. Harrisburg PA. Fall 2008.
Nanotechnology Workshop – sponsored by Capital Area Intermediate Unit and Penn State University, March 17. 2005
Biotech Institute Annual Conference, Philadelphia PA. June 2005.
Process Oriented Guided Inquiry Learning (POGIL) Conference at Franklin and Marshall, Lancaster, PA. Spring 2005.
Seventh Annual Pennsylvania Higher Education Network for Neighborhood Development (PHENND) Conference. Civic Engagement: Beyond Voting and Volunteering, Widener University, Chester, PA. Spring 2005
Instructional Strategies in Education Workshops: Studied and evaluated instructional strategies suited to teaching the sciences, Xavier University of Louisiana, New Orleans LA. Fall 2001.

UNIVERSITY AND COMMUNITY SERVICE

Southern University at New Orleans, New Orleans, LA

PRAXIS II Elementary Education Content Knowledge Test Exam Cram Workshop February 25, 2011. Conducted workshop session on Science portion of the test.

SUNO Day at area high schools Fall 2010. Served with colleagues and assisted the Admissions department in recruitment efforts.

Harrisburg University, Harrisburg, PA

Admissions and Student Services Accreditation Standards Workgroup. 2008. As a Charter Faculty member provided much needed history for the process.
University Seminar – Freshman seminar. Developed course outline for 2006/2007. Implemented new course material "Toolkit" in 2007/2008.
New Student Orientation - January 2006. During orientation, I met with future advisees and discussed the opportunities available at HU.

Christ Fellowship Prayer Tabernacle Church – Speaker for Great Women Honoring a Great Woman program – October 9, 2005.

University of Florida, Gainesville, Fl.

Graduate Student Affairs Cabinet, Co Director 1998-1999.
City of Gainesville Bicycle and Pedestrian Committee, Member 1997-1998. (Appointed by the Gainesville, Fl. City Commission.)
Graduate Student Council, Graduate Student Orientation Committee, 1996.
University Minority Recruitment and Retention Committee - Student Member (Appointed by the University President), 1996-1998.
Black Graduate Student Organization (BGSO), Member 1995-1999.
President, 1997-1998. Vice-President, 1996-1997.
Started BGSO Graduate Student Scholarship Award.
Hostess, First Annual Black Faculty, Staff, and Student Mixer, 1996.

University of South Florida , Tampa, Fl.

Dimensions, (promoting science in Hillsborough County Junior High Schools) Vice-President, 1993-1995. Founding Member.

Black Graduate and Professional Students Association, President, 1994-1995.

REFERENCES AVAILABLE UPON REQUEST

Executive Summary

Masters Services and Licensing Agreement for Southern University and A&M College System and Education Online Services Agreement

Parties to Agreement:	Southern University System (SUS) and Education Online Services Corporation (EOServe Corp).
Terms of the Agreement:	The terms of agreement shall be for five (5) years with an automatic five (5) year renewal.
The Program	Initially, the program will consist of the following online degrees:
Curriculum:	(1). Associate Degree (2). Bachelor's Degree (3). Master's Degree
Faculty	The faculty will be evaluated and supervised by SUS. Faculty will be paid by SUS. EOServe Corp. will compensate SUS faculty for creating course content and developing instructional design.
Administrative/Management:	SUS will work together to develop the online curriculums and degrees. Each party will provide sufficient resources and staff to ensure a successful development of the online curriculum and degrees. EOServe Corp. and SUS will participate in the curriculum development team. The team will adopt Southern University's Academic content to appropriate distance learning methodologies.
Marketing/Advertising	EOServe Corp. shall be solely responsible to market and advertise the online curriculum and degrees.

Ownership/Rights

Copyrights and initial property rights and interest on all course media provided by Southern University shall be owned by SUS. EOServe Corp. shall at all times retain sole ownership and rights to its recruitment and advertisement websites and market technologies.

SUS will work exclusively with EOServe Corp. on the distance learning curriculum and degree programs during the term of the agreement and any renewals of such agreement.

Financial Arrangements:

EOServe Corp. will pre-pay SUS $50.0k to cover costs for upstart and administration of on-line curriculum and degrees. EOServe Corp. will advance additional monies if needed to Southern University.

SUS will repay EOServe Corp. pre-payments in six (6) equal payments from gross revenue.

Gross Revenue distributions

EOServe Corp.	70%
SUS	30%

Projected Revenue for Southern University System

Year 1 =	$ 560K
Year 2 =	$ 2.3M
Year 3 =	$ 4.4M
Year 4 =	$ 8.1M
Year 5 =	$14.3M

Termination Terms:

Termination due to loss of SUS accreditation or probation: EOServe Corp. can give thirty (30) day notice.

Termination due to non-appropriation of financial resources: Sixty (60) day notice is required.

Termination due to breach by either party: Ninety (90) days to cure.

EDUCATION ONLINE
SERVICES CORPORATION

Master Services and Licensing Agreement for Southern University and A&M College System

TABLE OF CONTENTS

Signatures

EXHIBITS.

Exhibit 1 EOServe Corp. Learning Management System
Exhibit 2 Technical Support and Other Services
Exhibit 3 Online Degree Program Procedures and Best Practices
Exhibit 4 Best Practices Admissions Standard Operating Procedures
Exhibit 5 Best Practices Financial Aid Document Services Standard Operating Procedures

MASTER SERVICES AND LICENSE AGREEMENT BETWEEN EDUCATION ONLINE SERVICES CORPORATION AND SOUTHERN UNIVERSITY AND A&M COLLEGE SYSTEM

Education Online Services Corporation ("EOServe Corp."), a Delaware Corporation with principal address at 1560 Sawgrass Corporate Parkway, 4th floor, Sunrise, FL 33323, and Southern University and A&M College System ("Southern"), a Louisiana Institution of Higher Learning, with its principal address at JS Clark Administration Building, Office of the President, 4th Floor, Baton Rouge, LA, 70813, hereby enter into this Master Services and License Agreement (the "Agreement") effective as of the date executed below (the "Effective Date").

This Agreement is a Master Services and License Agreement that addresses the business relationship between EOServe Corp. and Southern, including the services, fees and conditions set forth below. This Agreement shall incorporate by reference each and every individual Statement of Work jointly signed by the Parties, as this may occur from time to time during the Term. The exhibits to this Agreement are an indivisible part of this Agreement and are incorporated herein by reference.

WHEREAS, Education Online Services Corporation assists educational partner institutions to develop and deliver full-service online degree programs, implement recruitment and enrollment marketing plans, and support students with securing financial aid as well as retention services.

WHEREAS, Southern is an educational institution accredited by the Southern Association of Colleges and Schools ("SACS"), a regional accrediting body recognized by the U.S. Department of Education. Southern is a 501(c)(3) not-for-profit organization pursuant to the Internal Revenue Code of 1986 as amended. Southern offers undergraduate and graduate degrees through classroom instruction; and

WHEREAS, Southern University desires to offer its undergraduate and graduate degrees via distance learning, and EOServe Corp. desires to provide its expertise and resources to facilitate the offering of the Southern University degree program online (the "Program"), as more fully described below;

Accordingly, in consideration of the promises and agreements set forth herein, the Parties intending to be legally bound, hereby agree as follows:

Definitions

Academic Content. In the event EOServe Corp.'s subject matter experts and instructional designers create a particular and individual course content and/or Course Media, said course shall remain the property of EOServe Corp. In the event Southern University's subject matter experts and instructional designers create a particular and individual course content and/or Course Media, without expense to EOServe Corp., said course shall remain the property of Southern. In the event that EOServe Corp. compensates Southern University's subject matter experts and instructional designers to create a particular and individual course content and/or Course Media, said course shall remain the property of EOServe Corp.

Course Media. Media that may include, but not be limited to, Internet and computer software, video tutorials, multimedia CD-ROMs and DVDs, textbooks and audio lectures, containing educational content and instructional tools devised by EOServe Corp. instructional designers and technical staff using Academic Content presented by Southern University faculty, designed to deliver Program courses in a distance education format via the designated Learning Management System.

ERx. EOServe Corp.'s online enrollment platform utilized for the purposes of providing the enrollment and financial aid document support services on behalf of Southern University.

Initial Enrollment Date. The Initial Enrollment Date is the date on which the Program begins to enroll its first class. The Parties anticipate offering the first class in October 2011 or sooner upon the mutual agreement of the Parties.

Learning Guide. A course study guide, which presents outcomes, supports key concepts and ideas of the course, suggests learning activities, identifies instructional materials and outlines assignments.

Learning Management System (LMS). Proprietary computer source code, associated databases, integrated applications and related processes, all of which have been designed for the interactive presentation and testing of academic content in an online environment.

Pre-Developed Course Media. Media that may include, but not be limited to, Internet and computer software, video tutorials, multimedia CD-ROMs and DVDs, textbooks and audio lectures, containing educational content and instructional tools devised by EOServe Corp. instructional designers and technical staff using Pre-Developed Academic Content designed to deliver Program courses in a distance education format via the designated Learning Management System.

Statement of Work ("SOW") means the standard statement of work form that is executed by the Parties as needed, and sets forth the specific services and deliverables needed by the Educational Partner for any particular aspect of implementation of the Program(s).

Agency of Record means a party that is authorized by Southern University to coordinate various services on behalf of Southern University. Appointed by Southern University, this agency is responsible for developing and deploying services including but not limited to lead generation, third-party enrollment services, marketing and social media profiles and initiatives for the purpose of student recruitment on behalf of the contracting party.

ARTICLE I.
THE PROGRAM

Section 1.1 **Program Curriculum. (Southern/EOServe Corp.)** The Program will initially consist of such online degrees as may be agreed upon by EOServe Corp. and Southern and subject to the approval of appropriate accreditation and regulatory State of Louisiana regulatory agencies as specified in the terms of the Agreement. Additional degrees may be produced for this Program. The process for deciding which additional courses and degrees will be produced is addressed in Section 4.3.

The Parties understand and agree that they shall initially develop and submit for approval an Associate Degree online program, a Bachelor's Degree online program and a Master's Degree online program. Further, the Parties understand and agree that these three (3) online degree programs shall be offered to prospective students through Southern University's existing Learning Management System ("Blackboard") or through EOServe Corp.'s Learning Management System. The Parties agree to specifically define the Learning Management System to be used for the offering of the above-referenced online degrees through mutually agreed-upon business objectives at the time of launch of the Program.

Subsequent online degree programs including but not limited to Master's Degree programs and PhD programs agreed upon by the Parties will be appended to this Agreement through the execution of appropriate addenda. The Parties understand and agree that the creation and offering of new degree programs may require Louisiana Board of Regents' approval, and/or the approval of any other State of Louisiana agency governing Southern to the extent it is a legal prerequisite.

Section 1.2 **Hours. (Southern)** The Parties understand and agree that the credit hour and grade point requirements for each online degree program will be consistent with the minimum requirements established by the appropriate accrediting agency or the Louisiana Board of Regents.

Section 1.3 **Transfer of Other Credits Hours**. **(Southern)** At the sole discretion of Southern University, the maximum amount of transfer credit allowed to satisfy graduation requirements is ninety-three (93) semester hours as it pertains to undergraduate degrees. A maximum of twelve (12) semester hours of courses whose age will not exceed seven years at the time of graduation may be transferred toward the master's degree. With regard to doctoral degrees, a maximum of twenty-seven (27) semester hours may be transferred, regardless of age, to meet requirements for completing a doctoral degree. A maximum of an additional six (6) semester hours of doctoral-level courses taken at a doctoral degree–granting institution may be transferred under certain conditions at the discretion of Southern University. All transfer credits must originate from another regionally, nationally and/or ACE-accredited institution.

Section 1.4 **Semesters**. **(Southern)** There will be six (6) semester start times per year entitled "Fall I" and "Fall II", "Spring I" and "Spring II", and "Summer I" and "Summer II." Each semester, and each course, shall be eight (8) weeks in duration. The Parties agree that semester start times per year may be increased to eight (8) semester start times per year at the sole discretion of Southern University.

Section 1.5 **Changes in Program**. **(Southern)** Southern University may remove courses from the Program and make other academic changes in the Program set forth in this Article I of the Agreement, as Southern University deems academically necessary.

ARTICLE II.
FACULTY AND ADJUNCT FACULTY PROVISIONS

All faculty involved in the Program shall be evaluated and supervised by Southern University in the same manner as faculty in other Southern University degree programs. All faculty and/or adjunct faculty shall be deemed to be Southern University faculty, and shall be paid by Southern University.

Section 2.1 **Presenting Faculty**. **(Southern)** Presenting Faculty are content specialists who, using Academic Content, develop and present the course material in multimedia formats to create the Course Media. These faculty shall be assessed and approved in advance by Southern University, upon consultation with EOServe Corp., whose input shall be strictly limited to evaluating the Presenting Faculty's presentation skills in the context of online delivery, and shall not extend to the Presenting Faculty's academic qualifications or the subject matter of the lectures. Southern University retains the sole right to hire and dismiss such faculty.

Section 2.2 **Evaluating Faculty. (Southern)** Evaluating Faculty shall be the faculty of record for students taking courses for credit, shall be assigned specific students for a course and may communicate with such students through voicemail, message boards, chat rooms, and e-mail. These faculty members, appointed and assessed by Southern University, shall guide students toward completion of course requirements, evaluate student work and award grades for coursework according to Southern University guidelines and standards. Students in the Program will be assigned one (1) evaluating faculty member for each course in which they are enrolled, and there will be a maximum of thirty-five (35) students assigned to an evaluating faculty member for each course. Evaluating Faculty shall be assessed and approved in advance by Southern University.

Section 2.3 **Advising Faculty. (Southern)** The Advising Faculty to the Program shall be selected for their disciplinary expertise to complement the Program. They shall be responsible for (1) the regular assessment of the program; (2) the supervision of Evaluating Faculty and staff; (3) advising within specific disciplines of the Program; (4) communication with students as required by student demand, and (5) other pertinent issues as may be appropriate to maintaining the academic quality of the Program or as assigned by the Faculty Chair of the Program. Advising Faculty members shall be appointed, assessed and approved in advance by Southern University.

Section 2.4 **Selection Criteria. (Southern/EOServe Corp.)** All faculty shall (1) hold credentials that meet SACS criteria for teaching in their discipline or field at the appropriate level and, at a minimum, a master's degree from an institution that was, at the time the degree was awarded, an institution accredited by a regional accrediting association or another accrediting association acceptable to Southern University, and with acceptable academic credentials in a relevant field; (2) show relevant experience that combines theory and practice; (3) show awareness of and respect for adult learning theory and practice; and (4) complete the online faculty training and orientation developed by EOServe Corp. and customized by Southern University. Exceptions to these credentials

may be made only by the Dean of the appropriate college at Southern University (or his or her formal representative, with the approval of the University's Chief Academic Officer).

ARTICLE III.
ADMINISTRATIVE RESPONSIBILITIES

Section 3.1 **Administrative Responsibilities. (Southern/EOServe Corp.)** Southern University and EOServe Corp. shall be responsible for the success and quality of the Program. Specific functions shall be the primary responsibility of one or all as set forth below. Southern University's responsibilities are indicated by the notation "Southern"; Education Online Services Corporation's responsibilities are indicated by the notation "EOServe Corp."; and joint responsibilities are indicated by multiple notations.

Section 3.2 **Program Development Resources; Management. (Southern/EOServe Corp.)** Upon the execution of the Agreement, Southern University and EOServe Corp. shall conduct a comprehensive launch meeting at Southern University at which the Parties will develop joint expectations and map the Program development process, including expectations for subsequent meetings and key milestones. Southern University and EOServe Corp. shall each appoint a Senior Project Manager within their respective organizations to serve as the primary point of contact during the development of the Program through its launch.

Each of the Parties agrees to allocate sufficient resources and staff to ensure successful development and timely launch of the Program, including any subsequent additions to the Program. EOServe Corp. shall consult with Southern University as necessary on the allocation or addition of Southern University resources and the procedures required to launch and maintain an online program. Southern University participating staff shall include (but not be limited to) representatives from the academic, administrative, financial and technology departments, as required based on the programs offered. EOServe Corp. participating staff shall include representatives from the course development, brand management, enrollment management, financial services and technology services departments, as required based on the programs offered. EOServe Corp. participating staff shall include a senior representative who shall assist with facilitating the relationship among the Parties and representing the Program to constituencies within Southern University. Following launch, each party will continue to make these resources available to the Program on an ongoing basis during the Term to ensure the success of the Program. Specifically, each party shall provide one (1) or more dedicated Senior Program Directors to manage the Program, and adequate staff to maintain communications and handle administrative and student issues as they arise.

Section 3.3 **Course Media Design and Production**. **(Southern/EOServe Corp.)** Each course shall have a curriculum development team made up of Southern University Presenting Faculty and EOServe Corp. instructional design personnel. The development team shall be responsible for adapting Southern University Academic Content to appropriate distance learning methodologies and formats in order to develop the Course Media. Southern University Presenting Faculty shall be responsible for delivering the lectures, while the production of the Course Media shall be the responsibility of EOServe Corp. instructional designers and technology staff, with the guidance and approval of Southern University. To the extent the location of the development of Course Media is outside the Baton Rouge campus and requires travel or other similar expenses for Presenting Faculty, EOServe Corp. shall be responsible for such expenses.

Course Media for each course shall fulfill all Southern University curriculum requirements. Course Media design regularly involves (1) establishment of the rationale for the course, including the overall educational goals; (2) identification of intended learning outcomes; (3) ideas and skills to be learned in the course; (4) and an instructional plan for each learning segment. Southern University faculty and staff will work closely with EOServe Corp. staff to assist EOServe Corp. in designing Course Media to meet the outcomes of the Program. In order to accomplish this goal, Southern University and EOServe Corp. shall work together to (a) adapt the course requirements and content into Course Media formats that satisfy Southern University degree requirements and (b) design specific format and course components.

Course Media shall include a syllabus that contains the course objectives, module outcomes, reading assignments, self-directed homework assignments and all associated textual materials and assignments including the Learning Guide. In addition, Course Media shall include assessment materials such as writing assignments and/or a bank of test questions for administering randomized multiple-choice quizzes and tests.

Section 3.4 **Delivery Technology. (EOServe Corp.)** EOServe Corp. shall be solely responsible for designing, building, contracting for, hosting, maintaining and managing all required computer code, databases, hardware, software, networks and other functionality necessary to deliver the online Program, including marketing, application, retention, course delivery, electronic communications and testing. This shall specifically include adapting or configuring Program-specific versions of EOServe Corp.'s LMS, online application system, customer resource management system and online order entry system. EOServe Corp. shall be responsible for acquiring an appropriate domain name(s) and thereafter hosting the DNS and code comprising the Program website(s) and the dedicated LMS along with all Course Media on EOServe Corp.'s servers. The Parties agree to work together to develop necessary integrations with Southern University systems and EOServe Corp. systems to ensure efficient Program operations.

Section 3.5 **Development of Learning Guide. (Southern/EOServe Corp.)** In addition to the Course Media produced by EOServe Corp., students will be provided a Learning Guide for each course. Learning Guides will be developed by Southern University Presenting Faculty and EOServe Corp. instructional designers, editors and staff. These Guides shall be formatted and published by EOServe Corp., and provided in accordance with Section 3.12.

Section 3.6 **Marketing and Advertising. (Southern/EOServe Corp.)**

(a). Southern University will incorporate the Program as appropriate into its marketing and sales literature, and the Program courses will be promoted along with Southern University's other course offerings. Southern University shall assign a dedicated resource who shall provide a marketing point of contact for EOServe Corp. with the university, specifically with regard to making all necessary marketing material approvals and providing creative elements to EOServe Corp. Southern University agrees to communicate with staff, students and Alumni to officially announce the Program prior to its offering. Southern University will also coordinate with EOServe Corp. on the issuing of appropriate press releases announcing the launch of the Program and thereafter reporting significant events. Southern University agrees to cooperate with and provide the necessary documentation to EOServe Corp. in order for EOServe Corp. to establish a local U.S. Mail permit in Broward County, Florida, on behalf of Southern University for purposes of distributing materials for the Program. Southern University agrees to cooperate with EOServe Corp. to fulfill all requisite "physical presence" requirements of the State of Florida necessary for the deployment of online services on behalf of the Program. Any costs associated with the establishment of a physical presence in the State of Florida shall be borne by EOServe Corp.

(b). EOServe Corp. shall be solely responsible for marketing and advertising the Program to prospective and enrolled students in a lawful and commercially reasonable manner for success of the Program which may include, but is not limited to, market research and choice of format; developing (see below) and distributing all manner of unique advertising materials including brochures, product catalogues, web creative, use of the Program website, trade show displays, informational letters and PDFs; distributing sample copies of the Course Media to appropriate parties; telephone campaigns including unique sales scripts; direct mailing campaigns; TV, radio and all manner of Internet advertising; use of outside marketing representatives; and by such other means that EOServe Corp. deems suitable pursuant to Federal Higher Education legislation regarding marketing and in conformity with all regional accrediting agency standards. Southern University agrees that EOServe Corp. shall have the right to market and advertise Southern University programs together with other university programs, and therefore Southern University understands and agrees that Program students will be provided with information on other EOServe Corp. offerings.

(c). EOServe Corp. shall be solely responsible for designing and producing the marketing materials. Southern University will provide EOServe Corp. a limited and non-exclusive right to use, and general guidelines governing the use of, its trademarks including name, logo, shield or seal, as the case may be, to be used in the marketing and advertising for the Program. EOServe Corp. agrees to adhere to all such guidelines. Southern University shall in addition make available, or allow EOServe Corp. to use, Southern University images, text including descriptions of the school and its programs, and other existing marketing creative or materials, as necessary, to assist EOServe Corp. in fulfilling its obligations herein. Southern University must review and have the right to approve in advance, prior to their publishing, initial promotional, marketing or other materials, including the Program website and adjunct creative pieces, which make reference to the Program or Southern University.

Southern University shall approve the textual content and use of any Southern University intellectual property, and may reject those materials which Southern University finds objectionable and harmful to its reputation and status. Southern University shall not unreasonably withhold or delay its approval thereof. Southern University shall review requested materials within ten (10) days of delivery by EOServe Corp.; if EOServe Corp. does not receive feedback on materials presented for review within ten (10) days, EOServe Corp. shall proceed with its marketing efforts involving said materials. Thereafter, during the Term, EOServe Corp. shall be permitted, without further approval from Southern University, to use the materials to promote the Program, and to create derivative marketing materials, including making non-material textual content changes to the approved materials, and to vary the format and presentation of the materials, to accommodate different marketing and advertising protocols and formats.

(d). Southern University agrees to engage EOServe Corp. as its Agency of Record to perform educational marketing services herein described as follows: The management of relationships with online media vendors, affiliates, publishers and other marketing activities, and platforms necessary for educational lead management and generation, provide optimization of marketing packages, tracking and monitoring strategies, data quality management processes, web application development and graphic design to include creatives, splash pages, websites and multimedia production and post-production (Web-commercials, TV, Radio commercials), as well as develop overall online brand strategies for the Southern University online degrees and program(s).

This paragraph 3.6 (d) of the Agreement applies solely to online education program marketing and does not intend in any way to impair, supersede or abrogate any existing marketing or promotional agreements, including the renewal or rebid thereof, that Southern may presently hold as it pertains to athletics, general non-online marketing and/or recruitment of on-campus students.

EOServe Corp. is hereby authorized to purchase media and outside services on Southern University's behalf as Southern University's Agent. EOServe Corp. shall devote its best efforts to further Southern University's interests and endeavor to make their communications successful. EOServe Corp. shall supervise all advertising, media, marketing, graphic design, packaging, collateral and promotional material and any other marketing services needed in all formats for appearance, accuracy, timeliness, position, size, mechanical reproduction and consistency with proper representation of Southern University's brand and educational offerings. EOServe Corp. shall credit and pay all bills incurred on behalf of Southern University's account, and shall make no commitments or disbursements or incur obligations for Southern University's account without authorization or approval from Southern University.

Southern University agrees to allow EOServe Corp. to create and host on its proprietary servers the following: (i) informational sites that utilize the Southern University brand and (ii) informational micro-sites that utilize the sub-domain(s) within the root Southern.edu domain of Southern University for the purpose of creating and deploying online marketing platforms to market the Southern University online degrees and programs as per the terms of the Agreement between the Parties. One such sub-domain, but not limited to, will be named: (www. requestinformation@Southern.edu). All such materials and work product created must be approved in writing by Southern University prior to deployment by EOServe Corp.

Section 3.7 **Procedures Manual. (Southern/EOServe Corp.)** EOServe Corp. and Southern University shall work together prior to the launch of the Program to draft a document that contains all relevant Southern University policies and procedures for the Program, and establishes operating guidelines for the services EOServe Corp. will be providing (the "Procedures Manual"). EOServe Corp. shall provide a standard template which shall be modified as required by Southern University. The Procedures manual will serve as the training and operational guide for EOServe Corp. staff who are providing services on behalf of Southern University. Concurrently, EOServe Corp. shall provide Southern University with a document that contains all EOServe Corp. policies and procedures for the Program, and establishes operating guidelines for the services EOServe Corp. will be providing to Southern University.

Section 3.8 **Communication with Prospective Students. (EOServe Corp.)** EOServe Corp. shall be responsible for responding to all indications of interest from prospective students who are responsive to Program marketing and advertising. EOServe Corp. shall customize and employ its proprietary instant response technology and its customer relationship management (CRM) software, so that it shall be responsive in a timely manner. EOServe Corp. shall dedicate program representatives to the Program, who shall be specially trained and managed to represent Southern University. The role of EOServe Corp.'s program representatives shall be to provide further

information about Southern University and the program of interest, the process of application and the availability of student aid, and the requirements of attending an online program, all in accordance with the policies and procedures as defined in the Procedures Manual. EOServe Corp. program representatives shall also verify that prospective students possess the objective criteria as established by Southern University to participate in the Program, and inform those who do not meet those criteria of the same. Prospective students who meet all objective criteria and who express an interest in the Program will be directed to complete an application.

In the event that a prospective student lives within driving distance of the campus that offers a program that the Parties are not currently offering, online EOServe Corp. will refer that student to the SU campus admissions office.

Section 3.8a. **State Authorization Requirements.** (**Southern/EOServe Corp.)** EOServe Corp. recognizes that Southern University must make a good faith effort to apply for approval of Program offerings, and document its efforts in such states as may require approval for the recruitment of prospective online students within the particular state. EOServe Corp. commits to assisting Southern in the application of requisite approvals by the Louisiana Board of Regents or any other state agency that may be required to approve online program recruitment.

Section 3.9 **Southern University Admissions**. **(Southern/EOServe Corp.)** EOServe Corp. shall be responsible for obtaining application information and documentation from new prospective students, utilizing a Southern University–customized interface in EOServe Corp.'s proprietary online application system. The online application shall be configured in accordance with all Southern University application requirements. EOServe Corp. will make all application information available upon completion to Southern University through a secure web-based interface; EOServe Corp.'s system shall be interfaced with Southern University's student information system in a manner that is reasonably acceptable to Southern University, and the Parties will share in the cost of integration. Southern University shall evaluate completed applications within five (5) business days. EOServe Corp. shall also collect application fees and remit them to Southern University as part of the reconciliation, pursuant to Article V.

Southern University shall have the sole responsibility for, and full and complete control regarding, the selection of students who are eligible, after completion of the required application process, for admission to the Program. Individuals who desire to enroll in the Program shall comply with all application and admissions procedures of Southern University. Southern University shall notify EOServe Corp. electronically of students who are eligible for admission to the Program. Southern University reserves the right to deny admission to or continued enrollment in the Program to any applicant who, in Southern University's sole determination, does not conform with Southern University general admissions requirements or otherwise violates Southern University policies. All students admitted to this Program shall comply with all policies, procedures, rules and regulations of Southern University.

In the case of an applicant who has submitted the application, the application fee and all other required application components, said applicant will be subject to Southern University's provisional admissions policy as follows: Students who meet the ACT/SAT and the high school GPA requirements but have up to two deficiencies in the core curriculum may be admitted provisionally and may be fully admitted depending on the requirements being met once the official high school transcript has been received. Financial aid will not be available to students who are in this category.

Section 3.10 **Enrollment Coordination. (EOServe Corp.)** Prospective students who elect to submit an application will be assigned a dedicated EOServe Corp. Enrollment Coordinator who will be available to answer questions about the application and enrollment process and assist in the collection of necessary documentation, all in accordance with the Procedures Manual. EOServe Corp.'s Enrollment Coordinators shall regularly communicate each semester with Southern University's Registrar, Office of Financial Aid and other offices as necessary to ensure the orderly and timely processing of applications and student registration, and the resolution of any issues.

Section 3.10a. **Determination of Number of Enrollments. (Southern)** Southern University in its sole discretion shall determine the number of academic calendar year enrollments that EOServe Corp. shall facilitate and support on behalf of Southern University as part and parcel of the bundled services offered by EOServe Corp. to Southern University which include advertising and marketing of the Program, the implementation of recruitment and enrollment marketing plans, the support of students with the completion of financial aid documents, as well as retention services, tutoring and graduation coaching.

Section 3.11 **Course Registration and Retention. (Southern/EOServe Corp.)** Each semester, EOServe Corp. shall be responsible for communicating with new and previously admitted students in order to ensure students are registering for the appropriate classes and have the necessary information for the coming semester. The Parties will agree as part of the Program launch on the methodology students and the Parties will employ to allow students to timely and efficiently register for classes. EOServe Corp. acknowledges that registration materials may be education records as such term is defined in Section 3.17 of this Agreement, and that the requirements of the Family Educational Rights and Privacy Act ("FERPA") attach to EOServe Corp.'s custodianship and utilization of such education records. The role of EOServe Corp. representatives in this process is to assist students in understanding and completing the administrative process of signing up for courses, ordering books and securing method of payment, and does not include admitting students into the program or academic advisement. All students will have access to their degree plans via the Southern University online student access portal. Each semester, EOServe Corp. and Southern University shall establish enrollment goals for each course and program in the Program, based on EOServe Corp.'s evaluation of market demand, Southern University's capacity and an evaluation of existing enrollment and student progression. EOServe Corp. shall provide Southern University with an estimated enrollment forecast eight (8) weeks prior to each semester start and updates throughout the semester. Course registration shall take place no later than seven (7) business days prior to start of each new semester. Once a new student has been admitted by Southern University and registered for his or her first class, EOServe Corp. shall assign each student a dedicated retention staff member, who shall have the responsibility of contacting and messaging that student for the purposes of retention in the Program, including providing information and assistance as necessary, through the completion of the student's degree requirements and graduation. EOServe Corp. staff shall also be responsible for communicating with students as part of the withdrawal process.

Section 3.12 **Academic Fees. (Southern/EOServe Corp.)** Southern University, with the recommendation of EOServe Corp., shall determine the tuition rates and other academic fees for the courses. Tuition rates and other academic fees will be subject to annual review by Southern University, with the recommendation of EOServe Corp. Initial tuition rates are established in Section 5.1. Southern University currently charges the following academic fees for degree-seeking students: _____fee, a course fee and a _____ fee. These fees shall be set, and revisions made, in accordance with annual university policy. Other academic fees may be applicable if students wish additional services such as rush transcripts. The Parties understand and agree that tuition and fees are governed by Southern University's policies and State of Louisiana statutes and any and all fees charged to students must be in compliance with both.

Section 3.13 **Financial Aid. (Southern)** Degree-seeking students who are eligible for participation in Federal Title IV financial aid programs shall have access to such programs on the same basis, and subject to the same criteria, as students enrolled in other programs at Southern University. Southern University's financial aid department will take all reasonable steps necessary to timely and efficiently provide Program students with access to the Federal Title IV financial aid programs which it administers.

The role of EOServe Corp. representatives with regard to financial aid shall be limited to explaining to students the availability of financial aid, the process of applying for financial aid and the location of relevant forms and documents. EOServe Corp. shall direct students to the appropriate Southern University office for further assistance. The Parties agree that Southern University is exclusively responsible for packaging, awarding, receiving and disbursing student financial aid and that neither EOServe Corp. nor any EOServe Corp. staff shall have any role in such processes other than the informational activities described above. The specific procedures to be followed by EOServe Corp. as it pertains to the aforementioned shall be fully defined in Exhibit 5 of this Agreement.

In order to facilitate the role of EOServe Corp. representatives with regard to the provision of financial aid support services, Southern University agrees to provide EOServe Corp. with view access level II (third-party servicer access) to the COD and NSDLS platform for the sole purpose referenced herein.

Section 3.14 **Course Roster. (Southern/EOServe Corp.)** Each course roster will be established two (2) business days before the start of each semester, in order to allow for withdrawals. EOServe Corp. shall receive from Southern University's system, not later than seven (7) days after the end of the first course week of each course, a current roster listing students enrolled in the course for credit as of the end of the first course week of such course, and reconcile this with its internal records. Thereafter, throughout the academic period, EOServe Corp. shall update the roster with the students who registered for, but subsequently dropped, the course and the date the course

was dropped by the student. A student shall be deemed enrolled in a course if listed as an enrolled student in Southern University's system. Student withdrawal from any and all courses must be done in compliance with Southern University policy.

Section 3.15 **Billing and Collection; Withdrawal. (Southern)** Southern University shall set up appropriate merchant bank accounts for the collection of non-tuition fees. EOServe Corp. shall not be entitled to any revenue as it pertains to non-tuition fees. Southern shall be responsible for billing and collecting all non-financial aid tuition and other charges and fees relating to the Program, including, but not limited to, application and graduation fees. Students shall be required to make payments in cash or cash equivalents, such as credit cards. Refunds shall be allowed for withdrawals through Week 2 of the semester according to the following schedule. Subsequent to Week 2, there shall be no refunds upon withdrawal. Disposition of appeals for refund exceptions shall be determined by Southern University and EOServe Corp.

Week 1 100% Refund
Week 2 75% Refund

Pursuant to the provisions of this Section 3.15, Southern University shall confirm in writing to EOServe Corp. that said provisions are consistent and correspond to Southern University's current Tuition Refund Policies. Further, Southern University agrees to promptly notify EOServe Corp. in writing of any changes to Southern University's Tuition Refund Policies in order to allow the provisions of this Section 3.15 to remain consistent with Southern University Tuition Refund Policies.

Section 3.16 **Instructional Materials and Access Fees; Distribution. (EOServe Corp.)** EOServe Corp. shall establish the pricing for, and arrange for the availability of, all instructional materials, texts, software and access to technology. EOServe Corp. shall mail all course materials to students who enroll timely no later than three (3) days prior to the start of their course.

Section 3.17 **Assignment of Evaluating Faculty and Advising Faculty; Notification. (Southern/EOServe Corp.)** Southern University shall assign, contract with and pay Evaluating Faculty and Advising Faculty. Southern University shall work with EOServe Corp. to ensure that appropriate faculty information is included in materials sent to students for each course. No later than seven (7) days prior to start of the course, Southern University will provide EOServe Corp. with a list of the names of Evaluating Faculty, including their individual telephone, physical address and e-mail address information. EOServe Corp. shall be responsible for the cost of providing selected teaching faculty with a complimentary set of course materials including textbooks. Southern University shall be responsible for the cost of providing non-teaching faculty with the required faculty texts for each course. In the event Southern University's faculty members who are not teaching courses decide they wish to create course content and complete the instructional design of the courses, EOServe Corp. will compensate each particular Southern faculty member acting in such capacity with a course development fee ranging from $1500 (fifteen hundred dollars) to $7500 (seventy-five hundred dollars) per course depending on the type of course.

In the event the faculty is teaching the course and developing the course, then the faculty will be paid for the course they teach by terms. Rates will vary depending on each faculty member's credentials. The average rate is approximately $2500 (twenty-five hundred dollars) per eight- (8) week Term.

Section 3.18 **Academic Advisors. (Southern)** Southern University Academic Advisors will assist the Program Director and Graduate Dean with the assessment of prospective students and with collection and review of all applications, transcripts and other credentials related to making admission decisions and course placement, as well as the development of a unique Southern University degree plan for each student. Each student admitted to the Program will work with an Academic Advisor and be the recipient of the Southern University advising services afforded all Southern University students, including continued individual student advising related to discipline area concerns and satisfactory progress within the Program.

Section 3.19 **Staffing and Response Times. (Southern)** Southern University shall provide a minimum of one (1) Academic Advisor, whose time is devoted exclusively to the Program, for (approximately) every three hundred (300) students enrolled in the Program. The Parties by mutual agreement may revise the ratio of Academic Advisors to students if, during the Term or extension Terms, it becomes apparent that more Academic Advisors are necessary to provide excellent service to students and prospective students. Southern University shall

also provide adequate numbers of personnel at all other positions (e.g., financial aid, faculty) dedicated to the Program in order to provide timely responses to all student questions and requests for information. Responses shall be delivered via telephone, fax, e-mail or live chat. The Parties will create a standard operating procedure to address this function, recognizing the relevance of the Center for Teaching and Learning Excellence "CTLE" to this function.

The Parties recognize that enrollment activities and active classes will run through the traditional academic calendar's Christmas Break. Both Parties will maintain active staff and faculty during the Christmas Break in order to provide the services outlined in this Article III.

Section 3.20 **Grade Processing and Records. (Southern)** Southern University shall maintain an academic record for each student who has enrolled in a course for credit and shall record grades and credits received by such students, all in accordance with Southern University customary student record procedures. Southern University shall post an official grade report for each student who has completed a course for credit on the Southern University web-for-student interface, no later than two (2) weeks after the end of each academic period. Southern University will charge students its standard fee for paper transcripts. Southern University shall also provide appropriate access to student data to corporate tuition assistance providers who possess written authorization from their employee-students.

Section 3.21 **Records and Confidentiality. (EOServe Corp.)** EOServe Corp. shall have access only to such computer networks and file information of Southern University which are related to Program students and necessary for the performance of any services under this Agreement. The Parties shall work together prior to the launch of the Program to create a mutually agreeable, reasonable and efficient process by which to share such necessary information. EOServe Corp. shall maintain with the strictest confidentiality any and all information regarding students and employees of Southern University. EOServe Corp. shall not disclose to any third party any portion of confidential information about any student or employee of the University. EOServe Corp. shall comply with all applicable laws, regulations, rules, ordinances and codes promulgated by any federal, state, county, municipal and/or other governmental unit or regulatory body, including without limitation FERPA, and other laws and rules governing student and personnel privacy and confidentiality. Student education records within the control of EOServe Corp. shall be maintained in accordance with FERPA, and any records or student information obtained by EOServe Corp. from Southern University shall be subject to disposition or destruction in accordance with instructions from Southern University. Notwithstanding the foregoing, EOServe Corp. shall be permitted to use contact information obtained from prospective students by EOServe Corp. to solicit prospective students or registered students for other educational programs, including non-Southern University programs, unless the prospective student or student notifies EOServe Corp. that he or she does not wish to be contacted. In no event shall EOServe Corp. share such student contact information with third parties, through sale or otherwise. All EOServe Corp. communications with prospective students and students shall be pursuant to a clearly published privacy policy, which shall comply with all applicable laws.

Section 3.22 **Program Completion and Graduation. (Southern)** Southern University shall design the Program so that it is possible for a student to fulfill all the degree requirements described in the Southern University Degree Plan, provided the student satisfies all requirements for graduation according to the requirements of Southern University. The Application for Graduation form and graduation fee must be submitted to Southern University before eligibility for graduation will be evaluated.

Section 3.23 **Financial Auditing. (Southern/EOServe Corp.)** During the term of this Agreement and for one (1) year after termination or expiration of this Agreement, any party shall have the right to have a mutually agreeable, reputable third-party auditing firm inspect and audit the records of another other party relating specifically and only to the Program, at the inspecting party's expense, once a year, upon reasonable notice and during normal business hours, in order to verify the financial statements delivered pursuant to this section. The Parties understand and agree that EOServe Corp. will be subject to the jurisdiction of the State of Louisiana legislative auditor who shall be entitled to audit all documents pertaining to the transactions under this Agreement.

Section 3.24 **Executive Meetings; Dispute Resolution. (Southern/EOServe Corp.)** During the Term, the Parties agree that Southern University and EOServe Corp.'s senior executives shall meet in person upon the reasonable request of the other to review operations and address concerns, issues and new business, in any event

no less than once per year and more often as required. In the event of a material dispute, or in the event that one party has given notice of a material breach pursuant to Article VI, the Parties agree that an Emergency Executive Meeting shall be held within ten (10) business days of receipt by one party of the other's written notice. Neither party may bring any legal action prior to the later of the conclusion of an Emergency Executive meeting or thirty (30) days from receipt of the other's written notice.

Section 3.25 **One-Year Program Evaluation Period. (Southern/EOServe Corp.)** Upon the mutual agreement of the Parties as it pertains to the selection and launch of initial online degree programs to be offered by Southern University, the Parties agree to offer the initial online degree programs without further changes for a period of one (1) year. Upon the conclusion of the first year, the initial online degree programs shall be mutually reviewed for possible revisions and curricular adjustment. It is the goal of the Parties to allow sufficient time for observation, assessment and evaluation of the effectiveness and efficiency of the initial online degree programs in order to improve their continued delivery.

ARTICLE IV.
RIGHTS AND RESPONSIBILITIES

Section 4.1 **Ownership of Rights.** The copyrights and the intellectual property rights and interests in all of the Course Media provided by Southern University shall be owned by Southern University. Southern University shall retain sole rights to all Academic Content it contributes to the development of the Course Media. EOServe Corp. shall at all times retain sole ownership and rights to its recruitment and advertising websites and marketing technologies, including all rights, title and interest in and to all software development tools, know-how, methodologies, processes, technologies or algorithms used in providing the recruitment and advertising, websites and marketing technologies which are based on trade secrets or proprietary information of EOServe Corp., or are otherwise owned or licensed by EOServe Corp. EOServe Corp. shall be deemed the sole author and owner of all computer code, including CGI, ASP, .NET or HTML, databases, graphics and data, and their attendant intellectual property rights, that are created or acquired by EOServe Corp. and incorporated into the recruitment and advertising websites or marketing technologies, or incorporated into any work embodying or derived from any portion of the LMS, websites or marketing technologies. Southern University shall be deemed the sole author and owner of any marks, graphics or data provided by Southern University and incorporated into the Program website or marketing materials as well as Southern University course content developed and deployed by Southern University.

Section 4.2 **Exclusivity.** During the term of this Agreement, including renewals, Southern University agrees to work exclusively with EOServe Corp. in regard to developing, marketing and delivering the Program, including comparable graduate degrees, certificates and the individual courses offered. Southern University may offer independently the same classes and degrees included in the Program via classroom attendance at one or more of its campuses or external facilities.

Southern University, during the term of this Agreement, will not by itself, or in cooperation with any entity other than EOServe Corp., deliver (or provide consulting services to develop the capacity to deliver) a distance learning program that would compete with the Program, including specifically an Internet version.

Section 4.3 **Additional Programs.** During the Term of this Agreement, the Parties may upon mutual agreement develop and offer additional courses and degrees to be incorporated into this Agreement. Any additional courses and degrees shall be added via written addendum, and offered pursuant to the terms and conditions of this Agreement, including the then-current distribution percentage.

Section 4.4 **Tuition-Free Enrollments**. EOServe Corp. and Southern University shall each be allowed to enroll their employees, as well as employee spouses and dependents, in the Program, and tuition shall be charged pursuant to the Parties' respective personnel policies. These enrollments shall be subject to availability as determined by the Parties. All instructional materials, textbooks, software and technology access fees shall be charged at the then existing rates by EOServe Corp. and provided by EOServe Corp.

ARTICLE V.
FINANCIAL TERMS

Section 5.1 **Tuition.** At the inauguration of the Program, tuition for the degree program shall be four hundred dollars ($400.00) per credit hour. EOServe Corp. shall make periodic (at least annually) recommendations concerning market pricing and recommended adjustments to tuition, and/or Southern University may advise EOServe Corp. of intended tuition adjustments, all of which shall be subject to Southern University's approval. The Parties also agree that EOServe Corp. may offer up to a ten percent (10%) discount to Corporate Customers at EOServe Corp.'s discretion; greater discounts may be offered upon mutual consent of EOServe Corp. and Southern University.

Section 5.2 **Gross Revenue Definition.** For purposes of this Agreement, "Gross Revenue" means tuition revenue determined by multiplying the then-current credit hour tuition rate charged, net of discounts, times the number of registered credit hours less any withdrawals, returns, refunds, bad debt expenses, credit card expenses, state and federal licensing fees and costs, postage and shipping expenses, bank account charges and sales taxes if and where assessed by law for the academic period, plus any interest earned in any related bank account. All revenue defined as unearned by Generally Accepted Accounting Principles (GAAP) (for example, pursuant to the pre-payment of tuition), shall only be distributed to the Parties when considered earned by GAAP based on the Course Registrations pursuant to Article III.

Section 5.3 **Financial Arrangements.**

(a). EOServe Corp. shall pre-pay to Southern University a pre-payment of fifty thousand dollars ($50,000) as a good faith advance on Program revenue distributions and to cover any costs incident to the creation and initial administration of the Program. In the event additional, non-projected costs incident to the creation and initial administration of the Program occur, EOServe Corp. will provide additional pre-payment funds as mutually agreed upon by the Parties. EOServe Corp. shall make the pre-payment to Southern University when the Parties jointly agree to begin active development of the Program courses. Southern University's repayment of these pre-paid fees to EOServe Corp. shall commence following the cumulative distribution of one hundred thousand dollars ($100,000) to Southern University in Program revenues, at which time EOServe Corp. shall begin to deduct six (6) equal amounts from subsequent gross revenue distributions to Southern University for each of the six (6) subsequent semesters, the total deducted to equal the amount pre-paid pursuant to this term, without interest. The Parties agree to adjust the repayment schedule accordingly if there are insufficient revenues to support the repayment schedule. In the event the Program does not provide sufficient revenues prior to Termination (for any reason other than material breach by Southern University) to support any or all of the repayment defined above, EOServe Corp. agrees that any repayment obligation outstanding at the time of Termination shall be forgiven.

(b). Student application and graduation fees shall be paid in their entirety to Southern University. Other Academic Fees as noted in Article III above shall also be paid in their entirety to Southern University if the additional fee services are paid by the students.

(c). The non-academic fees noted in Article III collected for instructional materials, textbooks, software and technology access as solely determined by Southern University shall be paid in their entirety to Southern University. This shall include all delivery costs. EOServe Corp. shall not receive any distribution from these fees, nor acquire any costs or expenses as a result of non-academic fees collected by Southern University and paid to Southern University by students enrolled in the Program.

(d). If an enrolled Program student subsequently enrolls in a Southern University traditional classroom-based course, Southern University and EOServe Corp. shall share the revenue derived from said student as follows: Southern shall retain 60% of revenue, and EOServe Corp. shall retain 40% of revenue for the campus course.

With the special permission of the Program Director, a student in the on-campus program may be permitted to enroll in online courses, subject to the revenue-sharing terms of this Agreement.

(e). In consideration of its services outlined above, EOServe Corp. shall be entitled to the following percentages of the Gross Revenue from the Program:

i) Revenue as defined in Section 5.2 of this Agreement, occurring from new students enrolled in online degree programs under the terms of this Agreement shall be shared on a 70/30 basis with seventy percent (70%) of fees to Education Online Services Corporation and thirty percent (30%) of fees to Southern University for all Terms completed by each student.

ii) Fee Schedules are based on two (2) courses per term for each student enrolled in online degree programs under the terms of this Agreement at a per-credit hour cost of no less than four hundred dollars ($400.00).

Section 5.4 **Distributions.** Pursuant to Section 5.3, there shall be a distribution of Gross Revenues collected to the Parties as follows: Upon receipt of funds by Southern University from funding sources (i.e., Cash payments, Federal Unsubsidized Direct Loan, Federal Subsidized Direct Loan, Federal Perkins Loan, Federal Graduate PLUS Loan, Federal Parent PLUS Loan, Federal Pell Grant, Federal Academic Competitiveness Grant, Federal National SMART Grant, Federal SEOG Program, other Title IV and/or Title VII aid), Southern University shall pay EOServe Corp. its portion of Gross Revenue from the Program within ten (10) days of receipt of funds from the abovementioned sources. The Parties agree to perform one (1) end-of-month reconciliation each month, for the purposes of determining and reconciling any overages or shortages in distribution of Gross Revenues. Upon such reconciliation, the Parties agree to pay each other any overages or shortages that may be determined, within ten (10) days of completion of reconciliation.

Section 5.5 **Tuition Refund Policy**. The Parties understand and agree to abide by Southern University's Tuition Refund Policy as follows:

i) Southern University may bill the student for any unpaid institutional charges.
ii) The Bursar's Office will evaluate tuition/fee reductions to non-Title IV programs on a case-by-case basis.
iii) Aid will be returned to aid programs in the priority utilized by Southern University.

The net amount (as opposed to the gross amount of the loan borrowed) of Federal Direct subsidized and unsubsidized) and Federal PLUS Loans (graduate and parent) will be used in the return calculation.

All financial aid recipients will be held accountable under the University's Satisfactory Academic Progress (SAP) policy.

The Financial Aid Office is required by federal regulation to evaluate students receiving all Failing, Incomplete or Unsatisfactory grades for the semester. These are generally students neglecting to officially withdraw from classes through the Registrar's Office.

ARTICLE VI.
TERM AND TERMINATION

Section 6.1 **Effective Date; Term of Agreement**. The Effective Date of this Agreement shall be the date upon which the last of the Parties has signed below. The Term of this Agreement shall be for a period of five (5) years from the Initial Enrollment Date, with a five-year (5) automatic renewal, unless previously terminated in accordance with Section 6.2.

Section 6.2 **Termination.**

(a). If Southern University loses its accreditation, is placed on probation or is placed on notice by its then-current accrediting body and/or Southern University is no longer recognized by the U.S. Department of Education as an accredited educational institution, then EOServe Corp. has the right to terminate this Agreement upon thirty (30) days' written notice to Southern University.

(b). The Parties acknowledge that the Program involves degree-seeking students taking part in a degree program. Therefore, in the event of time or either party terminating this Agreement, the Parties agree that they will cease accepting new students upon Termination, but shall continue to fulfill each of their respective obligations as set forth in this Agreement for all students who have enrolled and/or been admitted to the Program prior to Termination, from the time of Termination through each student's successful completion of his or her degree, certificate or course, or each student's departure from the Program. To clarify this provision: it is the intent of the Parties that after any termination of this Agreement, the participation of all existing students will continue until they graduate or depart from the Program. The Parties' rights and duties as defined in the Agreement will continue; therefore, the Parties agree that it will take several years (up to a maximum of ten (10) years) to complete this process. During this period of time specifically, the revenue sharing and all related rights and duties shall continue despite the termination of the Agreement. Also during this period of time, the Parties agree that neither will attempt to enroll this student base in any other online program.

(c). Upon termination of this Agreement for any reason, EOServe Corp. shall make the Course Media available to satisfy its obligations under Subsection (b) above.

(d). If Southern University or EOServe Corp. is at anytime adjudged bankrupt by a court with appropriate, proper and legal jurisdiction and venue, which bankruptcy is not cured within one hundred and twenty (120) days of such occurrence, then the other party has a right, with thirty (30) days' notice to the other, to terminate this Agreement. The Parties would then follow the termination procedures in Sections 6.2(b) and 6.2(c).

(e). This Agreement may be terminated by either Southern University or EOServe Corp. upon a material breach of the Agreement by the other party, provided, however, that the non-breaching party will provide the breaching party with a written notice of default, stating any remedies it intends to seek if such default is not cured, and provided, further, that on receipt of such notice, the breaching party will have ninety (90) days to cure the default. Upon such termination, or upon termination by mutual consent or by a court order, the Parties will follow termination procedures in Sections 6.2(b) and 6.2(c). Material breach is defined as a failure to perform a substantial part of the contract or one or more of its essential terms or conditions, or if there is such a breach of contract as substantially defeats its purpose.

(f). If the contract is terminated by Southern University or EOServe Corp. or by agreement between these Parties or by a court order, or in the event a material breach of this Agreement is not cured within the curative period provided for in Subsection 6.2(f) hereinabove, regardless of whether this Agreement is terminated, the non-breaching party shall be entitled to pursue all remedies it may be entitled to at law, in equity or both at law and in equity. The provisions of Section 6.2 shall survive the termination of this Agreement.

(g). Termination due to Non-appropriations: In the event Southern University is unable to fulfill the terms of this Agreement due to a non-appropriation of sufficient funds to perform the obligations of this Agreement, then such event will authorize either party to terminate this Agreement upon sixty (60) days' notice without any further obligation upon any party whatsoever. The dissolution or merger of the Board, closure of the institution or merger of the institution shall be treated as a non-appropriation and authorize termination of the Agreement upon sixty (60) days' notice without any further obligation.

ARTICLE VII.
REPRESENTATIONS AND WARRANTIES OF SOUTHERN UNIVERSITY

Southern University represents and warrants to EOServe Corp. as follows:

Section 7.1 **Corporate Status.** Southern University is a not-for-profit corporation duly organized, validly existing and in good standing under the laws of the State of Louisiana and in any other state in which its facilities are located.

Section 7.2 **Corporate Authorization.** Southern University is an educational institution accredited through the Southern Association of Colleges and Schools. Southern University is a 501(c)(3) organization pursuant

to the Internal Revenue Code of 1986 as amended. Southern University offers undergraduate and graduate degrees through classroom instruction.

Section 7.3 **No Conflict.** Neither the execution, delivery and performance of this Agreement by Southern University, nor the consummation of the transaction contemplated by this Agreement does or will, after the giving of notice or the lapse of time, or otherwise, (a) conflict with, result in a breach of or constitute a default under, the Certificate of Incorporation or By-Laws of Southern University, or any federal, state or local law, statute, ordinance, rule or regulation, or any court or administrative order or process, or any loan agreement, indenture or other instrument for borrowed money to which Southern University is a party, or any contract, agreement, arrangement, commitment or plan to which Southern University is a party; and (b) result in the creation of any mortgage, pledge, lien, claim, charge, encumbrance or other adverse interest, upon any of the assets and skills which Southern University is contributing to this Agreement. Subject to the foregoing, the Parties acknowledge that this Agreement is subject to approval by the Louisiana Division of Administration, Office of Contractual Review.

Section 7.4 **Other Parties.** Neither this Agreement nor any other transaction contemplated by this Agreement was induced or procured through any person, firm, corporation or other entity acting on behalf of, or representing, Southern University as a broker, finder, investment banker, financial advisor or in any other similar capacity.

Section 7.5 **Litigation.** There is neither any pending litigation nor, to Southern University's knowledge, any threatened litigation, at law or in equity, before or by any federal, state, municipal or other governmental court, department, commission, board, bureau or agency, domestic or foreign, against Southern University, relating to, or adversely affecting the right, or relating to Southern University's ability to perform its obligations under this Agreement, and any other documents or instruments to be executed in connection herewith.

Section 7.6 **Notification.** Southern University has not received any written notice nor has Southern University otherwise been made aware that the conduct of its business is carried on or conducted, or has been carried on or conducted, in violation in any material respect of any federal, foreign, state or local law, statute, ordinance, rule or regulation, or any court or administrative order or process, which would prevent Southern University from entering into and performing its obligations under the terms and provisions of this Agreement.

Section 7.7 **Survival.** The provisions of all sections of this Article VII shall survive the termination of this Agreement.

Section 7.8 **Content Warranties.** Southern University represents and warrants to EOServe Corp. that it owns the Academic Content or has obtained all rights in the Academic Content to provide the Academic Content to EOServe Corp. and convey the licenses granted herein to EOServe Corp. so that its use by EOServe Corp. to provide the services on behalf of the Program does not violate the intellectual property rights or other rights of a third party.

ARTICLE VIII.
REPRESENTATIONS AND WARRANTIES OF EDUCATION ONLINE SERVICES CORPORATION

EOServe Corp. represents and warrants to Southern University as follows:

Section 8.1 **No Incentives to EOServe Corp. Employees.** EOServe Corp. represents and warrants to Southern University that EOServe Corp. does not provide incentive compensation to its employees. EOServe Corp. is a third-party bundled-services provider, unaffiliated with Southern University, and provides Southern University with marketing, advertising and recruitment services, enrollment application assistance, course support for online delivery of course and technology.

Section 8.1a. **Corporate Status.** EOServe Corp. is a corporation duly organized, validly existing and in good standing under the laws of the State of Florida.

Section 8.2 **Corporate Authorization.** EOServe Corp. has full rights and power to enter into, and perform its obligations under, this Agreement, and has taken all requisite action, whether corporate or otherwise, to

authorize the execution, delivery and performance of this Agreement; and this Agreement has been duly authorized, executed and delivered by EOServe Corp. and is binding upon, and enforceable against, EOServe Corp. in accordance with its terms.

Section 8.3 **No Conflict.** Neither the execution, delivery and performance of this Agreement by EOServe Corp. nor the consummation of the transaction contemplated by this Agreement does or will, after the giving of notice or the lapse of time, or otherwise, (a) conflict with, result in a breach of or constitute a default under the Certificate of Incorporation or By-Laws of EOServe Corp., or any federal, state or local law, statute, ordinance, rule or regulation, or any court or administrative order or process, or any loan agreement, indenture or other instrument for borrowed money to which EOServe Corp. is a party, or any contract, agreement, arrangement, commitment or plan to which EOServe Corp. is a party; and (b) result in the creation of any mortgage, pledge, lien, claim, charge, encumbrance or other adverse interest, upon any of the assets and skills which EOServe Corp. is contributing to this Agreement.

Section 8.4 **Other Parties.** Neither this Agreement nor any other transaction contemplated by this Agreement was induced or procured through any person, firm, corporation or other entity acting on behalf of, or representing EOServe Corp. as a broker, finder, investment banker, financial advisor or in any other similar capacity.

Section 8.5 **Other Approvals.** No approval, authorization, consent or other order or action of, or filing with any court, administrative agency or other governmental authority is required for the execution and delivery by EOServe Corp. of this Agreement, or such other agreements and instruments contemplated hereby.

Section 8.6 **Litigation.** There is neither any pending litigation nor, to EOServe Corp.'s knowledge, any threatened litigation, at law or in equity, before or by any federal, state, municipal or other governmental court, department, commission, board, bureau or agency, domestic or foreign, against EOServe Corp., relating to, or adversely affecting the right, or relating to EOServe Corp.'s ability to perform its obligations under this Agreement, and any other documents or instruments to be executed in connection herewith.

Section 8.7 **Notification.** EOServe Corp. has not received any written notice nor has EOServe Corp. otherwise been made aware that the conduct of its business is carried on or conducted, or has been carried on or conducted, in violation in any material respect of any federal, foreign, state or local law, statute, ordinance, rule or regulation, or any court or administrative order or process, which would prevent it from entering into and performing its obligations under the terms and provisions of this Agreement.

Section 8.8 **Survival.** The provisions of all sections of this Article VIII shall survive the termination of this Agreement.

ARTICLE IX.
INDEMNIFICATION

Section 9.1 **Hold Harmless.**

(a). Southern University agrees to indemnify and hold EOServe Corp. harmless from and against any loss, damage or expense (including, without limitation, reasonable fees of attorneys and legal assistants including before, during and after trial, on appeal, or in bankruptcy, administrative or arbitration proceedings) suffered by EOServe Corp. resulting from (i) any material breach by Southern University of this Agreement; and (ii) any inaccuracy in or breach of any of the representations, warranties or covenants made by Southern University to this Agreement.

(b). EOServe Corp. agrees to indemnify and hold Southern University harmless from and against any loss, damage or expense (including, without limitation, reasonable fees of attorneys and legal assistants including before, during and after trial, on appeal, or in bankruptcy, administrative or arbitration proceedings) suffered by Southern University resulting from (i) any material breach by EOServe Corp. of this Agreement; and (ii) any inaccuracy in or breach of any of the representations, warranties or covenants made by EOServe Corp. to this Agreement.

Section 9.2 **Knowledge of Claim.** Upon obtaining knowledge thereof, the indemnified party shall promptly (but in any event within thirty (30) days) notify the indemnifying party in writing of any claim or demand which it has determined has given or could reasonably be expected to give rise to a right of indemnification under this Agreement. If such claim or demand relates to a claim asserted by a third party, the indemnifying party shall notify the indemnified party within thirty (30) days if it intends to contest any such claim or demand and shall have the right to employ counsel reasonably acceptable to the indemnified party, and the indemnified party shall cooperate in the defense of any such claim or demand, provided that the indemnifying party shall pay all out-of-pocket expenses incurred by the indemnified party in regard thereto. So long as the indemnifying party is defending in good faith any such claim or demand asserted by a third party, the indemnified party shall not settle or compromise such claim or demand. The indemnified party shall make available to the indemnifying party and its agents all records and other materials in its possession reasonably required for use in contesting any third-party claim or demand. Whether or not the indemnifying party so elects to defend any such claim or demand, the indemnified party shall not have any obligation to do so and the indemnified party shall not waive any rights it may have against the indemnifying party hereunder with respect to any such claim or demand by not defending same.

Section 9.3 **Indemnity Reimbursement.** Subject to the indemnifying party's right to defend third-party claims as set forth above, the indemnifying party shall reimburse the indemnified party promptly (but in any event within thirty (30) days) upon demand for any payment made or loss suffered by the indemnified party in respect of any liability, loss, damage or expense to which this Article X relates.

Section 9.4 **Costs and Fees.** Southern University's and EOServe Corp.'s obligation to indemnify hereunder shall include the reasonable costs of investigating or defending any such claim, contract, obligation, litigation or proceeding, and shall include the loss, damage or expense, including reasonable counsel fees (including charges for paralegals, before, during, and after trial, on appeal, or in bankruptcy, arbitration or administrative proceedings), incurred in connection therewith.

Section 9.5 **Survival.** The provisions of all sections of this Article IX shall survive the termination of this Agreement.

ARTICLE X.
MISCELLANEOUS PROVISIONS

Section 10.1 **Notices.** Any notices given pursuant to this Agreement shall be effective on the date of delivery if delivered by person or by facsimile transmission, or forty-eight (48) hours subsequent to the date of mailing if sent by overnight delivery or by Registered or certified mail return receipt requested, as follows:

If to Southern University:	Dr. Ronald Mason, Jr. Southern University JS Clark Administration Building Office of the President, 4th Floor Baton Rouge, LA 70813
If to Education Online Services Corporation	Barry M. Singer Chief Executive Officer Education Online Services Corporation 1560 Sawgrass Corporate Parkway, 4th floor, Sunrise, FL 33323
Copy to:	Joseph Mazon Vice President - Legal *and*

Donald S. Goldrich
Corporate Counsel
Education Online Services Corporation
1560 Sawgrass Corporate Parkway, 4th floor,
Sunrise, FL 33323

Section 10.2 **Further Assurances.** Southern University and EOServe Corp. shall execute and deliver such other and further instruments as may be required to carry out the intent and purpose of this Agreement. The provisions of this section shall survive the termination of this Agreement.

Section 10.3 **Independent Entities.** Neither Southern University nor EOServe Corp. nor any of their respective employees or consultants is or shall be deemed at any time during the term of this Agreement, directly or indirectly, to be an employee or consultant of the other party and Southern University, and EOServe Corp. each assume full and exclusive responsibility for payment of all applicable federal, state and local income taxes, gross receipt taxes, FICA, unemployment and disability benefits and worker's compensation obligations arising out of or relating to such employer's or consultant's performance of services on behalf of Southern University and EOServe Corp. pursuant to this Agreement.

Section 10.4 **Relationship of Parties.** The relationship between Southern University and EOServe Corp. is intended to be that of independent contractors, and this Agreement shall be construed to fulfill that intent. Nothing in this Agreement shall construe or be construed as the creation of a partnership or joint venture.

Section 10.5 **Captions.** Section titles or captions contained in this Agreement are inserted as a matter of convenience and for reference and in no way define, limit, extend or describe the scope of this Agreement or the intent of any provisions hereof.

Section 10.6 **Pronouns.** All pronouns and any variations thereof shall be deemed to refer to the masculine, feminine, neuter, singular or plural as the context shall require.

Section 10.7 **Counterparts.** This Agreement may be executed in two counterparts, and all counterparts so executed shall for all purposes constitute one Agreement, binding on all of the Parties hereto, notwithstanding that all Parties shall not have executed the same counterpart.

Section 10.8 **Benefit.** Except as herein otherwise provided, this Agreement shall be binding and inure to the benefit of the Parties hereto, their heirs, legal representatives, successors and assigns.

Section 10.9 **Changes in Writing.** This Agreement embodies and constitutes the entire understanding between the Parties with respect to the transaction contemplated hereby, and all prior agreements, understandings, representations and statements, oral or written, are merged into this Agreement. No provision hereof may be waived, modified, amended, discharged or terminated except by an instrument signed by the party against whom the enforcement of such waiver, modification, amendment, discharge or termination is sought, and then only to the extent set forth in such instrument.

Section 10.10 **Assignment.** Southern University may not assign or transfer any of its rights and/or obligations under or arising from this Agreement without the prior written consent of EOServe Corp.

Section 10.11 **Confidentiality and Non-Disclosure**.

(a). Southern University, and EOServe Corp. agree that any non-public information regarding the documents and information concerning the subject matter of this Agreement, and a party's business, however recorded or transferred including derivations thereof, including but not limited to a party's plans, programs, processes, products, costs, equipment, finances, operations or customers, which is furnished or disclosed by that party (the "Disclosing Party") to the other (the "Receiving Party") is considered confidential, and shall include information which is designated as confidential or information which should be regarded as confidential given the nature and circumstances of its disclosure (collectively "Confidential Information"). The Receiving Party will hold

Confidential Information in confidence and will not, without prior written permission of the Disclosing Party, disclose such Confidential Information to any person other than its own employees and agents who have a reasonable need to know in connection with this Agreement. The Receiving Party shall take any and all measures reasonably necessary to protect and preserve the confidentiality of Confidential Information, including due care in the choice and manner of the disclosure of the Confidential Information to employees or agents. The Receiving Party acknowledges that significant economic benefit accrues to the Disclosing Party due to the confidential nature of the Confidential Information, and the Receiving Party agrees that all Confidential Information provided or disclosed to the Receiving Party shall remain the sole and exclusive property of the Disclosing Party. The Receiving Party will use the Confidential Information exclusively in connection with the performance of its obligations under this Agreement and shall not use such Confidential Information for any other purpose or use whatsoever. The Receiving Party agrees to exercise the same degree of care in handling Confidential Information that it exercises toward its own but in no event less than due care. Upon termination of this Agreement for any reason, or upon request of the Disclosing Party, each party will promptly return to the other party, or certify destruction of, all Confidential Information (and any copies thereof) in its possession.

(b). The obligations of non-disclosure and non-use imposed hereunder do not apply to information that the Receiving Party can show through competent documentation (i) is or became known publicly, other than through the acts or omissions of the Receiving Party; (ii) was learned by the Receiving Party from a third party entitled to disclose it; (iii) was already known to the Receiving Party before receipt from the Disclosing Party and was not acquired from the Disclosing Party or its employees, either directly or indirectly; (iv) was independently developed by the Receiving Party; or (v) must be disclosed by operation of law. In the event that an order by a court or government entity having competent jurisdiction requires disclosure of the Disclosing Party's Confidential Information, it shall not be a breach of this term for the Receiving Party to disclose Confidential Information to the extent, and only to the extent, required by that order, provided that the Receiving Party shall, to the greatest extent practicable, notify the Disclosing Party prior to any required disclosure and cooperate with the Disclosing Party in seeking relief from that court order. This Section shall survive the termination of this Agreement.

(c). The Receiving Party acknowledges and agrees that monetary damages may provide an inadequate remedy for breach of this section, and therefore that, in addition to remedies available otherwise under this Agreement or at law, the Disclosing Party may be entitled to preliminary and permanent injunctive relief restraining the Receiving Party from any unauthorized disclosure or use of any Confidential Information, in whole or in part, and from rendering any service to any person, firm, corporation, association or other legal entity to whom or to which Confidential Information, in whole or in part, has been disclosed or is threatened to be disclosed in violation of this Agreement. The Receiving Party shall notify the Disclosing Party as soon as practicable upon discovery of any unauthorized use or disclosure of Confidential Information and will cooperate with the Disclosing Party in every reasonable way to prevent further unauthorized disclosure or use of the Confidential Information.

Section 10.12 **Construction.** No provision of this Agreement shall be construed by any court or other judicial authority against any party hereto by reason of such party's being deemed to have drafted or structured such provisions.

Section 10.13 **Approvals.** Notwithstanding anything to the contrary contained in this Agreement, any reference in this Agreement to consents or approvals being required by either Southern University or EOServe Corp. shall always be construed and interpreted to mean that such approvals and consents shall not be unreasonably withheld or delayed.

Section 10.14 **Compliance with Law.** It is the intention and the agreement of the Parties hereto that each will carry out its obligations and responsibilities hereunder in full conformance with all applicable federal, state and local laws, rules and regulations.

Section 10.15 **Severability.** If any provision of this Agreement shall be held in doubt or unenforceable by a court of competent jurisdiction, the invalidity or unenforceability of such provision shall not affect the remaining provisions of this Agreement.

Section 10.16 **Mailing Lists.** It is understood and agreed that Southern University will make appropriate (as determined by Southern University) mailing lists and other promotional materials available to EOServe Corp. to use solely in developing and promoting the Program and any additions or amendments thereto.

Section 10.17 **Force Majeure.** In the event performance of this Agreement, or any obligation hereunder, is prevented, restricted or interfered with by reason of acts of God, wars, revolution, civil commotion, acts of public enemy, embargo, acts of the Government in its sovereign capacity, labor difficulties or any other circumstances beyond the reasonable control and without the fault or negligence of the party affected, the party affected, upon giving prompt notice to the other party, shall be excused from such performance on a day-to-day basis to the extent of such prevention, restriction or interference (and the other party shall likewise be excused from performance of its obligations on a day-to-day basis until the delay, restriction or interference has ceased), provided, however, that the party so affected shall use its best reasonable efforts to avoid or remove such causes on nonperformance and both Parties shall proceed whenever such causes are removed or cease.

Section 10.18. **Governing Law.** The laws of the State of Louisiana shall apply in any legal issue, and the agreed-upon venue and jurisdiction for any legal proceeding is East Baton Rouge Parish, Louisiana.

Section 10.19 **Attorney's Fees.** In the event of any litigation or judicial action arising out of or related to this Agreement, the prevailing party shall be entitled to any costs or expenses available under the law.

Section 10.20 **Non-Solicitation.** During the term of this Agreement, and for a period of two (2) years after termination for any reason, neither party shall, directly or indirectly, for itself or for any other person, firm, corporation, partnership, association or other entity, employ or solicit for employment, any person employed or under contract (whether as a consultant, employee or otherwise) by or to the other party, unless such employee or former employee has not been employed by the employing party for a period of two (2) years.

IN WITNESS WHEREOF, the Parties hereto have executed this Master Services and Licensing Agreement as of the date written below.

Southern University	**Education Online Services Corporation, Inc**
By: _____	By:_____
Name: _____	Name:_____
Title: _____	Title:_____
Date: _____	Date:_____

Exhibit 1 for Master Services and Licensing Agreement
EOServe Corp. Learning Management Platform

This exhibit describes the Learning Management System Services that Southern University shall receive through the EOServe Corp. System. The specific features and functionality reflected in the services are subject to change and discontinuation by EOServe Corp. at its sole discretion.

1. **Learning Management System**. A learning management system (LMS) is a software application for the administering, documenting, tracking and reporting of training programs, classroom and online events, e-learning programs and training content and includes the features set forth below:

Learning Management Platform Features:

- Southern University's Logo for LMS branding
- Login Access
- Personalized Course Access Page (this will be the Southern University landing page, i.e., www.southern-online.com)
- Online Help Pages
- System, Course and Student-Level Administrative Reporting
- Profile Update - Allows user to update his or her system password, e-mail address and other personal information listed in the campus directory
- Assessment Tools for managing outcomes and user experiences

2. **Southern University's Responsibilities for Provision of Learning Management System Element**s. Subject to Southern University's cooperation and participation, EOServe Corp. will develop and build Southern University's Online Platform in accordance with this Agreement and EOServe Corp.'s standard development efforts and methodology. The Parties agree as follows:

a) Logos, Colors, Art Design. Southern University agrees to provide EOServe Corp. within seven (7) days of request with Southern University's logo and colors.
b) Site Information. Southern University agrees to provide EOServe Corp. within fifteen (15) days of request with site content including but not limited to the following:
c) Course description and syllabi for the appropriate online degree programs shall be aligned with Southern University learning outcome and goals to include:

- Course Description
- Course Objectives
- Course Requirements
- Method of Evaluation
- Textbooks
- Additional Required Materials (must also be provided by school)
- Weekly Schedule of lessons and assignments

d) Other Information. Southern University agrees to provide EOServe Corp. with the following information upon execution of the Agreement:

- Academic calendar of Southern University
- Administrative calendar of Southern University
- Financial Aid calendar of Southern University

3. **Launch Schedule**. EOServe Corp. will launch the online platform under the Southern University domain name on or before the fortieth (40^{th}) day following the date of EOServe Corp.'s receipt of the required site information from Southern University.

4. **Online Courseware.** "Courseware" shall mean the various online course delivery options available through the EOServe Corp. System.

a) Storage Space. Storage space allocated for usage of Courseware and other applicable EOServe Corp. Services is provided in accordance with EOServe Corp.'s then-current storage policies.

b) Courseware Features.

- Homepage
- Quick Summary
- My Pretests (features questions designed to help Southern University understand student strengths and needs for support)
- My Lessons
- My Tutors
- My Sessions (archived tutor sessions so students can refer to their coursework)
- My Submissions (where students submit completed work)
- My Usage (tracks the time students have spent in lessons with a tutor as well as how many documents have been submitted through My Submissions)
- Threaded Discussions
- E-mail

c) EOServe Corp. Evaluation is an Internet-based product that allows its Educational Partners to gather course evaluation and survey feedback across courses, programs or an entire institution. EOServe Corp. Evaluation also provides a distribution mechanism for the results of these processes to faculty and administrators.

d) Reporting: EOServe Corp. will provide regular reports to Southern University detailing academic progress, fiscal status and student information.

Exhibit 2 for Master Services and Licensing Agreement
Technical Support and Other Services

1. **Technical Support**. EOServe Corp. will provide telephone and online technical support associated with the use of the EOServe Corp. System in accordance with the following:

- Tier 1 Technical Support. EOServe Corp. will provide telephone and online support (via chat and e-mail) to Southern University's faculty, students and staff who may need technical assistance associated with their use of the EOServe Corp. System. This support will be provided on a 24/7 basis.

- Tier 2 Technical Support. EOServe Corp. will provide telephone and online support (via chat and e-mail) to two (2) designated Southern University's help desk representatives, solely on system accessibility and software technology issues associated with use of the EOServe Corp. System. The Southern University help desk representatives will be responsible for responding to Southern University faculty, students and staff who need technical support. This support will be provided on a 24/7 basis. Southern University will notify EOServe Corp. in writing of any change in Southern University's help desk representatives.

- Technical Support Limits. Technical Support does not include support related to the use of Southern University's or other third parties' technology, technical issues associated with outside ISPs, networks or third-party software or issues related to user inexperience with systems and settings other than the EOServe Corp. System.

2. **EOServe Corp. Use of Services**. During the Term of this Agreement or for so long as EOServe Corp. is authorized to offer the EOServe Corp. services to Southern University, whichever period is shorter, EOServe Corp. hereby authorizes Southern University to access and use the EOServe Corp. services via the EOServe Corp. System and provide access to the EOServe Corp. services to Southern University's faculty, students and administrative staff, solely for educational and instructional use on the EOServe Corp. System. Authorized users may access the EOServe Corp. services only in accordance with the terms and conditions set forth in this Agreement and, to the extent permissible under Louisiana law, in any end-user license agreement ("EULA") or terms of use that may be contained in or with the EOServe Corp. services (each a "EULA"). Southern University agrees that no other individuals or third parties shall be allowed access to the EOServe Corp. services. Except as expressly set forth in the foregoing, all rights with regard to the services offered herein are reserved by EOServe Corp., and under no circumstances shall Southern University (or its users or students) resell, publish, transfer, distribute, sublicense, provide access to, copy, adapt, translate, reproduce, modify, enhance or use the EOServe Corp. services or the content contained therein without the express written permission of EOServe Corp. Southern University further agrees not to remove or alter any trademark or other proprietary notice in or on any services. All right, title and interest in and to the EOServe Corp. Services and the content, materials and data contained therein, and any derivative works thereof (whether authorized or not, including any modifications made, specifically for Southern University or to such course offerings in general, by EOServe Corp. or any other third party (including Southern University and its agents or representatives), is expressly reserved by EOServe Corp. as applicable. The preceding sentence does not alter any term in the Master Service License Agreement in regard to ownership of intellectual property. EOServe Corp. shall be obligated to maintain, revise, enhance or update the standardized EOServe Corp. services. EOServe Corp. may suspend use of or access to the EOServe Corp. services in connection with any violation of this Agreement or any applicable EULA.

Exhibit 3 for Master Services and Licensing Agreement
Education Online Services Corp. Online Degree Program Procedures and Best Practices

The Parties agree that the following online degree program procedures and industry best practices are necessary for the successful implementation and deployment of online degree programs:

a) Southern University agrees to ensure that the online degree program is approved by all applicable agencies (such as Faculty Senate, State Higher Education Board, SACS).

b) Southern University agrees to ensure that the online degree program admissions policy is approved by all relevant Southern University departments and appropriate regulatory bodies or agencies including but not limited to the Academic Council, Curriculum Committee and Graduate Council.

c) Southern University agrees to ensure that online courses for online degree programs are approved in writing by all relevant Southern University departments.

d) In the event that Southern University Academic Policy permits the use of Prior Learning Assessment ("PLA") credits, all policies and processes utilized by online degree programs thereunder must be agreed upon and approved by Southern University.

e) Southern University's Information Technology Department shall collaborate with Education Online Services Corporation's Information Technology Department to integrate the Education Online Services online enrollment platform ("ERx") through APIs or other effective integration methods with Southern University's current Student Information System for the purpose of enabling Southern University to update EOServe Corp. in real time regarding the status of each student.

f) Southern University agrees to review and make admit decisions within five (5) business days of receipt of necessary student documents, including review of prior college credits based on official or unofficial transcripts.

g) Southern University agrees to review and offer preliminary awarding of financial aid within five (5) business days of receipt of necessary documents.

h) For the purpose of marketing and increasing target market awareness of Southern University's online degree programs, Southern University agrees to compile and provide EOServe Corp. with access to Southern University's Stop Out Student, Non-Admitted Student and Alumni databases. EOServe Corp. will utilize said databases solely for the purpose of informing prospective students via e-mail, direct mail, online marketing and telephone contact about Southern University's online degree programs.

i) Southern University agrees to the prominent placement of an online graphic banner promoting the online degree program on the home page of Southern University's website, and social media profile pages such as Facebook, Twitter etc.

Exhibit 4 for Master Services and Licensing Agreement
Online Degree Program Best Practices – Admissions Standard Operating Procedures

Education Online Services Corporation is committed to the delivery of highly qualified prospective students to Southern University. The following constitutes the process utilized by EOServe Corp. for the purposes of verification, qualification and submission of prospective students to Southern University.

Interview with Prospective Student. EOServe Corp. Admissions Advisors provide the prospective student with Program information, University history and information, cost and admission requirements, and all questions are discussed between the advisor and the prospective student. The prospective student confirms his or her commitment to the application process and meeting deadlines.

Interview Complete. When the Interview is complete, the prospective student information is entered into the EOServe Corp. database (Enrollment Rx (ERx). (Enrollment Rx is a database allowing the EOServe Corp. Admissions Services Department to manage student files, contact information, documents and progress in the admissions process.) The "Applicant Status" is placed at "Interview Complete."

Application Sent to Southern University. Via the ERx, the Admissions Services Department automatically sends the prospective student a "Welcome E-mail" with a link to complete the application materials electronically. This is done by placing the student in "Interview Complete" Status. The materials include the following required state university, private and federal admissions documents:
1) Application (appropriate to the school),
2) Technology Requirements,
3) High School/GED Transcript Request,
4) Payment Waiver Form (if applicable),
5) College Transcript Request Form (if applicable)
6) Application Fee

All documents required from the prospective student are sent via the ERx's Docusign functionality to facilitate online completion. Upon completion by the prospective student, the status of each document is automatically updated by ERx/Docusign functionality.

School Application Complete. Once the prospective student has satisfactorily completed all required documents, the prospective student's admission status is placed in "School Application Complete" status.

Placement Exam. In the event Southern University requires prospective students to complete an online placement exam, the placement exam will be automatically e-mailed to prospective students once their application is placed on "School Application Complete" status. Advisors will not have access to the exam.

Financial Aid Support Walk-Through. When admission application documents are verified as complete by the EOServe Corp. Admissions Services Department, the prospective student is contacted by said department and immediately transferred to EOServe Corp. financial aid support services to begin financial aid document completion support and assistance, answering questions and performing FAFSA walk-throughs with prospective students upon interview completion. A prospective student must be in "School Application Complete" status for the EOServe Corp. Financial Aid Support Services Department to speak with the student or for an appointment to be scheduled.

EOServe Corp. Financial Aid Advisors assist prospective students with the FAFSA application and questions, PIN application, MPN instructions and Entrance Counseling Exam instructions. The funding applications may not process as completed on the same day; therefore, the EOServe Corp. Financial Aid Team will notate the student as "Financial Aid Walk-Through Complete – Yes" in the prospective student file within the ERx.

When the appropriate document is verified as "Complete" by the designated Financial Aid officer at Southern University, the document will be updated in the "student file" in the ERx.

Request of Official Transcripts. The EOServe Corp. Admission Services Department processes requests for official HS/GED transcripts utilizing the following steps.
a) Receive Transcript Request Authorization from student
b) Research School Address
c) Provide the student with information on how to request official college transcripts and address where said transcripts must be received.

Southern University Responsibilities regarding Transcripts:
a) Conduct search for the student in the ERx application tab to verify the transcript has been received
b) Add the date that Official Transcripts were received by Southern University
In the event that the student wishes to transfer college credits to the chosen online degree program, the cost of the college transcript request fee remains the responsibility of the student.

Admissions Review Readiness. Upon completion by the prospective student of all admissions documents and receipt of same by EOServe Corp., as well as the Financial Aid Walk-Through, EOServe Corp. will then place the student under "Ready for Admissions Review" on the ERx, which will automatically alert Southern University to review the appropriate file and the student's documents, and note any other documents required.

Southern University Responsibilities regarding Admissions Review:
a) The Southern University Director of Admissions will receive an e-mail from EOServe Corp. once the student is placed in "Ready for Admissions Review" status in the ERx.
b) The Southern University Director of Admissions logs into the ERx and locates the student in the search field on the application tab.
c) The Southern University Director of Admissions reviews each applicable document that has been uploaded to the student's file.
d) Southern University can also add the date of receipt of official transcripts received at this time.
e) Once the documents have been reviewed by Southern University, its Director of Admissions will place the student in the appropriate Admissions Decision status: Approved, Rejected or Pending (with notes about the reasons for the Pending decision).

Admissions Complete Status. Approved students must meet the Southern University requirements for online degree program admission, including transcript requirements and/or application fees as needed. Exceptions will be made on a case-by-case basis, and should not be considered standard operating procedure. Admissions Approval is performed directly by the Southern University Director of Admissions and cannot be determined by EOServe Corp. or its representatives.

Exhibit 5 for Master Services and Licensing Agreement
Online Degree Program Best Practices – Financial Aid Document Services Standard Operating Procedures

Education Online Services Corporation is committed to supporting prospective students to Southern University with the completion of appropriate financial aid documentation on behalf of the Program. The following constitutes the process utilized by EOServe Corp. for the purposes of verification, and submission of financial aid documents for prospective students at Southern University.

1. EOServe Corp. Responsibilities for the Provision of Financial Aid Services:

i) EOServe Corp. discusses tuition funding options (i.e., Title IV, Cash-Pay, etc.) with prospective students.

ii) EOServe Corp. performs walk-through with prospective student via phone to include:
   a) Applying for a Federal Personal Identification Number (PIN)
   b) Completing the FAFSA application
   c) Completing Direct Loan MPN application

iii) EOServe Corp. creates and reviews an estimated award letter with the prospective student if appropriate. EOServe Corp.'s projected award letter is a simple Excel Spreadsheet document that projects the cost tuition and expected funding based on the prospective student's EFC number from his or her completed FAFSA and Southern University's cost of attendance.

iv) EOServe Corp. e-mails to the Southern University Director of Financial Aid a list of prospective students who require FAFSA received status, NSLDS checks, MPN checks, ISIR checks and Verification/C-Code checks. Pending NSLDS results upon receipt of said list by Southern University, EOServe Corp. collects default, overpayment and overlapping loan clearance paperwork.

v) EOServe Corp. then assists with the collection of student verification documents and C-Code documents for the initial FAFSA.

vi) EOServe Corp. uploads every needed document for the prospective student's Financial Aid package to the ERx. Once all documents are submitted, EOServe Corp.'s Financial Aid Services Representative activates "Ready for Review" status, which notifies Southern University's Director of Financial Aid via e-mail that the prospective student's financial aid package is ready for review by Southern University.

2. Southern University Responsibilities for the Provision of Financial Aid Services:

i) Southern University agrees to check ISIRs, MPNs and entrance counseling for prospective students and appropriately update the prospective student's record in the ERx.

ii) Southern University agrees to update the ERx with any documents needed from the prospective student to clear C-Code issues as well as update the ERx if the student has been selected for verification.

iii) Southern University agrees to review NSLDS for prospective students and update the ERx with any issues that may require clearance.

iv) Southern University agrees to review verification and C-Code documents, and process verifications and/or corrections to ISIR (documents will be uploaded by EOServe Corp. for Southern University to review).

v) Southern University agrees to update the ERx with all required documents for financial aid to ensure the prospective student's funding will be processed.

vi) Southern University agrees to process the funding package for each prospective student once the funding package is completed.

vii) Southern University agrees to process any Title IV or funding maintenance as required.

SOUTHERN UNIVERSITY AT NEW ORLEANS
6400 Press Drive
New Orleans, LA 70126-0002
(504) 286-5311
FAX (504) 284-5500
www. suno.edu

OFFICE OF THE CHANCELLOR

MEMORANDUM

To: Ronald Mason, J.D.,
President, Southern University System

From: Victor Ukpolo, Ph.D.,
Chancellor

Date: October 7, 2011

Re: October 2011 Meeting of the Board Supervisors

As an addendum to my previous memo, Southern University at New Orleans asks your approval to include the following informational item on the agenda of the Board of Supervisors:

1. MOU for the SUNO/SUSLA Connection

Thanks very much for your consideration.

VU/hec

Attachments

_____

Approval Ronald Mason, J.D., President

College Connection Partnership

Description

The College Connection Partnership (CCP) formed in the spring 2012 by Southern University at New Orleans (SUNO) and Southern University at Shreveport (SUSLA) allows SUNO to offer freshmen and transfer applicants who do not meet current admission requirements the opportunity of attending one of our partnering community colleges without completing a separate application, paying a separate application fee, or requesting additional transcripts and test scores. Our intention is to admit these applicants as transfer students once they earn at least 12 college level credits with a 2.0 GPA or better.

Procedures

Evaluate freshman or transfer applicant's transcript(s). When the applicant is eligible for only the College Connection option, use the following procedures:

1. Recruitment, Admissions and Retention will have the CCP Intent to Participate form enclosed with the denial letter.

2. When interested applicants return a signed CCP Intent to Participate Form, route to SUNO CCP Delegate.

    a. For freshmen applicants, update should always be to the future semester at least one academic year from the date of signing.

    b. For transfer applicants, update should always be to, at least, the next future semester for admission to SUNO.

3. The SUNO CCP Delegate, will copy documents (original "CCP Intent" form goes to the community college but copies of transcripts, test scores and SUNO application) and mail (or send them with the student in a sealed envelope) to the selected community college.

4. Forms will be given to the SUSLA CCP Delegate, to update the semester, to enter the CCP program action/decision.

Southern University Shreveport

Southern University New Orleans

MEMORANDUM OF AGREEMENT

BETWEEN

SOUTHERN UNIVERSITY AT NEW ORLEANS

AND

SOUTHERN UNIVERSITY AT SHREVEPORT

Southern University at New Orleans (SUNO) and Southern University at Shreveport (SUSLA), in order to establish a cooperative arrangement which offers access to all students who desires to pursue a college education, agree to provide seamless admission into the college for applicants who are not eligible for immediate admission to Southern University at New Orleans as well as pre-admission into the university upon attaining eligibility as a transfer student.

Applicants to Southern University at New Orleans who are not eligible for immediate admission will be:

a) Admitted to Southern University at Shreveport without completing additional application forms.
b) Admitted to Southern University at New Orleans upon completion of at least 12 hours of college credit with a 2.0 grade point average, must not need more than one developmental course, and must be academically eligible to transfer.
c) Receive an admission letter detailing the partnership and the conditions of enrollment at both institutions.
d) Assigned and Enrollment Advisor from Southern University at New Orleans and Southern University at Shreveport to provide assistance with the admissions and transfer processes.

For its part, Southern University at New Orleans will:

a) Develop in conjunction with Southern University at Shreveport an admission letter to be mailed to the students by Southern University at New Orleans
b) With the permission of the student, provide Southern University at Shreveport with all application materials for the student.
c) Develop in conjunction with Southern University at Shreveport an "Intent to Participate" form to expedite the admission process.
d) Encourage program participants to enroll at Southern University at Shreveport to begin pursuit of their educational goals and to transfer to Southern University at New Orleans upon attaining eligibility as a transfer student.
e) Provide admission counselors and advisors to program participants. Counselors and advisors will be available through phone and on-line consultants, we well as through on-site appointments.

f) Meet periodically with Southern University at Shreveport representatives to assess program effectiveness.
g) Maintain records and track program participants.
h) Students enrolled at SUSLA will be eligible to live on campus at SUNO.

For its part, Southern University at Shreveport will:

a) Process admission applications provided to them by Southern University at New Orleans
b) Waive the admission application fee to Southern University at Shreveport
c) Encourage students to enroll at Southern university at Shreveport to begin the pursuit of their educational goals and to facilitate transfer to the University when appropriate.
d) With permission from the students, provide Southern University at New Orleans with participating students' transcripts each semester to facilitate the recording of student data Southern University at New Orleans and allow for appropriate advising.
e) Develop in conjunction with Southern University at New Orleans an "Intent to Participate" Form to expedite the admissions process.
f) Provide admission counselors and advisors to program participants. Counselors will be available on-line, through telephone consultants as well as on site appointments.
g) Meet periodically with Southern University at New Orleans representatives to assess program progress.
h) Promote the program in the Greater New Orleans area.
i) House a staff member on the campus of Southern University at New Orleans.

Miscellaneous points:

1. Southern University at New Orleans and Southern University at Shreveport enter into this agreement in a joint effort to provide post-secondary educational opportunities for all Louisiana students and to facilitate transferability between two-and-four year institutions
2. This agreement is effective upon signing. Either party may terminate the agreement through a written notice of intent. Should the agreement discontinue students who declared their intent to participate will be allowed to complete the enrollment and transfer process in accordance with the agreement in place at the time.
3. Both parties will periodically assess the program for effectiveness and impact and share the outcome of that assessment for planning purposes.
4. Changes to this agreement may be made at any time, with the express agreement of the chief academic officers of each campus.

Dr. Ray Belton Chancellor Southern University at Shreveport	Date
Dr. Victor Ukpolo Chancellor Southern University at New Orleans	Date

SOUTHERN UNIVERSITY AT NEW ORLEANS
Enrollment Services
6400 Press Drive
New Orleans, Louisiana 70126-0002
Direct (504) 286-5314 Fax: (504) 284-5481
www.suno.edu

RECRUITMENT, ADMISSIONS
AND RETENTION

October 7, 2011

«AddressBlock»

«GreetingLine»

Thank you for your application to Southern University at New Orleans for the Fall 2011 semester. After a careful evaluation of your application materials, we have determined that you do not meet the criteria for immediate admission to SUNO. However, we believe that you are a good candidate for future admission to SUNO through the College Connection Partnership. This program is a cooperative agreement between Southern University at New Orleans and Southern University at Shreveport, and will enable you to begin your college education.

If you elect to enroll in College Connection, you must complete the enclosed Participation Form and return it to the Office of Recruitment, Admissions and Retention at SUNO. You will be automatically admitted to Southern University at Shreveport without submitting any additional paperwork. You will be eligible to return to SUNO upon successful completion of the following criteria:

1. You must complete 12 or more transferrable hours of college-level coursework, which is in addition to any remedial coursework required;
2. You must earn a cumulative grade point average of at least 2.0 on all college-level coursework
3. You must achieve good academic standing with SUSLA.

Once the above requirements have been met, the courses you take at SUSLA will be transferred to SUNO. Your SUSLA and SUNO counselors will work with you on the details of transferring.

The Partnership Form may be returned to us by mail or fax, however we encourage you to bring the form to the Office of Recruitment, Admissions and Retention in person. This will help to expedite the enrollment process at SUSLA, particularly if you are planning to enroll for the upcoming semester. At that time, you can also speak to one of our admissions counselors about how to choose courses that will both transfer and advance you toward a degree from SUNO.

Once enrolled at SUSLA, you may live on SUNO's campus and participate in campus activities to enhance your experience and success. The University believes that students who live on-campus are more likely to stay enrolled, graduate on time, and feel connected to the campus community. Should you decide to live on campus, you must contact the Office of Residential Life at (504) 286-5395 or (504) 286-5122 to ensure that all proper paperwork has been completed and fees have been paid.

Sincerely,