# BOARD OF SUPERVISORS FOR THE UNIVERSITY OF LOUISIANA SYSTEM

## ACADEMIC AND STUDENT AFFAIRS COMMITTEE

June 27, 2019

Item G.1. Grambling State University's request for approval to award an Honorary Doctorate of Humane Letters to Mr. Alejandro Perkins.

## **EXECUTIVE SUMMARY**

Grambling State University (GSU) requests approval to award an Honorary Doctorate of Humane Letters to Mr. Alejandro Perkins. Mr. Perkins, a native of Dallas, Texas, earned his undergraduate degree from Xavier University of Louisiana in 1999 and his Juris Doctorate from Southern University Law Center in 2004. After a two-year judicial law clerkship for the Honorable Judge Wilson Fields at the 19<sup>th</sup> Judicial District Court, Mr. Perkins joined Hammonds, Sills, Adkins and Guice Law Firm. Mr. Perkins is a litigator specializing in complex litigation, general liability, workers' compensation, labor and employment, education law and insurance defense. As of January 2013, Mr. Perkins is the youngest partner of the firm. He also is an adjunct professor at Southern University Law Center.

Through his active involvement in local, regional and national legal societies, Mr. Perkins has been able to use his personal achievements as a vehicle to uplift others. He recently served the National Bar Association as Deputy General Counsel as well as two terms as President of the Louis A. Martinet Legal Society – Greater Baton Rouge Chapter. In addition, Mr. Perkins has partnered with the Marshall-Brennan Constitutional Literacy Project, functioned as National Bar Association Director of Region V, and served on the Board of Governors for the National Bar Association. In recognition of his many accomplishments to the legal profession and unwavering commitment towards ensuring others have access to education, Mr. Perkins has been honored by both of his alma maters. Southern University Law Center named Mr. Perkins a 2013 Distinguished Alumnus and, in 2015, Xavier University recognized Mr. Perkins as one of its top 40 under 40.

In July 2016, Mr. Perkins was appointed to the Board of Supervisors for the University of Louisiana System by Governor John Bel Edwards. In January 2017, he was selected by his fellow board members to serve as Chairman of the Board for the University of Louisiana System; he served in this capacity for two years. Additionally, Mr. Perkins is a Louisiana Arts and Science Museum Board Member, National Annual Fund Chair for Xavier University, and Vice President of Xavier University Alumni Association – Baton Rouge Chapter. He is a faithful member of his church, a Lifetime member of Alpha Phi Alpha Fraternity, Inc., and a member of the Masonic Lodge. Mr. Perkins, through his leadership and innovative spirit, has tremendously benefitted all of these organizations.

Executive Summary G.1. June 27, 2019 Page 2

Grambling State University would like to recognize Mr. Perkins for his staunch support of, and contributions to, higher education in the State of Louisiana. His substantial achievements clearly warrant the granting of an honorary degree from the University.

## RECOMMENDATION

It is recommended that the following resolution be adopted:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors for the University of Louisiana System hereby approves Grambling State University's request for approval to award an Honorary Doctorate of Humane Letters to Mr. Alejandro Perkins.



June 13, 2019

Dr. Jim Henderson President/CEO University of Louisiana System 1201 North Third Street, Suite 7-300 Baton Rouge, LA 70802

Dear Dr. Henderson:

# Subject: AWARDING OF THE HONORARY DEGREE, DOCTOR OF HUMANE LETTERS, ON MR. ALEJANDRO "AL" PERKINS.

Grambling State University conferred the honorary degree, *Doctor of Humane Letters*, on Mr. Alejandro "Al" Perkins at its May, 2019 commencement ceremony.

Mr. Perkins is the immediate past Chairman of the Louisiana System Board of Supervisors.

Grambling State University recognized Mr. Perkins for his staunch support of, and contributions to, higher education by bestowing upon him the honorary degree, *Doctor of Humane Letters*.

Sincerely,

Richard J. Gallof, Jr., JD

President

RJG:jc

# Alejandro R. Perkins

Alejandro Raeshod Perkins, fondly known as "Al," is a native of Dallas, Texas. He earned his undergraduate degree in Political Science from Xavier University of Louisiana in 1999 and his Juris Doctorate from Southern University Law Center (SULC) in 2004. After a two-year judicial law clerkship for the Honorable Judge Wilson Fields at the 19th Judicial District Court, he joined Hammonds, Sills, Adkins and Guice law firm. Al is a litigator specializing in complex litigation, general liability, workers' compensation, labor and employment, education law and insurance defense and as of January 2013 he is the youngest partner of the firm. Al is also an adjunct professor at Southern University Law Center.

Al's value system is strongly rooted in service to others. Through his active involvement in the local, regional and national legal societies, he's been able to use his personal achievements as a vehicle to uplift others. He recently served the National Bar Association as Deputy General Counsel, appointed by President Ben Crump. He served two terms as President of the Louis A. Martinet Legal Society - Greater Baton Rouge Chapter. Under his leadership, the membership of Martinet was restored and subsequently flourished. He's partnered with the Marshall-Brennan Constitutional Literacy Project, served as National Bar Association Director of Region V, which includes Texas, Louisiana and Mississippi, and served on the Board of Governors for the National Bar Association. On December 4, 2017, he was inducted to The 100 Black Men of Metro Baton Rouge.

Mr. Perkins has had the distinction of being recognized by both of his Alma Maters Xavier University and Southern University Law Center. In 2015, Xavier University recognized Al as one of its top 40 under 40 for his vast accomplishments and service to his community. Southern University Law Center awarded Al the honor of 2013 Distinguished Alumnus in recognition of his many accomplishments to the legal profession and unwavering commitment towards ensuring others have access to education. He has received the President's Leadership Award from the National Bar Association in 2016 and 2012. He has been featured in a number of publications including The Advocate, Times-Picayune, "Around the Bar" Baton Rouge Bar Association, LSBA Journal, and the American Bar Association Journal. He has been a speaker all over the nation on various legal and professional topics.

In July 2016, Al was appointed by Gov. John Bel Edwards to the Board of Supervisors for the University of Louisiana System. In January 2017, Al was selected by his fellow board members to serve as the Chairman of the Board for the University of Louisiana System. The UL System consists of over 90,000 students and 9 universities including: Grambling State University, Louisiana Technical University, University of Louisiana Monroe, University of Louisiana Lafayette, University of New Orleans, Southeastern State University, Northwestern State University, Nicholls State University and McNeese State University.

In addition to his leadership in the legal community, Al is a Louisiana Arts and Science Museum Board Member, National Annual Fund Chair for Xavier University, and Vice President of the Xavier University Alumni Association-Baton Rouge Chapter. Al believes in paying it forward and is a strong financial supporter of many organizations including his alma maters - Xavier University, Southern University Law Center, Bishop Dunne Catholic School - Alpha Phi Alpha Fraternity, Delta Sigma Theta Sorority, the Louisiana Black Hall of Fame, and Good Street Baptist Church just to name a few.

Al is a member of the First Community Antioch Baptist Church in Lutcher, Louisiana where he has worked with the Youth Ministry. He is a proud Lifetime member of Alpha Phi Alpha Fraternity, Inc. and is a member of the Masonic Lodge. In his spare time, he enjoys spending time with his wife, Dina, and daughters, Alexia and Zaiya, listening to great music, developing business ideas and offering his time and talents to inspire our youth. His desire is to bridge the philosophical divide between yesterday's history makers and tomorrow's leaders and innovators.

# BOARD OF SUPERVISORS FOR THE UNIVERSITY OF LOUISIANA SYSTEM

## ACADEMIC AND STUDENT AFFAIRS COMMITTEE

June 27, 2019

Item G.2. Northwestern State University's request for approval to offer Undergraduate Certificates in Business Analytics, Strategic Communication, and Leadership Studies.

## **EXECUTIVE SUMMARY**

Northwestern State University requests approval to offer Undergraduate Certificates (UC) in Business Analytics, Strategic Communication, and Leadership Studies. Designed as a focused, incremental, stackable credential, the UC can be linked to an existing degree program major as an additional focus area (concentration or minor), or it can be a standalone area of specialization to augment a student's educational background and/or to meet industry demand for upper level training. A UC is comprised of at least 18 credit hours, of which at least half must be at the upper (junior/senior) level.

# **Undergraduate Certificate in Business Analytics**

The proposed 18 credit hour UC, developed and offered by the Computer Information Systems area of the School of Business, will provide training on basic business analytics to help bridge the gap between the skills of the current workforce and the needs of industry. Courses required of the proposed UC, to include Basic Business Statistics, Intermediate Business Statistics, Database Systems, Advanced Database Systems, Data Analytics, and Marketing Research, will increase the knowledge of completers in the area of problem solving and analysis. To provide maximum flexibility to the working student, the proposed UC will be offered online.

## **Undergraduate Certificate in Strategic Communication**

The purpose of the proposed UC is to instruct students on the principles, goals, and techniques of targeted messaging for specific audiences, and to prepare them to work as competent communication professionals, improving marketability for employment. Through active classroom learning and instruction, as well as interactive experiential learning with industry professionals, students will acquire the knowledge and critical skills necessary to be responsive and effective professionals in strategic communications. The 18 credit hour curriculum (composed of courses in Public Relations Principles, Video Production 1, Writing for Mass Media, Social Media Management, Principles of Advertising, and Public Relations Writing) will provide knowledge and skill sets that apply to any communication-related employment including public, corporate, political, non-profit, and entrepreneurial enterprises. All courses required of the proposed UC are offered on-site with the goal of developing online sections to facilitate and support the delivery of instruction for certificate program students.

Executive Summary G.2. June 27, 2019
Page 2

## **Undergraduate Certificate in Leadership Studies**

The concept of Northwestern's proposed UC in Leadership Studies is to provide students with a carefully curated series of courses and experiences that are embedded with increasing opportunities to develop hard-skills and soft-skills required of leadership positions in a variety of fields. The 18-hour curriculum requires completion of the following courses: Peer Mediation and Leadership Development, Practical Experience in College Leadership Development, Mentoring Leadership and Change, Concepts and Technologies of Organizational Communication, Leadership Experience, and a 3-hour upper-level course prescribed by the academic department to complement and enhance the student's preparation for leadership positions within his/her chosen field of study. Courses will be delivered in a combination of modalities: traditional (on-site), hybrid, and online.

## RECOMMENDATION

It is recommended that the following resolution be adopted:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors for the University of Louisiana System hereby approves Northwestern State University's request for approval to offer Undergraduate Certificates in Business Analytics, Strategic Communication, and Leadership Studies.



310 Sam Sibley Drive Caspari Hall - Suite 223 Natchitoches, LA 71497 (O) 318-357-6441 (F) 318-357-4223

G 2

June 3, 2019

Dr. Jim Henderson, President University of Louisiana System 1201 North Third Street, 7-300 Baton Rouge, LA 70802

Re: Proposal to add Undergraduate Certificate: Business Analytics

Dear Dr. Henderson:

Northwestern State University is submitting the attached proposal to add *Undergraduate Certificate: Business Analytics* item to be placed on the agenda for approval at the June 2019 Board Meeting.

Thank you for your consideration.

Sincerely,

Dr. Chris Maggio

**President** 

**Attachment** 

## PROPOSAL to DEVELOP a NEW ACADEMIC CERTIFICATE PROGRAM

(CAS, PAC, UC, PBC, GC, PMC, PPC)

Date: May 21, 2019

Campus:	Program: UC in Business Analytics (521301)
Northwestern State University	
Institutional Contact Person & Contact Info (if clar	ification is needed)
·	
Mr. Curtis Penrod,	
Coordinator of Computer Information Systems a	nd Assistant Professor, School of Business,
318-357-5033,	
penrodc@nsula.edu	

## 1. Certificate Description

Describe the program concept: purpose and objectives; proposed curriculum; mode of delivery (on-site/hybrid/on-line). Indicate which courses are new; describe plan for rolling out new courses.

\*\* Attach catalog descriptions for the required and elective courses, including prerequisites and LCCN, when applicable. \*\*

The purpose of this program is to provide training on basic business analytics to help bridge the gap between the skills of the current workforce and the needs of industry. Conversations with industry partners have reinforced the point that one of the key skillsets employees need is the ability to problem solve and think analytically. This 18-hour certification program will increase the knowledge of completers in the area of problem-solving and analysis. Students will be able to add- on this certification as they are seeking an undergraduate degree or complete it independently so they can gain skills in the specific area.

Once admitted, the student will take six undergraduate courses to complete the undergraduate certificate. Students will need certain knowledge (prerequisites) to register for some of the courses. For example, the student may need to take foundational courses (see below listing) before he or she can take the courses required in the 18-hour certificate program.

To provide maximum flexibility to the working student, the certification will be offered online.

While courses will be reviewed as needed to maintain currency in the field, the initial courses planned for the certification are as follows:

- BUAD2120 Basic Business Statistics: A basic statistical foundation is developed; emphasis is then placed upon practical business applications including hypothesis testing, ANOVA, contingency table analysis, and introductory regression analysis; material is related directly to business applications. Prerequisites: CIS 2000 and any of the following: MATH 1060, 1090, 1100, 1810, 2010 or SMAT 1820 and 1840 or 2810.
- BUAD3120 Intermediate Business Statistics: Time series, index numbers, analysis of variances, chi square, non-parametric tests applied to business and economic problems. Prerequisite: Successful completion of BUAD 2120 or SSTA 2810 and junior standing.
- 3) CIS 2980 Database Systems: Study of the design, implementation, and management of database systems in a business environment. Topics include data modeling, normalization, SQL, and the utilization of a relational database management system to develop an integrated database application. Prerequisite: CIS 1015 or consent of instructor.
- 4) CIS 4000 Advanced Database Systems: Advanced topics and techniques of database system technology. Students will design and implement software components integral to database systems using a modern database management system (DBMS). Prerequisite: CIS 2980.
- 5) CIS 4070 Data Analytics: An introduction to the field of data analytics including the extensive use of data, statistical and quantitative analysis, exploratory and predictive models, and fact-based management to drive decisions and actions. Data analytics is explored as a process of transforming data into actions through analysis and insights in the context of organizational decision making and problem solving. This course stresses the factors that impact the performance of business decision makers and the data management and analysis methods that add value to them. The application of selected data mining techniques to business decision making situations is illustrated. Students actively participate in the delivery of this course through case and project presentations. Prerequisites: BUAD 2120 and CIS 2980. BUAD 3120 is recommended.
- 6) MKTG4440 Marketing Research: The academic and applied elements of marketing research, including modeling, sampling, survey, instrument design, data collection, computer-based data analysis and data presentation. Prerequisites: MKTG 3230

and BUAD 2120 or MKRG 3230 and SSTA 3810.

#### The six required courses are offered the following semesters:

All semesters: BUAD 2120 and CIS 2980

Fall: CIS 4070

Spring: BUAD 3120 (potentially summer as well), CIS 4000, and MKTG 4440

#### Prerequisites for the required courses are as follows:

BUAD 1800 – Introduction to Information Technology: An introductory course, focusing on the use of file management; word processing, presentation, and database management; and social issues related to information technologies.

BUAD 2200 – Business Reports and Communication: Communication problems, business letters, employment application procedures. Problem areas investigated by research procedures; sources of data, compilation and arrangement of data, documentation, bibliography, and effective presentation. Prerequisites: BUAD 1800 or equivalent; ENGL1010, 1020.

CIS 2000 – Spreadsheet Applications: This course is designed to assist students in preparing for the MOS (Microsoft Office Specialist) Excel Certification. Attention is given to developing skills in spreadsheet applications including data exchange between other types of applications.

ECON 2010 – Principles of Microeconomics: A survey of economic principles governing the behavior of individual households and business firms and the markets for specific goods. It addresses the problems of how market prices influence the allocation of society's scarce resources and the distribution of income among its members. Prerequisite: sophomore standing.

ENGL 1010 - Composition and Rhetoric I: The short paper; rhetoric, with emphasis on writing.

ENGL 1020 – Composition and Rhetoric II: Writing the longer paper; diction, style, analysis and interpretation of collateral readings leading to the composition of the research paper. Prerequisite: ENGL1010 with a grade of "C" or better or equivalent.

MATH 1020 – College Algebra: A graphing treatment of the essential topics of college algebra with emphasis on functions, graphing, and applications. A graphing calculator will be required in the course.

MATH 1060 – Finite Mathematics: Systems of linear equations, vectors, matrices, and matrix algebra; linear inequalities; counting techniques: permutations and combinations; probability; basic concepts in mathematics finance (annuities included); and an introduction to statistics. Prerequisite: MATH 1020 or MATH 1035.

MKTG 3230 – Principles of Marketing: Marketing functions, channels of distribution, marketing institutions, marketing analysis, price determination, marketing trends. Prerequisite: Junior standing, ECON 2010, BUAD 2200, or consent of instructor.

The nine prerequisite courses are offered every semester.

#### 2. Need

Outline how this program is deemed essential for the wellbeing of the state, region, or academy (e.g., how is it relevant, how does it contribute to economic development or relate to current/evolving needs). Identify similar programs in the state and explain why the proposed certificate is needed.

The business world is amid a large change regarding analytics and business intelligence. Over the years, as databases and other systems have become larger and more prevalent, businesses and other organizations have started collecting more and more data. As time has passed, businesses/organizations have realized they have a treasure trove of data which is not being used to enhance the organization. Only a tiny portion of the data is utilized by the organization. Only a small amount of time is spent by managers on utilizing the data. Thus, employees with the skills to analyze data and use it to make changes in an organization are highly valued. These employees can contribute to the success of an organization which helps the state, region, and nation.

If one looks at the Bureau of Labor Statistics national employment projections, of the jobs which require at least a baccalaureate degree, several of the top 14 occupations with the highest number of projected job openings through 2026 are related to analysis:

- \* Computer Systems Analysts 54,400 additional jobs through 2026 with a median annual wage of \$88,740
- \* Management Analysts 115,200 additional jobs through 2026 with a median annual wage of \$83,610
- \* Market Research Analysts and Marketing Specialists 138,300 jobs through 2026 with a median annual wage of \$63,120

The over 300,000 new analyst jobs do not include occupations outside of the top 14 occupations with the highest number of job

offerings nor does it address occupations that include data analysis as part of their job duties even though it is not part of their title

As another example of the demand for employees with analytical skills, one could go to the LAWorks website. On May 21, 2019, the LAWorks website was reviewed and the following information was found:

- \* Computer Systems Analysts 5-star job 70 advertised jobs
- \* Financial Analysts -5-star job 21 advertised jobs
- \* Information Security Analysts 5-star job 35 advertised jobs
- \* Management Analysts 5-star job 120 advertised jobs
- \* Market Research Analysts and Marketing Specialists 5-star job 26 advertised jobs
- \* Operations Research Analysts 5 star-job 10 advertised jobs

Thus, only looking at 5-star jobs and only at jobs which expressly say "Analyst", one can see as of May 21, 2019, the state of Louisiana had 282 positions open. Numerous other positions at different star levels and with different titles (such as Manager) would also have a need for the skills provide by this certification.

This certification can help fill a need for analysts by providing analytical skills to students who are already in the workplace and want to move into one of these areas or students completing a baccalaureate degree but wanting to add additional skills before they graduate.

This program is an institutional priority as it provides further opportunities in areas being highlighted as key workforce needs (careers in Accounting, Business Administration, and Computer Information Systems). The institution clearly realizes the importance of providing a workforce to meet the needs of Louisiana. In recent years, numerous businesses have made commitments to come to Louisiana and higher education needs to help make those commitments a success.

As part of its mission, the institution "will prepare its students to become productive members of society and will promote economic development and improvements in the quality of life of the citizens in its region." As previously shown in the last section, a large need exists for skills in analytics. By obtaining these skills, students will be able to further their careers, increase their quality of life, and become productive members of society.

This certification will increase educational attainment as existing students in the School of Business, as well as some students outside the School of Business, will add to their list of skills. Community members may also wish to add this certification to showcase additional skills as they pursue new employment opportunities.

#### 3. Students

Describe student interest. Project enrollment and productivity for the first 5 years; justify projections.

Student interest/demand is likely to come from two sources: (1) existing students pursuing a baccalaureate degree and (2) members of state and regional communities, especially business and industry, wishing to develop analytical skills.

The School of Business has approximately 1200 students who may wish to add this certification. Additionally, the university has another pool of approximately 6000 students seeking a baccalaureate degree who may wish to add this certification.

As the information technology industry grows in Louisiana, existing workers will see the need for additional analytical skills to enhance their career prospects providing another potential market for this certificate.

Based on the above information, the initial enrollments are as follows:

Year 1 – 5 Year 2 – 15 Year 3 – 20 Year 4 – 25 Year 5 – 30

Based on the above information, the initial degrees awarded are as follows:

Year 1 – 3 Year 2 – 9 Year 3 – 12

Year 4 – 15 Year 5 – 18

4. Accreditation		
Describe plan for achi	eving program accreditation.	
Program accreditation undergraduate certification	s not necessary. The certificate will be in the School of Business, butes.	It AACSB does not accredit
5. Faculty, Administ	ration, & Other Resources	
	needs be met: will additional faculty, facilities, equipment, or lier and oversee the proposed program?	brary resources be required? What
• • • • • • • • • • • • • • • • • • • •	ncilities, or equipment are required. The Computer Information System of the proposed program.	tems area within the School of Busine
will deliver and oversee	the proposed program.	
	and proposed program.	
<b>6. Cost</b> Summarize additional	costs to offer the program. On separate budget sheet, estimate ve years, indicating need for additional appropriations (if any).	e costs and revenues for the project
6. Cost Summarize additional program for the first fo Minimal costs exist for	costs to offer the program. On separate budget sheet, estimate	
6. Cost Summarize additional program for the first fi Minimal costs exist for requested beyond some	costs to offer the program. On separate budget sheet, estimate ve years, indicating need for additional appropriations (if any). the implementation of this program. All courses currently exist. N	
6. Cost Summarize additional program for the first fi Minimal costs exist for	costs to offer the program. On separate budget sheet, estimate ve years, indicating need for additional appropriations (if any). the implementation of this program. All courses currently exist. N	
6. Cost Summarize additional program for the first for Minimal costs exist for requested beyond some	costs to offer the program. On separate budget sheet, estimate ve years, indicating need for additional appropriations (if any). the implementation of this program. All courses currently exist. No initial marketing costs in the first year.	o additional appropriations are

# SUMMARY OF ESTIMATED ADDITIONAL COSTS/INCOME FOR PROPOSED CERTIFICATE

Institution: NORTHWESTERN STATE UNIVERSITY

Date: 5/30/19

Certificate Program, Unit: UNDERGRADUATE CERTIFICATE IN LEADERSHIP STUDIES

FTE = Full Time Equivalent (use the institution's standard definition and provide that definition).

		EXP	ENDITURES	3		9,5		
	FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
	AMOUNT	FTE	Amount	FTE	AMOUNT	FTE	AMOUNT	FTE
Faculty (Salary & Benefits)	\$						\$	
Graduate Assistants								
Support Personnel (Professional Service Contract for Course Dev.)								
Fellowships and Scholarships	ľ							
SUB-TOTAL EXPENSES	\$0.00		\$0.00		\$0.00		\$0.00	
				2 h				
	AMOUN	Т	AMOUN	IT	AMOUN	IT	AMOUN	IT
Facilities	\$		\$		\$		\$	
Equipment							N. C.	
Travel						•		
Marketing	\$1000.00							
SUB-TOTAL	\$1000.00		\$		\$		\$	
GRAND TOTAL EXPENSES	\$1000.00		\$		\$		\$	
	4. 11 24 1	RI	VENUES	WIE				
Amount & Percentage of Total Anticipated From:	AMOUNT	%	AMOUNT	%	AMOUNT	%	AMOUNT	%
State Appropriations	\$		\$		\$		\$	
Federal Grants/Contracts								
State Grants/Contracts								
Private Grants/Contracts								
Tuition	19500.00	80	58500.00	80	78000.00	80	97500.00	80
Fees	4750.00	20	14250.00	20	19000.00	20	23750.00	20
Other (specify)							_	
TOTAL	24250		72750		97000		121250	



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June 3, 2019

Dr. Jim Henderson, President University of Louisiana System 1201 North Third Street, 7-300 Baton Rouge, LA 70802

Re: Proposal to add Undergraduate Certificate: Strategic Communication

Dear Dr. Henderson:

Northwestern State University is submitting the attached proposal to add *Undergraduate Certificate: Strategic Communication* item to be placed on the agenda for approval at the June 2019 Board Meeting.

Thank you for your consideration.

Sincerely.

Dr. Chris Maggio

**President** 

**Attachment** 

## PROPOSAL to DEVELOP a NEW ACADEMIC CERTIFICATE PROGRAM

(CAS, PAC, UC, PBC, GC, PMC, PPC)

Date: May 31, 2019

Campus: Northwestern State University Program: CIP, Certificate Designation, Title

09.9999 Undergraduate Certificate in Strategic Communication

Institutional Contact Person & Contact Info (if clarification is needed)

Dr. Brian Gabrial, Interim Department Head for New Media, Journalism, and Communication Arts, Northwestern State

University

195 Sam Sibley Drive

Natchitoches, LA 71497

gabrialb@nsula.edu

<u>1-318-357-5360</u>

Dr. Greg Handel, Dean, College of Arts and Sciences, handelg@nsula.edu

#### 1. Certificate Description

Describe the program concept: purpose and objectives; proposed curriculum; mode of delivery (on-site/hybrid/on-line). Indicate which courses are new; describe plan for rolling out new courses.

\*\* Attach catalog descriptions for the required and elective courses, including prerequisites and LCCN, when applicable. \*\*

Northwestern State University proposes to introduce an undergraduate certificate in Strategic Communications. The proposed curriculum is based on courses currently offered by the Department of New Media, Journalism, and Communication Arts, and will be delivered on on-site and online.

The purpose of this certificate and corresponding courses is to instruct students on the principles, goals, and techniques of targeted messaging for specific audiences, and to prepare them to work as competent communication professionals, improving their marketability for employment. Through active classroom learning and instruction as well as interactive experiential learning with industry professionals, students will acquire the knowledge and critical skills necessary to be responsive and effective professionals in Strategic Communications. The professional skills acquired and practiced are transferable to any communication-related employment, including public, corporate, political, non-profit, and entrepreneurial enterprises.

## **Objectives**

- 1. Students will learn and practice basic media writing and editing;
- 2. Students will study and apply public relations principles and writing;
- 3. Students will develop strategies to reach varied audiences through varied media platforms including video skills, social media messaging and management, and advertising/media marketing/branding.

The following 18-hour curriculum will be open to all majors. All classes are offered on-site; one class is currently offered both on-site and online: COMM 2360--Public Relations Principles. If the proposed certificate is approved, the goal will be to develop and offer on-site and online sections of each course to facilitate and support the delivery of instruction for certificate program students.

Required Courses	Credit Hours	
COMM 2360: Public Relations Principles	3	
COMM 2440: Video Production 1	3	
COMM 2510: Writing for Mass Media	3	
COMM 3260: Social Media Management	3	
COMM 3510: Principles of Advertising	3	
COMM 3600: Public Relations Writing	3	
Total	18	

## **COMM 2360—Public Relations Principles**

A study of the policies, procedures, ethics, and practices of building and maintaining positive relationships with an organization's various internal and external publics.

Prerequisite: Sophomore standing.

### **COMM 2440—Video Production 1**

An introduction to the process of creating video including an overview of television equipment, studio and field practices, nonlinear digital editing and applicable theory for the development of visual messaging. Fundamental to course is laboratory experience in video production.

Prerequisite: Sophomore standing.

## COMM 2510—Writing for Mass Media

An introduction to the theories and skills of news gathering and news writing.

Prerequisite: ENGL 1010, 1020 and COMM 1040 with a "C" or higher.

#### COMM 3260—Social Media Management

Survey of current social media landscape and available tools for navigating today's digital communication world. Students will produce and post content (written, photo, video) on various social media channels while exploring strategies to cohesively present clear, effective messaging across multiple platforms. Prerequisite COMM 2510 – student must pass with a grade of C or better.

## **COMM 3510—Principles of Advertising**

An introductory survey of the purposes, procedures, and effects of advertising, including legal and ethical responsibilities, societal roles, research procedures, media planning, creative strategy, and the environment of advertising practice.

Prerequisite: Sophomore standing.

## **COMM 3600—Public Relations Writing**

Comprehensive study and application of varied public relations writing formats, with emphasis on communications theory; ethics and societal role of communications professionals; concepts and models for designing and delivering messages to diverse internal and external publics; and incorporating new and emerging technologies.

Prerequisite: COMM 2510 and 2360, or consent of instructor.

### 2. Need

Outline how this program is deemed essential for the wellbeing of the state, region, or academy (e.g., how is it relevant, how does it contribute to economic development or relate to current/evolving needs). Identify similar programs in the state and explain why the proposed certificate is needed.

In conversations with the Departmental Advisory Council, industry experts and stakeholders have indicated a continual need for Strategic Communications skills for graduates as they enter the workforce.

In its "Key Attributes Employers Seek on Students' Resumes" 2017 survey, the National Association of Colleges and Employers (NACE) ranked top skills desired in a college graduate. The following rank-ordered skills by potential employers will be reinforced and refined through completing the Strategic Communication Certificate:

Problem-solving skills 82.9%, Communication skills (written) 80.3%, Communication skills (verbal) 67.5%, Detail-oriented 64.1%, Technical skills 59.8%, Computer skills 48.7%, Strategic planning 39.3%

Source: The National Association of Colleges and Employers

In addition, the U.S. Department of Labor projects that job growth in public relations areas will grow 9% so the need for "organizations to maintain their public image will continue to drive employment growth." Thus, the need to train strategic communications professionals remains strong.

Source: https://www.bls.gov/ooh/media-and-communication/public-relations-specialists.htm?view\_full#tab-6

The knowledge and skills developed through the Strategic Communication Certificate will help students gain communication-related employment in Natchitoches and surrounding parishes or throughout the state and tri-state region. Regardless of a student's major, having this certificate will complement other disciplines as every profession and organization must communicate with internal and external audiences. In this media-saturated environment, businesses, professions, and organizations need employees who possess effective, clear, and meaningful communication skills and can use professional judgment to choose the appropriate medium and message.

In the Natchitoches region, which is heavily dependent upon tourism, the need for competent communications professionals becomes critical to organizations like the Visitors and Conventions Bureau, the Louisiana Sports Hall of Fame, The Natchitoches Historic Foundation, The Association for the Preservation of Historic Natchitoches, and the non-profits who maintain the historical landmarks in the area. In addition, the city, the parish, and NSU, which is the area's largest employer, require communications professionals.

The Department of New Media's mission statement supports the tenets of the University's mission to graduate students who contribute to the economic success of the region and quality of life:

Department of New Media, Journalism, and Communication Arts. Students pursuing a Bachelor of Arts degree in Communication polish speaking, writing, and multimedia skills through experiences in and out of the classroom. Innovative courses prepare students for hundreds of jobs that require a foundation of communication skills. TV anchors, radio show hosts, bloggers, photojournalists, graphic designers, social media managers, speech writers, public relations specialists, reporters and scores of others all rise according to their communications skills. Specifically, the Strategic Communication concentration, which forms the foundation of the proposed certificate program, focuses on how organizations and media influence opinions and the behavior of key publics. The curriculum emphasizes an ethical approach and analyzes societal effects of strategic communication practices on individuals, communities, and the society at large.

#### 3. Students

Describe student interest. Project enrollment and productivity for the first 5 years; justify projections.

The Department of New Media, Journalism, and Communication Arts currently offers a Bachelor of Arts Degree with a concentration in Strategic Communication. Students in this concentration enroll in most of the courses offered in the proposed certificate program as part of their core program of study. Those courses include: COMM 2360, COMM 2510, and COMM 3600. The other courses proposed for the certificate program are electives that will best prepare them for a strategic communications position. The department's graduates in the Strategic Communication concentration have been employed as public relations specialists, social media managers, corporate recruiters, information officers for government/military, and other related areas.

NSU is situated in northwest Louisiana and provides educational opportunities for many first-generation students and those from rural areas. The department's communication program and this certificate program will further enhance these students' employment opportunities because every business, profession, and organization need good communicators. This need is documented in surveys by NACE, the Department of Labor, and professional organizations. In general, employers want those who can write well, speak well, and craft appropriate messages for varied audiences. Understanding how to navigate a media-saturated world and how to best use current social media technologies can provide students with an advantage over other applicants without such knowledge and skills.

The proposed certificate will be an attractive option for students in all majors to complement their current discipline. For example, science requires scientists who can speak and write effectively for a non-science audience and how to deal with media professionals who may contact them; a business can fail without effective communication strategies; health professionals must be able to effectively inform internal and external audiences about medical issues, news, and advancements; and athletics and sports organizations require those who can work with the professional media and craft their own messages and branding to fans.

Enrollment for the most recent two semesters is as follows:

Course	Enrollment
COMM2360 Public Relations Principles	40
COMM2440 Video Production I	36
COMM2510 Writing for Mass Media	43
COMM3260 Social Media Management	34
COMM3510 Principles of Advertising	40
COMM3600 Public Relations Writing	11

The department foresees that a certificate program will increase these enrollments numbers, especially with regard to COMM3600 (Public Relations Writing). In addition, two course name changes will be proposed in the 2019-2020 academic year to align more closely with current professional nomenclature. (With approval, the COMM 3510 course name will change from "Principles of Advertising" to "Advertising, Marketing, and Branding," and the course name for COMM 3600 will change from "Public Relations Writing" to "Writing for Strategic Communication.")The new course titles are more responsive to industry needs, and will resonate with those students interested in the new certificate or concentration.

The department anticipates an initial enrollment of 8 students in the first two years, and an increase of between 10-12 in years 3 and 4, and 15 in year 5.

#### 4. Accreditation

Describe plan for achieving program accreditation.

The Department of New Media, Journalism, and Communication Arts is accredited through the University's accreditation with the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).

## 5. Faculty, Administration, & Other Resources

How will instructional needs be met: will additional faculty, facilities, equipment, or library resources be required? What department will deliver and oversee the proposed program?

The proposed Strategic Communication Certificate program will be delivered by the Department of New Media, Journalism, and Communication Arts, and overseen by the department head and faculty with expertise in strategic communications. If approved, the resource needs in the certificate's first year can be met with current, incoming, and adjunct faculty. With anticipated growth in the Strategic Communication certificate and concentration, an experienced and qualified full-time teacher will be needed in the second year to teach, supervise, and administer these programs.

### 6. Cost

Summarize additional costs to offer the program. On separate budget sheet, estimate costs and revenues for the projected program for the first five years, indicating need for additional appropriations (if any).

Because the department anticipates that courses will be taught by full-time faculty members on load, the proposed certificate program can be implemented in the first year at no additional cost. Should the program's enrollment grow in the second year and beyond, the Department of New Media, Journalism, and Communication Arts will require a full-time faculty hire who has professional expertise in strategic communication principles and practice. If hired at the instructor level, that additional cost should be \$42,000, based upon the current salary grid.

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Primary Administrator for Proposed Certificate	Date	
Provost/Chief Academic Officer	Date	-
Management Board/System Office	Date	

## SUMMARY OF ESTIMATED <u>ADDITIONAL</u> COSTS/INCOME FOR PROPOSED CERTIFICATE

Institution: Northwestern State University of Louisiana	Dat	te:

Certificate Program, Unit: Undergraduate Certificate in Strategic Communication

FTE = Full Time Equivalent (use the institution's standard definition and provide that definition).

		EXF	PENDITURES	44.00				
	FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
	AMOUNT	FTE	Amount	FTE	AMOUNT	FTE	AMOUNT	FTE
Faculty	\$		\$42,000		\$		\$	
Graduate Assistants								
Support Personnel								
Fellowships and Scholarships								
SUB-TOTAL EXPENSES	\$		\$42,000		\$		\$	
EXILEPED FOR CHILDREN								
	AMOUN	IT	AMOUN	IT	AMOUN	IT	AMOUN	IT
Facilities	\$		\$		\$		\$	
Equipment								
Travel								
Supplies								
SUB-TOTAL	\$		\$		\$		\$	
GRAND TOTAL EXPENSES	\$		\$42,000	\$			\$	
		R	EVENUES					高級
Amount & Percentage of Total Anticipated From:	AMOUNT	%	AMOUNT	%	AMOUNT	%	AMOUNT	%
State Appropriations	\$		\$		\$		\$	
Federal Grants/Contracts	1							
State Grants/Contracts								
Private Grants/Contracts								
Tuition	\$5,180		\$5,180		\$5,180		\$5,180	
Fees	\$3,106		\$3,106		\$3,106		\$3,106	
Other (specify)								
TOTAL	\$66,288		\$66,288		\$82,860		\$99,432	

<sup>\*</sup>Tuition and fees are estimated based upon projected enrollment.



310 Sam Sibley Drive Caspari Hall - Suite 223 Natchitoches, LA 71497 (O) 318-357-6441 (F) 318-357-4223

June 3, 2019

Dr. Jim Henderson, President University of Louisiana System 1201 North Third Street, 7-300 Baton Rouge, LA 70802

Re: Proposal to add Undergraduate Certificate: Leadership Studies

Dear Dr. Henderson:

Northwestern State University is submitting the attached proposal to add *Undergraduate Certificate: Leadership Studies* item to be placed on the agenda for approval at the June 2019 Board Meeting.

Thank you for your consideration.

Sincerely

Dr. Chris Maggio

**President** 

**Attachment** 

DEDICATED TO ONE GOAL. YOURS."



## PROPOSAL to DEVELOP a NEW ACADEMIC CERTIFICATE PROGRAM

(CAS, PAC, UC, PBC, GC, PMC, PPC)

Date: 5/30/2019

Campus:

Program: CIP, Certificate Designation, Title

**Northwestern State University** 

Undergraduate Certificate (UC) in Leadership Studies (520213)

Institutional Contact Person & Contact Info (if clarification is needed)

Kimberly Walker McAlister, Ed.D.

Dean, Gallaspy College of Education and Human Development

**8-107 Teacher Education Center** 

150 Tarlton Drive

Northwestern State University of Louisiana

Natchitoches, LA 71497 mcalisterk@nsula.edu

318.357.5553

#### 1. Certificate Description

Describe the program concept: purpose and objectives; proposed curriculum; mode of delivery (on-site/hybrid/on-line). Indicate which courses are new; describe plan for rolling out new courses.

\*\* Attach catalog descriptions for the required and elective courses, including prerequisites and LCCN, when applicable. \*\*

#### **PROGRAM CONCEPT:**

The concept of Northwestern's proposed certificate in Leadership Studies is to provide students with a carefully curated series of courses and experiences that are embedded with increasing opportunities to develop hard-skills and soft-skills necessary for leadership in many disciplines. Hard skills include word processing and presentation abilities. Soft skills include the ability to work in teams and independently, being organized, and able to think critically and solve problems<sup>(1)</sup>. The certificate signifies that its holder has intentionally sought-out experiences that prepare him/her for leadership roles a variety of disciplines.

#### **PURPOSE AND OBJECTIVES:**

Businesses and industries spend approximately 14 billion dollars annually on leadership development <sup>(2)</sup>. Leadership occurs across disciplines, and students from all majors can benefit from participation in this program. The purpose of Northwestern's certificate program is to give students the opportunity to acquire knowledge and skills through a combination of classroom instruction and experiential learning. Northwestern's UC in Leadership Studies follows a developmental model, one in which students start-off with classroom lessons and assigned roles and duties. As students gain experience and develop specialized interests, they assume greater responsibility and eventually ownership of the activities and projects. Following this model, it is anticipated that students will earn greater autonomy and be more confident in their decision-making abilities. Eventually, students will apply what they learned in the classroom and in prior assignments to enhance existing projects and/or create new ones <sup>(3)</sup>.

The certificate program has six objectives:

- Students will learn mentoring skills from faculty supervisors,
- 2) Students will learn from each other by assuming more and varied responsibilities in leadership activities,
- 3) Students will apply their knowledge and skills to new or existing projects,
- 4) Students will learn the importance of thinking strategically,
- 5) Students will develop the ability to listen for the purpose of better understanding members of their team,
- 6) Students will learn how to effectively and appropriately communicate their experiences with others.

## PROPOSED CURRICULUM:

The proposed 18-hour curriculum consists of prescribed coursework designed to help prepare UC students for leadership positions in a variety of fields. Since leadership opportunities exist in all disciplines, the certificate program is open to all majors. The flexible structure of several courses permits students to customize their experiences to meet their unique academic and career interests. The 18-hour curriculum includes a 3-hour upper-level course prescribed by the academic department to compliment and enhance the student's preparation for leadership positions within his/her chosen field of study.

Required Courses	Credit Hours
SAHE 1020. PEER MEDIATION AND LEADERSHIP DEVELOPMENT	3
SAHE 1030. PRACTICAL EXPERIENCE IN COLLEGE LEADERSHIP DEVELOPMENT	3
SAHE 2050. MENTORING LEADERSHIP AND CHANGE	3 (NEW)
ORGL 3170. CONCEPTS AND TECHNOLOGIES OF ORGANIZATIONAL COMMUNICATION	3
CONTENT COURSE (3000-Level or 4000-Level).	3
Course designated by department in which students' major field of study is housed	
SAHE 4050. LEADERSHIP EXPERIENCE	3

#### **COURSE CATALOG DESCRIPTIONS:**

SAHE 1020. PEER MEDIATION AND LEADERSHIP DEVELOPMENT. Develop skills in peer mediation, helping competencies, leadership, communication, and knowledge of organizational procedures in potential college leaders. Prerequisite: Consent of instructor.

SAHE 1030. PRACTICAL EXPERIENCE IN COLLEGE LEADERSHIP DEVELOPMENT. Continuation of SAHE 1020; this course will focus on development, presentation, and critique of projects related to leadership and organizational roles on the college campus. Prerequisite: SAHE 1020.

SAHE 2050. MENTORING: LEADERSHIP AND CHANGE. Leadership and Change is an advanced course examining the change process and preparing leaders who are effective in working with individuals, groups, and organizations in leading and managing change. Course is designed to be an interactive theory-to-practice focused on leadership as a change in process.

ORGL 3170. CONCEPTS AND TECHNOLOGIES OF ORGANIZATIONAL COMMUNICATION. This course will explore the role that human communication, both oral and written, plays in structuring, maintaining, and changing organizational behavior. Students will examine the role that the social media, ethics, diversity, leadership, conflict resolution, and problem-solving can have on business and corporate outcomes.

CONTENT COURSE (3000-Level or 4000-Level). This course is designated by the department responsible for the UC student's major field of study. This upper-level, major specific course was selected by the department because it compliments and enhances the student's preparation for leadership positions within his/her chosen field of study.

SAHE 4050. LEADERSHIP EXPERIENCE. A capstone interdisciplinary course putting into practice the knowledge, theory and skills learned in previous courses. Students will create and participate in an experience coupled with reflection throughout the course.

## **MODE OF DELIVERY:**

Courses will be delivered in a combination of modalities: traditional (on-site), hybrid, and online.

#### PLAN FOR ROLLING-OUT COURSES:

Initially, student cohorts will come from participants of Northwestern's President's Leadership Program (PLP). There are approximately ninety (90) PLP students per year. During their first year at NSU, all members of PLP enroll in SAHE 1020 (Fall) and SAHE 1030 (Spring). Beginning in Spring 2020, PLP Students interested in pursuing the UC in Leadership Studies will enroll in SAHE 2050. In Fall 2020, they will enroll in ORGL 3170. During Spring 2021 or after, UC in Leadership Studies students will enroll concurrently in SAHE 4050 and in the Content Course designated by the academic departments in which each student's major resides.

#### **TIMELINE:**

Course	Semester and Year
SAHE 1020: Peer Mediation and Leadership Development	FALL 2019
SAHE 1030: Practical Experience in College Leadership Development	SPRING 2020
SAHE 2050: Mentoring: Leadership and Change	SPRING 2020
ORGL 3170: Concepts and Technologies of Organizational Communication	FALL 2020
CONTENT COURSE (3000-Level or 4000-Level)	SPRING 2021
Course designated by department in which students' major field of study is housed.	
SAHE 4050: Leadership Experience	SPRING 2021

Whereas the initial cohort of UC in Leadership Studies students will consist of PLP students, the program will be strategically marketed to other groups of students as well. In addition to PLP students, we seek to target students who are already engaged in leadership activities, such as members of recognized student organizations or athletics. Academic credit for SAHE 1020 and SAHE 1030 will be available for students who are not members of PLP but still possess comparable leadership experience through participation in student government association or other structured student organizations. Non PLP students will be expected to meet objectives of SAHE 1020 and 1030 via an electronic portfolio assignments.

#### **SECTION REFERENCES:**

- 1. 2018 Hanover Research: How to Build the Graduates Employers Want to Hire
- 2. Laci Loew & Karen O'Leonard, Leadership Development Fact Book 2012: Benchmarks and Trends in US Leadership Development. Bersin by Deloitte, July 12, bersin.com
- 3. McKinsey and Company. (2014). Why Leadership Programs Fail. McKinsey Quarterly.

## 2. Need

Outline how this program is deemed essential for the wellbeing of the state, region, or academy (e.g., how is it relevant, how does it contribute to economic development or relate to current/evolving needs). Identify similar programs in the state and explain why the proposed certificate is needed.

#### **ESSENTIAL AND RELEVANT TO ECONOMIC DEVELOPMENT:**

Organizations seek to hire and promote job candidates with outstanding skills and experience in the areas of leadership and real-world problem solving <sup>(1)</sup>. The strongest contenders need a combination of hard skills and soft skills. Examples of hard skills include competencies in making presentations, word processing and spreadsheets. Examples of soft skills include persuasive communication, cooperation, self-motivation, adaptability, organization and meticulous attention to details, critical thinking, and problem solving. Universities must provide opportunities for students to develop hard skills and soft skills<sup>(2)</sup>.

Northwestern's proposed UC in Leadership Studies prepares students for leadership through formal lectures and hands-on experiences. An important characteristic of Northwestern's UC in Leadership Studies program is its developmental model, one which enhances learning-by-doing by gradually exposing students to more responsibility as their experience and competence grows. Students get the most benefit from experiential learning when they reflect upon their most recent experiences within the context of concepts and theories taught in the classroom, as well as prior hands-on experiences. Experiential learning is a significant and vital component of formal instruction in modern higher education (3). The Association of American Colleges and Universities identified experiential learning as a "high impact educational practice"<sup>(4)</sup>, one that improves critical thinking and problem-solving skills<sup>(5)</sup>. Additional benefits include better communication <sup>(6,7)</sup> and acquisition of special skills in teambuilding and teamwork<sup>(8)</sup>.

#### RESPONSIVE TO CURRENT/EVOLVING NEEDS OF EMPLOYERS AND STUDENTS:

The National Association of Colleges and Employers Job Outlook 2016 survey highlighted the most essential attributes that employers' look for among recent graduates. These include problem solving skills and an ability to work in a team<sup>(9)</sup>. A 2016 Chronical of Higher Education commentary expounded on the merits of experiential learning as an invaluable means for helping students acquire critical skills in problem solving and teamwork<sup>(10)</sup>). These skills and attributes are essential to successful leaders. Northwestern's UC in Leadership Studies aims to prepare students for future leadership roles in a variety of disciplines.

As part of their leadership scholarship, students selected for the PLP complete leadership courses and engage in experiential learning during their first year at NSU. The first cohort of the proposed UC in Leadership Studies will be self-selected from PLP. A survey of PLP Students was used to gauge interest in the proposed UC in Leadership Studies. Ninety percent (90%) of respondents believed that completing a Leadership Studies certificate would help them develop skills that are attractive to employers. Seventy-eight percent (78%) of respondents indicated they were *Very Interested* or *Extremely Interested* in building upon the leadership coursework and experiential learning that they began as members of PLP during their first year at NSU.

#### **Student Comments About Leadership Studies Coursework and Experiences**

I think that going out and volunteering for programs would be amazing!

In this program, I think it would be good to work on speaking in public. Learning how to talk to people and present ideas as a leader but also gaining the knowledge on how to speak to people and keep them interested.

I really think it [hands-on leadership experience opportunities] would attract a lot of leaders. It would help a lot for graduating students as employers will be more inclined to pick the student due to that extra certificate.

This program sounds like an opportunity not only to grow as a leader but show our love and support for the PLP program! I would recommend more projects in the communities like the community service project. It would get our faces out in the community.

A lot of coursework should be hands-on experiential learning.

## SIMILARITY TO OTHER PROGRAMS IN THE STATE:

Leadership studies (and certification thereof) has become increasingly popular across the nation. Within Louisiana, most leadership programs are associated with non-degree, professional development programs or add-ons in graduate education. For instance, Louisiana State University (LSU)'s Office of Continuing Education offers professional development programing, including a non-degree certificate program in Management & Leadership. It consists of a prescribed sequence of 5 non-credit courses. Several Louisiana Colleges and universities offer Graduate-Level Educational Leadership Certificates programs that serve as add-on certificates for a Master of Education Degree. Northwestern's UC in Leadership Studies is unique because it consists of undergraduate coursework, taken for-credit.

## **SECTION REFERENCES:**

- 1. Wall Street Journal (April 2015). To Get a Job, New Hires Are Put to the Test
- 2. 2018 Hanover Research: How to Build the Graduates Employers Want to Hire
- 3. Cantor, J. A. (1997). Experiential learning in higher education: Linking classroom and community. ASHE-ERIC Higher Education Report, 24-7 (series 95-7).
- 4. Kuhn, G. D. (2008) High-impact educational practices: What they are, who has access to them, and why they matter. The Association of American Colleges and Universities.
- 5. Eyler, J. (2009, Fall). The power of experiential learning. Liberal Education, 24-31.

6. Clements, M. D. and Cord, B. A. (2013). Assessment guiding learning: Developing graduate qualities in an experiential learning programme. Assessment and Evaluation in Higher Education, 38 (1). Retrieved from

http://www.gru.edu/qep/documents/articles/assessing-qualities.pdf

- 7. Marini, R. C., and Tillman, R. R. (1998). Giving graduates worldwide the business skills they need through cooperative education. *Journal of Cooperative Education*, 33(2), 50-59.
- 8. Kayes, A. B., Kayes, C. D., and Kolb, D. A. (2005). Experiential learning in teams. *Simulation Gaming*, 36. Retrieved from <a href="http://sag.sagepub.com/content/36/3/330.full.pdf+html">http://sag.sagepub.com/content/36/3/330.full.pdf+html</a>
- 9. National Association of Colleges and Employers (2015). Job Outlook 2016. Retrieved from <a href="http://www.naceweb.org/s11182015/employers-look-for-in-new-hires.aspx">http://www.naceweb.org/s11182015/employers-look-for-in-new-hires.aspx</a>
- 10. Aoun, J. E. (2016). Robot-proof: How colleges can keep people relevant in the workplace. *The Chronical of Higher Education*. Retrieved from <a href="http://chronicle.com/article/Robot-Proof-How-Colleges-Can/235057">http://chronicle.com/article/Robot-Proof-How-Colleges-Can/235057</a>

#### 3. Students

Describe student interest. Project enrollment and productivity for the first 5 years; justify projections.

#### STUDENT\_INTEREST:

During Spring 2019, a survey of PLP students was conducted in order to gauge interest in a proposed UC in Leadership Studies. Seventy-eight percent (78%) of respondents indicated they were *Very Interested* or *Extremely Interested* in building upon the leadership coursework and experiential learning that they completed as members of PLP during their first year at NSU.

Almost two-thirds (63%) of respondents were either *Very Interested* or *Extremely Interested* in pursuing a structured 18-hour Certificate in Leadership Studies. One half of the PLP respondents indicated they were *Very Likely* to enroll in a third (new) leadership course during the upcoming academic year. Another thirty-two percent (32%) indicated they would *Likely* enroll in the course. This course, Mentor Development, is the third course in the sequence of the proposed UC in Leadership Studies curriculum at NSU.

Leadership opportunities exist in all academic disciplines and careers. Accordingly, Northwestern's proposed UC in Leadership Studies is designed to appeal to students with varied academic and career goals and interests. Respondents to the PLP student survey were asked to report their current major field of study. Students who were *Extremely Interested* in pursuing a certificate in Leadership Studies at NSU reported majoring in disciplines associated with all four of the University's Colleges.

College Majors of Students Extremely Interested in Leadership Studies

Biology		Business Administration	Criminal Justice	Communications	Computer Information
		and Accounting			Systems
	Health and Exercise	Hospitality Management	Elementary	Electronic Engineering	Psychology
	Science	and Tourism	Education	Technology	

#### PROJECT ENROLLMENT AND PRODUCTIVITY FOR THE FIRST 5 YEARS

There are approximately ninety (90) PLP students per year. In a Spring 2019 Survey, ninety percent (90%) of PLP student respondents believed that completing a Leadership Studies certificate would help them develop skills that are attractive to employers. Almost two-thirds (63%) of respondents reported being either *Very Interested* or *Extremely Interested* in pursuing a structured 18-hour Certificate in Leadership Studies.

If one-half of the current PLP cohort elect to complete the certificate, enrollment in Northwestern's UC in Leadership Studies will begin with 45 students in the first year. A strategic marketing campaign that also targets student leaders outside of PLP will help drive enrollment after year one. We expect to increase the prior year's enrollment by 10% each year.

**5-YEAR FORECAST:** 

Course	Semester	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024
SAHE 1020: Peer Mediation and Leadership Development	FALL	90	90	90	90	90
SAHE 1030: Practical Experience in College Leadership Development	SPRING	90	90	90	90	90
SAHE 2050: Mentoring: Leadership and Change	SPRING		45	50	55	61
ORGL 3170: Concepts and Technologies of Organizational Communication	FALL		45	50	55	61
CONTENT COURSE (3000-Level or 4000-Level)	SPRING			45	50	55
SAHE 4050: Leadership Experience	SPRING			45	50	55

#### JUSTIFICATION OF ENROLLMENT AND PRODUCTIVITY PROJECTIONS:

Project enrollment and productivity is expected to grow as a result of strategic marking aimed at PLP students and others in leadership roles through recognized student organizations, athletics, etc.

#### **BUILDING MOMENTUM THROUGH 3-PHASE STRATEGIC MARKETING:**

A strategic marketing campaign will be used to increase awareness and interest in the UC in Leadership Studies program among those outside of PLP. It will target faculty, staff, and students.

- Phase one will involve discussions with deans and department heads in all four colleges at NSU.
- Phase two extends out-reach to select faculty and staff engaged in academic advising, mentoring, and other out-of-class
  activities with student leaders.
- Phase three further extends our marketing efforts by targeting student groups directly.

#### 4. Accreditation

Describe plan for achieving program accreditation.

Northwestern State University of Louisiana is accredited by Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).

#### 5. Faculty, Administration, & Other Resources

How will instructional needs be met: will additional faculty, facilities, equipment, or library resources be required? What department will deliver and oversee the proposed program?

#### **RESOURCES:**

During year one, course instruction will be met using existing faculty, facilities, equipment and other resources.

#### **PROGRAM DELIVERY:**

The proposed UC in Leadership Studies is multidisciplinary in nature. The following divisions and units of Northwestern State University will each play important roles in the successful delivery of the program:

- School of Education
- Department of Criminal Justice
- Office of the Dean of Students
- Office of First Year Experience and Leadership Development
- Each Academic Department will teach a self-identified upper-level Content Course to their respective majors within the Leadership Studies Certificate program.

## PROGRAM OVERSIGHT:

Northwestern's Gallaspy College of Education and Human Development (GCEHD) will oversee the proposed program.

#### 6. Cost

Summarize additional costs to offer the program. On separate budget sheet, estimate costs and revenues for the projected program for the first five years, indicating need for additional appropriations (if any).

Additional costs will be minimal for immediate implementation, as existing faculty will be used to teach courses offered. In year one, course development will occur for two new courses (SAHE 2050 and SAHE 4050) and realignment of ORGL 3170. Course development will be contracted with outside consultants with expertise in Leadership Studies.

It is anticipated that project enrollment and productivity will grow at a rate of 10% each year. This may necessitate the hiring of one adjunct faculty (year two) and another adjunct member (year three). Development of new coursework and marketing campaign may require some expense, but this would be minimal.

Cost and revenues on the following budget sheet are computed based on SCH generated by each student, based on current fees and tuition.

CERTIFICATIONS:	Primary Administrator for Proposed Certificate	Date
	Provost/Chief Academic Officer	Date
	Management Board/System Office	Date

# SUMMARY OF ESTIMATED ADDITIONAL COSTS/INCOME FOR PROPOSED CERTIFICATE

Institution: NORTHWESTERN STATE UNIVERSITY Date: 5/30/19

Certificate Program, Unit: UNDERGRADUATE CERTIFICATE IN LEADERSHIP STUDIES

FTE = Full Time Equivalent (use the institution's standard definition and provide that definition).

STATE OF STREET		EXP	ENDITURES	3					
	FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR		
<del></del>	AMOUNT	FTE	Amount	FTE	AMOUNT	FTE	AMOUNT	FTE	
Faculty (Salary & Benefits)	\$		\$ 2,640 (Adjunct)	.25	\$5,280 2 Adjuncts	.50	\$		
Graduate Assistants									
Support Personnel (Professional Service Contract for Course Dev.)	\$3,000								
Fellowships and Scholarships									
SUB-TOTAL EXPENSES	\$3,000		\$2,640	.25	\$5,280	.50	\$		
				No.		170/170	THE REAL PROPERTY.		
	AMOUN	Т	AMOUN	IT	AMOUN	Т	AMOUNT		
Facilities	\$		\$ \$		\$	;		\$	
Equipment									
Travel								,	
Marketing	\$1,000								
SUB-TOTAL	\$	\$ \$		\$			\$		
GRAND TOTAL EXPENSES	\$		\$ \$		\$				
		RE	VENUES					BEO IX	
Amount & Percentage of Total Anticipated From:	AMOUNT	%	AMOUNT	%	AMOUNT	%	AMOUNT	%	
State Appropriations	\$		\$		\$		\$		
Federal Grants/Contracts									
State Grants/Contracts								-	
Private Grants/Contracts									
Tuition	\$7,270		\$7,270		\$7,270		\$7,270		
Fees									
Other (specify)	-								
TOTAL	\$654,300		\$654,300		\$654,300		\$654,300		

<sup>\*</sup>Tuition and fees calculated for 2 online courses at \$1,125 per course, and 4 F2F courses at \$1,255. The multiplier is 90 students per projection for enrollment in SAHE 1020.

# BOARD OF SUPERVISORS FOR THE UNIVERSITY OF LOUISIANA SYSTEM

## ACADEMIC AND STUDENT AFFAIRS COMMITTEE

June 27, 2019

Item G.3. Northwestern State University's request for approval to offer a Post-Masters Certificate in Adult-Gerontological Acute Care Nurse Practitioner.

#### **EXECUTIVE SUMMARY**

Northwestern State University requests approval to offer a Post-Masters Certificate in Adult-Gerontological Acute Care Nurse Practitioner (PMC AGACNP). Registered nurses (RNs) practice in a myriad of roles in healthcare. Some obtain master's level or higher degrees, which formally prepare them to focus on special populations, or concentrations, in areas such as education, administration, research, etc., and to continue to work as RNs. Others choose to pursue master's level or higher degrees which formally prepare them to practice as advanced practice registered nurses (APRNs) with specific populations, or concentrations, including, but not limited to, family, women's health, pediatrics, adult-gerontology acute care (AGACNP), psychiatric mental health, and others. To practice as an AGACNP in Louisiana, an RN must obtain a minimum of a Master of Science in Nursing (MSN) with a concentration in adult-gerontology acute care nursing. The purpose of the proposed PMC AGACNP is to provide didactic and clinical education necessary for RNs or APRNs who already possess a graduate degree in nursing, in any concentration other than AGACNP, to meet the requirements to become an AGACNP.

The objectives of the proposed PMC AGACNP are to prepare certificate holders to: (1) apply advanced practice skills, abilities, and knowledge to promote optimal health to adults with critical, acute, and chronic health conditions; (2) apply advanced nursing practice knowledge in differential diagnosis and disease management in adult patients with critical, acute, or chronic health conditions, including the use and prescription of therapeutic, pharmacological, and nonpharmacological interventions; (3) provide culturally competent, population-based treatment modalities; and (4) demonstrate knowledge, skills, and abilities to qualify to take an AGACNP Certification Examination in order to apply for state licensure as an APRN, practicing as a board certified AGACNP with the ability to obtain prescription authority, including controlled substances.

The structure of the proposed certificate program follows Northwestern's Master of Science in Nursing Adult-Gerontology Acute Care Nurse Practitioner program (MSN AGACNP). The curriculum plan for each PMC AGACNP student will vary depending upon coursework already completed during the student's prior graduate program. Each student's formal transcript will be reviewed, and a gap analysis will be completed to compare previous coursework and clinical experiences to the requirements of the MSN AGACNP curriculum pattern. What is lacking in regards to clinical and nonclinical courses for a particular student will need to be completed in order for the AGACNP PMC to be awarded. No new courses will need to be

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developed for the proposed program. The PMC AGACNP student will learn alongside the MSN degree seeking AGACNP student, as both are preparing to be eligible to take the same certification exam.

The need for AGACNPs is growing rapidly and is expected to continue to increase due to the aging population. As people live long with chronic health conditions such as coronary heart disease, chronic obstructive pulmonary disease, cancer, chronic kidney disease, etc., the need for quality care will continue to escalate. The University anticipates enrolling five (5) students per year for the first two years of program implementation and enrolling ten (10) students per year thereafter. The offering of the PMC AGACNP is a natural progression for Northwestern, which is the oldest (and very successful) state supported nursing program in Louisiana.

## RECOMMENDATION

It is recommended that the following resolution be adopted:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors for the University of Louisiana System hereby approves Northwestern State University's request for approval to offer a Post-Masters Certificate in Adult-Gerontology Acute Care Nurse Practitioner.



310 Sam Sibley Drive Caspari Hall - Suite 223 Natchitoches, LA 71497 (O) 318-357-6441 (F) 318-357-4223

G 3

June 4, 2019

Dr. Jim Henderson, President University of Louisiana System 1201 North Third Street, 7-300 Baton Rouge, LA 70802

Re: Post-Master's Certificate: Adult-Gerontological Acute Care Nurse Practitioner (AGACNP)

Dear Dr. Henderson:

Northwestern State University is submitting the attached *Proposal to Develop a New Academic Certificate Program: Adult-Gerontological Acute Care Nurse Practitioner (AGACNP)* item to be placed on the agenda for approval at the June 2019 Board Meeting.

Thank you for your consideration.

Sincerely,

Dr. Chris Maggio

**President** 

**Attachment** 

DEDICATED TO ONE GOAL. YOURS.



# PROPOSAL to DEVELOP a NEW ACADEMIC CERTIFICATE PROGRAM

(CAS, PAC, PBC, GC, PMC, PPC)

#### Date:

Campus: Northwestern State University (NSU)	Program: Adult-Gerontological Acute Care Nurse Practitioner (AGACNP) post master's certificate (51.3821)
Institutional Contact Person & Access Info (if clair and Research in Nursing, Associate Professor, Co 318-677-3100; roppoloc@nsula.edu	rification is needed): Dr. Connie Hale, Director of Graduate Studies ollege of Nursing

## 1. Certificate Description

Describe the program concept: purpose and objectives; proposed curriculum; mode of delivery (on-site/hybrid/on-line). Indicate which courses are new; describe plan for rolling out new courses.

Registered nurses (RNs) practice in a myriad of roles in healthcare. Some obtain master's level or higher degrees, which formally prepare them to focus on specific populations, or concentrations, in areas such as education, administration, research, etc., and continue to work as RNs. Others choose to pursue master's level or higher degrees which formally prepare them to practice as advanced practice registered nurses (APRNs) with specific populations, or concentrations, including, but not limited to, family, women's health, pediatrics, adult-gerontology acute care (AGACNP), psychiatric mental health, and others. To practice as an AGACNP in Louisiana, an RN must obtain a minimum of a Master of Science in nursing (MSN) degree with a concentration of adult-gerontology acute care nursing. The curriculum necessary to obtain this degree requires specific courses that focus on the care of individuals and populations from age 13 years to death who are at risk of developing and/or who have a diagnosis of acute, critical and/or complex chronic health conditions in any setting where the patient may be encountered.

The purpose of this program is to provide the didactic and clinical education necessary for registered nurses (RNs or APRNs) who already possess a graduate degree in nursing, in any concentration other than AGACNP, to meet the requirements to become an AGACNP. The objectives of this post-master's certificate (PMC) program are to prepare the certificate holder to: 1) apply advanced practice skills, abilities and knowledge to promote optimal health to adults with critical, acute, and chronic health conditions; 2) apply advanced nursing practice knowledge in differential diagnosis and disease management in adults patients with critical, acute, or chronic health conditions, including the use and prescription of therapeutic, pharmacologic, and nonpharmacologic interventions; 3) provide culturally competent, population-based treatment modalities, and 4) demonstrate knowledge, skills, and abilities to qualify to take an AGACNP Certification Examination in order to apply for state licensure as an APRN, practicing as a board certified AGACNP with the ability to obtain prescriptive authority, including controlled substances.

Once the student successfully completes the AGACNP PMC (Adult-Gerontology Acute Care Nurse Practitioner Post-Master's Certificate) program, documentation of the AGACNP role and population focus will be noted on their formal transcript. This allows the graduate to apply for certification through either the American Nurses Credentialing Center (ANCC) AGACNP certification exam or the American Association of Critical Nurses (AACN) AGACNP certification exam, or any other examinations deemed appropriate by certifying bodies. Once the graduate successfully passes a national AGACNP certification exam, he/she may apply for advanced practice registered nurse licensure with the Louisiana State Board of Nursing (LSBN), and, if granted, practice in Louisiana as an AGACNP.

The structure of this certificate program follows NSU's Master of Science in Nursing Adult-Gerontology Acute Care Nurse Practitioner program. Currently, NSU's MSN nurse practitioner program is nationally accredited until 2023 by the Commission on Collegiate Nursing Education (CCNE), to assure educational quality and integrity of the program. The AGACNP program is congruent with national standards for graduate level and advanced practice registered nursing education and is consistent with nationally recognized core role and population specific Adult-Gerontology Acute Care Nurse Practitioner Scope and Standards of Practice competencies. The curriculum plan for each post graduate AGACNP certificate student is based on the MSN AGACNP curriculum pattern but will vary depending upon course work already completed during the student's prior graduate program. Each student's formal graduate transcript is reviewed, and a gap analysis is completed to compare previous course work and clinical experiences to the requirements of the MSN AGACNP curriculum pattern. The gap analysis is a tool that determines needed coursework for the PMC AGACNP student. On the gap analysis form, courses required for the AGACNP concentration are listed in one column, then courses from the student's graduate transcript that satisfy those required courses are listed in an adjacent column. The coursework needing to be completed can then be extracted,

and an individualized curriculum plan formulated for the PMC AGACNP student. Courses on the MSN AGACNP curriculum pattern may be waived if the required course or its equivalent have been successfully completed. Physical Assessment, Pharmacology, and Pathophysiology courses, known as the "three P's," are necessary for all nurse practitioner degrees; therefore, the PMC student who is already practicing as a certified nurse practitioner (in a different population/concentration) should demonstrate proficiency in these courses. If the PMC AGACNP student is not currently practicing as a nurse practitioner or pursued another non-APRN role, then the foundational "three P's" courses will have to have been taken within 6 years prior to certificate completion. Depending on course and clinical requirements, the post graduate AGACNP certificate may be earned in three to four semesters. In addition, the gap analysis takes into consideration the type and number of previously supervised clinical experiences the post graduate student has completed, if any, and determines the clinical experiences needed to satisfy the AGACNP clinical requirements. Because the AGACNP concentration clinical practice hour requirements are unique, the only supervised clinical hours counted toward the PMC are those completed in caring for adults (age 13 and up) in a variety of clinical settings, including Urgent Care that qualify as AGACNP appropriate hours. The PMC AGACNP certificate student is required to complete a minimum of five hundred (500) supervised direct patient care clinical hours within the AGACNP scope and standards of practice. This may include up to 48 hours of supervised direct clinical assessment, in the population focused area of practice.

The MSN AGACNP curriculum pattern, also used for the post master's certificate AGACNP student, consists of both nonclinical and clinical courses. Students who pursue the AGACNP concentration take MSN core courses (research, theory, advanced pathophysiology, and social forces), five clinical courses, two nurse practitioner role courses, advanced assessment course, advanced pharmacotherapeutics, and family dynamics. The specific courses each PMC AGACNP student requires will vary according to that individual's gap analysis, as detailed above.

The courses that comprise the MSN AGACNP program are listed below. In order to provide maximum flexibility to our graduate students, those who have earned and are practicing as Family Nurse Practitioners (FNP) or Adult-Gerontology Primary Care Nurse Practitioners (AGPCNP) may complete most of these courses online, with minimal required visits to campus. AGACNP clinical courses are hybrid courses with some in class meeting and some online delivery. Distance learning between the Alexandria, Natchitoches, and Shreveport will be utilized for class meetings when possible to minimize student travel.

NURG5120: THEORY ORIENTED NURSING PRACTICE. (3-3-0). Nursing theory development as basis for nursing practice. Systematic description, prediction and control of clinical phenomena in the generation of testable hypotheses about nursing.

NURG5280: ADVANCED HUMAN PHYSIOLOGY AND PATHOLOGY FOR ADVANCED PRACTICE NURSES. (3-3-0). The analysis, evaluation, synthesizing and integration of advanced human physiology and pathology concepts for the advanced practice nurse.

NURG5100: SOCIAL FORCES AND NURSING PRACTICE. (3-3-0). Social forces affecting the health care system; exploration and evaluation of concerns germane to contemporary nursing and the role of the masters prepared nurse. Prerequisite:

Graduate standing.

NURG5010: RESEARCH IN NURSING. (3-3-0). Scientific investigation; classifications of research; analysis and interpretation. Developing a research design to investigate a nursing problem. Application of an Evidence-Based Practice model for research appraisal. Prerequisites: Basic statistics course (may be taken concurrently) and graduate standing.

NURG5995: RESEARCH SEMINAR. (1-1-0). The utilization of evidence-based knowledge to provide high quality health care, initiate change, and improve nursing practice. Prerequisite: 5010.

NURG5996: RESEARCH SEMINAR II. (2-2-0). The utilization of evidence-based knowledge to develop a professional paper in lieu of thesis relative to the role of the masters prepared registered nurse. Closed registration. By selection only. Prerequisites: NURG 5010 and NURG 5995.

NURG5710: PHARMACOTHERAPEUTICS. (3-3-0). Study of clinical pharmacological therapeutics for advanced nursing practice. Prerequisite: Graduate standing.

NURG5810: FAMILY DYNAMICS FOR ADVANCE NURSING PRACTICE. (3-3-0). Examination of theories of family and the dynamics influencing family life, role behavior, coping, change and challenge. Emphasis is on strategies to assess and promote primary family health to formulate a nursing practice framework. Prerequisite: Registration in or credit for 5120.

NURG5370: GENOMICS FOR NURSING PRACTICE. (1-1-0). This course reinforces knowledge of basic genetics, inheritance patterns, mutations, and the Human Genome project. It then introduces diagnostic techniques, genetic counseling, pharmacogenomics, gene therapy, as well as ethical, legal, and social issues pertaining to advanced practice nursing. Focus is on prenatal genetics, development and teratogenesis, neurodegenerative diseases, hereditary cancers, sickle cell disease, familial hypercholesterolemia and cardiomyopathies and other selected heredity disease processes.

NURG5690: INFORMATICS FOR NURSING PRACTICE. (1-1-0). Combining evidence-based practice, decision support systems, and organization of interprofessional care to prepare MSN nurses to serve as information managers, patient advocates, and educators. Focus is on accessing, understanding, applying, and evaluating health related information to improve cost effective care and enhance safety.

NURG5820: INTRODUCTION TO THE ROLE OF THE NURSEPRACTITIONER. (2-2-0). The social, professional, and legal forces which structure and affect the implementation of the role and role competencies of the nurse practitioner. Prerequisite: Acceptance into a nurse practitioner concentration.

NURG5830: ROLE OF THE NURSE PRACTITIONER IN CLINICAL PRACTICE. (2-2-0). The historical, theoretical, social, legal and regulatory aspects of the professional role of the nurse practitioner.

NURG5840: ROLE OF THE NURSE PRACTITIONER IN BUSINESS PRACTICE. (2-2-0). Practical applications and strategies for the nurse practitioner student to develop professional, business, political and legal/regulatory acumen.

NURG5700: METHODS OF CLINICAL NURSING ASSESSMENT. (3-2-6). Advanced health assessment of infants, children, adults, prenatal and elderly with emphasis on data collection, differential diagnosis, and establishing priorities for health maintenance and prevention. Prerequisite: Graduate standing and registration in or credit for 5280. Must be accepted into nurse practitioner curriculum or with faculty approval. Corequisite: 5820 or with faculty approval.

NURG5410: AGACNP I: ACUTE CARE MANAGEMENT OF THE ADULT-GERIATRIC CLIENT. (3-2-7). The theoretical and clinical basis for the management of acute care health needs of adults through the life cycle. Prerequisites: 5120, 5280, 5700, 5690, 5370. Corequisites: 5010, 5710, 5830.

NURG5420: AGACNP II: EMERGENCY AND TRAUMA CARE OF THE ADULT-GERIATRIC CLIENT. (3-2-7) The theoretical and clinical basis for the advanced practice management of emergency and trauma health care needs of adults through the life cycle. Prerequisites: 5410. Corequisites: 5100, 5810, 5995.

NURG5430: AGACNP III: CRITICAL CARE MANAGEMENT OF THE ADULT-GERIATRIC CLIENT. (3-2-7) The theoretical and clinical basis for the advanced practice management of critical care health needs of adults through the life cycle. Prerequisites: 5420. Corequisites: 5840

NURG5440: AGACNP IV: CLINICAL PRECEPTORSHIP. (3-0-21). Clinical preceptorship in selected clinical sites in internal medicine, emergency/trauma and intensive care areas with opportunities to refine the role of the acute care nurse practitioner and refine competencies in clinical judgement and management of the acute care needs of the adult client. Prerequisites: 5430.

The plan for rolling out new courses: No new courses were developed for the PMC AGACNP program. Although the PMC AGACNP student possesses an advanced nursing degree and is, perhaps, practicing as a nurse practitioner, he/she is new to the acute-gerontology role, just like AGACNP degree seeking students, and therefore, will complete the same courses. The PMC AGACNP student will learn alongside the MSN degree seeking AGACNP student, as both are preparing to be eligible to take the same national certification exam.

The post graduate certificate AGACNP program is currently an institutional priority this time because of the increasing acuity of patients and the dearth of AGACNPs to adequately care for them. According to the LSBN, APRNs who have graduate degrees in nursing, with concentrations in areas other than AGACNP, are unable to fill this need even with a critical care background (as an RN) or with on-the-job training. However, if these APRNs were offered a PMC AGACNP, the length of time needed to expand their clinical practice could be decreased by 1 to 4, or perhaps more, semesters. It must be noted that AGACNPs hold a minimum of an MSN degree. Any nurse who holds an MSN degree in any concentration other than AGACNP can only become an AGACNP by obtaining a post graduate certificate. Without the PMC option, many APRNs in primary care who would choose to pursue expansion of their clinical practice would likely be discouraged from doing so.

The post graduate AGACNP certificate program is congruent with and furthers NSU's mission. NSU is a responsive, student-oriented institution that is committed to the creation, dissemination, and acquisition of knowledge through teaching, research, and service. The University maintains as its highest priority excellence in teaching in graduate and undergraduate programs. NSU prepares its students to become productive members of society and promotes economic development and improvements in the quality of life of the citizens in its region. The PMC AGACNP program will further this mission by educating graduate students to become adult-gerontology acute care nurse practitioners. These AGACNPs will help meet the increasingly complex, acute and critical health care demands not only in Louisiana, but regionally and nationally as well. Maintaining and returning to health citizens of Louisiana potentiates their productivity, which is important to economic development and potential growth.

#### 2. Need

Outline how this program is deemed essential for the wellbeing of the state, region, or academy (e.g., how is it relevant, how does it contribute to economic development or relate to current/evolving needs). Identify similar programs in the state and explain why the proposed certificate is needed.

The Adult-Gerontological Acute Care Nurse Practitioner (AGACNP) is an advanced practice registered nurse who possesses specialized knowledge and skills to provide comprehensive health care to individuals from age 13 to death. These nurse practitioners use evidence-based practice to assess, diagnose, treat, and evaluate patients who have critical, acute, and chronic health needs. AGACNPs practice within the AGACNP scope of practice and standards, promote optimal health, manage and treat chronic, complex, and often life-threatening health disorders, use advanced assessment and diagnostic modalities, and prescribe and Implement advanced treatment and pharmacotherapeutics when indicated.

The need for AGACNPs is growing rapidly and is expected to continue to increase. Global populations are aging, especially in the developed world. Aging brings chronic health conditions which are prone to exacerbations as well as disability. As baby-boomers age, the number of people over age 65 years will increase exponentially. In the United States, it is expected that about 21% of the population will be over age 65 by 2050. According to the US Census Bureau estimates, there will be 83.7 million people over 65 in the US by 2050. This is almost double the population of 43.1 million over 65 years in 2011. As people live longer with chronic health conditions such as coronary heart disease, chronic obstructive pulmonary disease, cancer, chronic kidney disease, etc., the need for AGACNPs to care for them will only increase.

Why are there shortages of providers: The shortage of AGACNPs exists because there are few programs nationally and therefore few graduates. Additionally, many RNs who pursue graduate education choose to pursue a primary care focus (FNP or AGPCNP) but find that they are practicing outside their educational preparation in an acute care role. The LSBN has made clear that the educational preparation for primary care does not prepare the practitioner for an acute care role. Moreover, the State Board is also clear that "on the job" training or a critical care nursing background as an RN does not fulfill the educational requirements for acute care practice.

Relevance and need: The need and relevance for offering the PMC AGACNP has been demonstrated though the policies of the LSBN. Furthermore, there is active interest among primary care nurse practitioners for pursuit of the PMC AGACNP. According to the Louisiana State Board of Nursing (LSBN), there were 3,561 nurse practitioners licensed and residing in Louisiana in 2017. Of these, 135 were working in acute care and 197 were working in trauma. That is less than 10% of nurse practitioners. With people living longer, the increasing elderly population, and increased acuity of patients, the need for this program is profound.

Post graduate AGACNPs can be educated in three to four semesters, depending on prior MSN degree and training. This potentially decreases the time needed to expand clinical practice by 1 to 4 semesters, perhaps more. This makes the PMC AGACNP a viable option for APRNs already in clinical practice. Research has long found comparable, or even better, patient outcomes related to quality, effectiveness, cost, and patient satisfaction when comparing acute care nurse practitioners and physicians, frequently with lower costs (American Journal of Critical Care, 2005).

Other schools offering PMC AGACNP: Currently, there are no universities in Louisiana who offer a post graduate AGACNP certificate. That makes this PMC program unique within Louisiana.

#### 3. Students

Describe student interest. Project enrollment and productivity for the first 5 years; justify projections.

Student interest/demand for a post graduate AGACNP certificate will be from registered nurses who hold a graduate nursing degree. Examples of students who would have an interest in a post graduate AGACNP certificate include advance practice registered nurses (APRNs) licensed as clinical nurse specialists, nurse midwives, certified registered nurse anesthetists, or nurse practitioners licensed to work in population focused areas other than adult-gerontology. Non-APRN nurses with a graduate degree (educator, administrator, and research degrees) would also be candidates for the post graduate certificate AGACNP.

According to the Louisiana State Board of Nursing (LSBN), there were 3,561 nurse practitioners licensed and residing in Louisiana in 2017. Only 135 stated they worked in acute care, and 197 stated they worked in trauma. This leaves many nurse practitioners who need post masters certificate options if they ever want to pursue the AGACNP concentration. Additionally, nurses with an advanced degree who are not nurse practitioners might want to return to school to become an AGACNP. The post masters AGACNP certificate program would allow these nurses to return to school and become trained as AGACNPs.

Queries from past students about the availability of a post graduate AGACNP program have been received for some time. No formal survey has been conducted, but there is a pool of at least 10 FNPs who have expressed strong interest in pursuing a post graduate AGACNP. Although the numbers may not be impressive, as word spreads about the possibility of a post graduate AGACNP, there have been further inquiries requesting information, expressing interest, or asking to be notified when a post graduate AGACNP becomes a reality at NSU.

NSU is a leader in Louisiana in graduating nurse practitioners. Over the last four years, NSU has graduated 273 nurse practitioners; 61 nurse practitioners in 2016, 72 nurse practitioners in 2017, 66 nurse practitioners in 2018, and 74 nurse practitioners in 2019. There are 81 nurse practitioner students currently in clinical courses who are projected to graduate in 2020. The table below outlines the nurse practitioner graduates from NSU since 2016.

NSU APRN Graduates from 2016 to 2019, with Projections for 2020

	2016	2017	2018	2019	2020
All NPs	61	72	66	74	*81

\*Predicted to graduate

Based on NSU's current interest in the post graduate AGACNP, we anticipate enrolling 5 students per year for the first and second year and enrolling 10 students per year thereafter. See the table below.

	Year 1	Year 2	Year 3	Year 4	Year 5+
New Students	5	5	10	10	10
Total Enrollment		10	15	20	20
Graduates	1-	5	5	10	10

#### 4. Accreditation

Describe plan for achieving program accreditation.

NSU's MSN program was implemented in 1972. Currently, the MSN program is nationally accredited by the Commission on Collegiate Nursing Education (CCNE), to assure educational quality and integrity of the program, until 2023. NSU has been preparing nurse practitioners since 1982. Furthermore, NSU has been successfully preparing PMC FNPs who provide primary care throughout Louisiana for the past 17 years. Until 2015, post master's certificate programs did not require separate accreditation from the degree seeking program. At that time, CCNE began developing an accreditation review process for post graduate certificate programs that will eventually be required for all post graduate certificate programs. NSU has already received approval from the Louisiana State Board of Nursing for the AGACNP post master's certificate program and has noted this on their list of approved programs. Once approval is received from the ULS Board, NSU will apply to have this post graduate AGACPNP certificate program accredited by CCNE. This process begins with a substantive change notification letter to CCNE with a time frame of 90 days prior to implementation up to 90 days after implementation of the addition of the program. NSU has the substantive change notification letter in draft form and will send it promptly to CCNE upon ULS Board approval of the post graduate certificate AGACNP program.

## 5. Faculty, Administration, & Other Resources

How will instructional needs be met: will additional faculty, facilities, equipment, or library resources be required? What department will deliver and oversee the proposed program?

The instructional needs for this certificate program will be met within the existing resources at Northwestern State University. All required courses for the post graduate AGACNP certificate program are already developed for the MSN degree seeking AGACNP program. There are no additional faculty, facilities, equipment, and library resources required. No additional appropriations are requested. The College of Nursing will oversee this proposed certificate program.

#### 6. Cost

Summarize additional costs to offer the program. On separate budget sheet, estimate costs and revenues for the projected program for the first five years, indicating need for additional appropriations (if any).

There are no added costs with the implementation of this post master's certificate program. As stated earlier, NSU offers an MSN with concentration in AGACNP. The post master's students will take the same courses as the degree seeking students.

CERTIFICATIONS:_	Primary Administrator for Proposed Certificate	May 28, 20 Date
	Provost/Chief Academic Officer	Date
<del>-1:</del>	Management Board/System Office	Date

# BOARD OF SUPERVISORS FOR THE UNIVERSITY OF LOUISIANA SYSTEM

## ACADEMIC AND STUDENT AFFAIRS COMMITTEE

June 27, 2019

Item G.4. Southeastern Louisiana University's request for approval of a Letter of Intent for a Master of Science in Computer Networking and Administration.

## **EXECUTIVE SUMMARY**

Southeastern Louisiana University (SLU) requests approval of a Letter of Intent for a Master of Science (MS) in Computer Networking and Administration. The proposed MS degree is designed to provide students with a pathway to high-demand careers in the applied computer science and information technology industries, with a focus in the areas of computer networking and administration. The proposed graduate program will prepare individuals for career-oriented jobs in rapidly growing computer networking and administration industries in the State of Louisiana and beyond. The demand for graduates with a degree in computer science is growing two times the national average according to the Bureau of Labor Statistics. The Bureau projects that new computing jobs will account for 71% of all STEM jobs. Furthermore, Computer Networking and Administration will be the major portions of the computing job market. The program proposed by SLU will help meet industry need.

The 33 credit hour graduate program, with thesis and non-thesis options, will include 15 hours of core courses along with 12-18 hours of specialized coursework depending on the thesis option selected by the student. Core courses include: Advanced OOP for Networking and Systems Administration, Network Design and Performance, Enterprise Computing, Advanced Systems Administration, and a Capstone Course. While other public universities in the state offer graduate level computer science programs, what is proposed by SLU is fundamentally different from those existing programs. While the proposed program is built upon the same foundations as other graduate-level computer science programs, what SLU has designed also examines the organizational and the technological issues involved in enterprise scale networking including emerging network technologies, network processing, high-performance computing, networking programming, and security. A graduate program of this nature will complement existing computer science programs and, together, these programs will produce talent required of the workforce.

The proposed graduate program will target two main streams of potential candidates — those who completed traditional programs in computer science and professionals with non-computer science degrees who are currently working in computing areas or are seeking a career change. The University anticipates an initial enrollment of 15 students with that number increasing to 50 by YR 5. Program implementation will require no new physical infrastructure and will share existing faculty resources. Since the Department of Computer Science currently offers undergraduate courses in the areas of computer networks and administration there is a solid foundation for building the proposed graduate program. The only anticipated cost is the addition

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of one tenure-track faculty member in order to accommodate the increased frequency of graduate course offerings. All courses required of the proposed graduate program will be offered online to accommodate working adults.

# RECOMMENDATION

It is recommended that the following resolution be adopted:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors for the University of Louisiana System hereby approves Southeastern Louisiana University's request for approval of a Letter of Intent for a Master of Science in Computer Networking and Administration.



June 6, 2019

Dr. James B. Henderson President, The University of Louisiana System 1201 North Third Street, Suite 7-300 Baton Rouge, LA 70802

Re: Letter of Intent for a Master of Science in Computer Networking and Administration

Dr. Henderson:

Southeastern Louisiana University respectfully requests that its Letter of Intent to develop a new academic program leading to a Master of Science in Computer Networking and Administration be placed on the agenda for the June 2019 meeting of the University of Louisiana System Board of Supervisors.

A Master of Science in Computer Networking and Administration offers our current students, alumni, and computer science professionals a pathway to high-demand careers in the applied computer science and information technology industries, with a focus in the areas of computer networking and administration. The program will examine the organizational and the technological issues involved in enterprise scale networking including emerging network technologies, network processing, high-performance computing, network programming, and security. The MS degree will prepare students for positions such as computer network administrator, network specialist, network design engineers, system software developer, and system administrator. The coursework will be available 100% online. The use of virtual handson labs will augment the learning experience for the practical aspects of networking and administration for our students.

Your consideration of this request is appreciated.

Sincerery,

John L. Crain

## LETTER OF INTENT to DEVELOP a NEW ACADEMIC PROGRAM [Jan2018]

**General Information** 

Date: June 5, 2019

Institution: Requested <u>CIP, Designation, Subject/Title:</u>

CIP: 11.0101

Southeastern Louisiana University Designation: Master of Science

Subject/Title:

Computer Networking and Administration

Contact Person & Contact Info:

Tena L. Golding, Provost and Vice President for Academic Affairs

provost@southeastern.edu

Phone: 985-549-2316 Fax: 985-549-2304 SLU Box 10798 Hammond, LA 70402

#### 1. Program Objectives and Content

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

## Purpose:

Southeastern Louisiana University proposes the establishment of a Master of Science in Computer Networking and Administration. Accredited by ABET since 1999, our Computer Science programs are committed to preparing students to be nationally competitive both in the workforce and in graduate studies. We are producing computer science graduates who are highly sought-after in the state, region, and around the nation.

This MS degree is designed to provide our current students, alumni, and computer science professionals with a pathway to high-demand careers in the applied computer science and information technology industries, with a focus in the areas of computer networking and administration. This program will prepare graduate students for career-oriented jobs in the rapidly growing computer networking and administration industries in the State of Louisiana, and the nation. The course work will be available 100% online. Offering the courses online enables us to provide prospective students with a huge degree of flexibility, in course scheduling and location. The use of virtual hands-on labs will augment the learning experience for the practical aspects of networking and administration for our students.

## Objectives:

Southeastern's Master of Science in Computer Networking and Administration is fundamentally different from traditional computer science programs. The proposed program is built upon the same foundations as other graduate-level computer science programs but emphasizes both the knowledge and the technical skills needed for the workforce. The program will examine the organizational and the technological issues involved in enterprise scale networking including emerging network technologies, network processing, high-performance computing, network programming, and security. The proposed program will prepare graduates for jobs in the rapidly growing computer networking and administration industries. We recognize the need for such professionals not only in our local area, but also regionally, and nationwide. Our degree will prepare students for positions such as computer network administrator,

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network specialist, network design engineers, system software developer, and system administrator. The program will attract our students and alumni as well as professionals in need of advanced career-enhancing training.

The proposed program is to be available completely on-line. Semesters include Fall, Spring and Summer so the students can graduate on time.

To maintain the quality of the proposed MS program, we have built and will implement the same ABET assessment procedure to guarantee that our graduates meet the leaning outcomes and the educational objectives of the program.

This proposal has been presented to the Industrial Advisory Council for the Department of Computer Science at Southeastern during its meeting on September 28, 2018. The industrial advisory council includes all major employers in the fields of computer science and information technology in southeastern Louisiana. The proposal was strongly endorsed by the Council.

## Structure and Content:

## Admission requirements

- 1. Meet all University admission requirements.
- 2. A bachelor's degree or appropriate post-baccalaureate certificate in Computer Science or Computer Engineering from an institution with full regional accreditation for that degree.
- 3. A minimum cumulative undergraduate GPA of 2.7 on a 4.0 scale (or equivalent).
- 4. Transcripts that show completion of courses in key areas such as general programming skills using languages such as C/C++ and Java, formal programming language foundations, data structures, algorithms, and discrete math.
- 5. If the undergraduate degree is not in Computer Science or Computer Engineering, students may be required to take the appropriate prerequisites.
- 6. Combined score on the GRE of at least 290.

## Graduation requirements

- 1. The program requires a total of 33 credit hours beyond the baccalaureate degree. This includes: successful completion of all courses listed on the Plan of Study within the 5-year time limit
- 2. Achievement of a GPA of at least 3.0 (a "B" average), with no more than 6 credit hours of a "C" grade and no grade below a "C" in the courses on the Plan of Study
- 3. 15 credit hours of core courses
- 4. 12 or 18 credit hours of specialization coursework depending on the option
- 5. The student can select from the following program options:
  - a. Thesis Option -27 hours course work and 6 hours graduate thesis.
  - b. Non-Thesis Option 33 hours course work.

The curriculum combines coursework in the foundations of computer science as well as topics in the focus areas of computer networking and administration. Below we list topics for both the foundational coursework and the focus area coursework. Following this, we show typical schedules.

#### **COURSES**

# CORE COURSE WORK (required – these will be new courses)

• CMPS 580: Advanced OOP for Networking and Systems Administration; 3 hours

- CMPS 609: Network Design and Performance; 3 hours
- CMPS 615: Enterprise Computing; 3 hours
- CMPS 616: Advanced System Administration; 3 hours
- CMPS 711: Capstone; 3 hours

# ELECTIVE COURSE WORK OF FOCUS AREAS – (these will be new courses)

- CMPS 620: Advanced Wired Networking Concepts; 3 hours
- CMPS 631: Network Modeling and Analysis; 3 hours
- CMPS 632: Network Management; 3 hours
- CMPS 650: Advanced Large-Scale Computing; 3 hours
- CMPS 651: Emerging Computing and Networking Technologies; 3 hours
- CMPS 652: Advanced Storage Technologies; 3 hours
- CMPS 770: Thesis; 1-3 hours, repeatable for up to 6 hours

#### THESIS/PROJECT

- Thesis option in which the student works with a committee and has a formal public defense of their work.
  - o CMPS 770: Thesis; 1-3 hours, repeatable for up to 6 hours
- Advanced Capstone Project in which the student works closely with a sponsor (faculty or industry) to complete a project of merit.

These 11 new graduate courses will be designed by current faculty. We already have courses in the areas of Computer Networking and Administration at the undergraduate level so our faculty have been teaching and doing research in these areas and have the expertise needed to design the courses. The courses will be rolled out at the rate of two to three new courses per semester using the following schedule:

# TWO YEAR SCHEDULE FOR COURSE ROLL-OUT

11 new courses	Year 1 Fall	Year 1 Spring	Year 2 Summer	Year 2 Fall	Current faculty with expertise
					Yang; Alkadi; Soysal;
580	X				Sekeroglu
609	Х				Tran
615		Х			Burris
616		X			Tran
620	Х				Tran
631			X		Tran
632				Х	Tran
650		×			Burris; Soysal; Sekeroglu
651			х		Burris; McDowell; Achee; Tran
652				Х	Soysal; Sekeroglu
711				Х	Koutsougeras; Alkadi

# **CURRICULUM for MS in COMPUTER NETWORKING AND ADMINISTRATION**

	FIRST YEAR		
First Semester			1
Course Number	Course Name	Core/Elective	Hours
CMPS 580	Advanced OOP for Networking and Systems Admins	Core	3 hrs
CMPS 609	Network Design and Performance	Core	3 hrs
CMPS 620	Advanced Wired Networking Concepts  Sub Total:	Elective	3 hrs

Second Semester			
Course Number	Course Name	Core/Elective	Hours
CMPS 615	Enterprise Computing	Core	3 hrs
CMPS 616	Advanced System Administration	Core	3 hrs
CMPS 650	Advanced Large-Scale Computing	Elective	3 hrs
	Sub Total:	9	hours

Summer Semester		Т	
Course Number	Course Name	Core/Elective	Hours
CMPS 631	Network Modeling and Analysis	Elective	3 hrs
CMPS 651	Emerging Computing and Networking Technologies	Elective	3 hrs
	Sub Total:	6	hours

Thesis option take one elective and Thesis CMPS 770 for 3hrs

SECOND YEAR										
First Semester										
Course Number	Course Name	Core/Elective	Hours							
CMPS 711	Capstone	Core	3 hrs							
CMPS 632	Network Management	Elective	3 hrs							
CMPS 652	Advanced Storage Technologies	Elective	3 hrs							
	Sub Total:	9	hours							

Thesis option take CMPS 711, one elective and Thesis (CMPS 770) for 3hrs

Total: 33 hours

Note: Courses are designed to accept new students in cohorts.

More elective courses will be added gradually to give students more choices.

In the following sections we give a brief description of each of the topics studied in Core and Focus Area courses.

# **COURSE DESCRIPTIONS**

## CORE COURSE WORK

CMPS 580: Advanced OOP for Networking and Systems Admins

This is a course in Object Oriented Programming. Students must have completed one year of OO programming prerequisite, as the course will presume that level of knowledge and will build from there. Multiple languages will be studied in this course. The languages chosen will have direct and immediate applicability to the field of Networking and Systems Administration program and will be chosen for their use in the topic areas of that degree program. Students will be quickly led through the primitive types and control structures of each language and immersed in significant projects using advanced language features. Note: Student must have one year of programming in an object-oriented programming language.

# • CMPS 609: Network Design and Performance

This course will examine the design and performance of networks. Students will learn to design networks based on identified needs and analyze the performance of that network. The designs include site, campus, and enterprise networks. WAN technologies will be combined with LAN technologies in the design of enterprise networks. Students will learn to assess the business goals and their application to the network goals. Students will learn to evaluate the security goals of the network and to integrate these goals in the design.

## CMPS 615: Enterprise Computing

This course explores enterprise systems (clouds, server farms, etc.) from the environment, networking, storage, security, and system administration perspectives. Students in this course gain an understanding of the knowledge and concepts needed to manage and administrate those enterprise systems.

# • CMPS 616: Advanced System Administration

System administration topics and technologies that serve as the basis for later course work in system administration. Topics covered include: ethics and system administration, the law and system administration, and the role of the system administrator in organizations. Technologies covered include: computing resource management, the TCP/IP protocol suite, the Domain Name Service (DNS), the Dynamic Host Configuration Protocol (DHCP), and web services hosting.

# • CMPS 711: Capstone

Information technology projects require the application of sound project management principles in order to be developed on time, on budget, and on specification. This course

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takes students through the nine knowledge areas of modern project management and the utilization of project management principles in both traditional and agile environments.

#### ELECTIVE COURSE WORK

• CMPS 620: Advanced Wired Networking Concepts

This course will cover the principles of wired networking with a focus on algorithms, protocols and implementation of advanced wired networking concepts The course will begin with in-depth background in architecture and protocols at physical, MAC, IP, and transport layers. Also, theoretical aspects of wired network challenges are discussed with a research focus. The course also explores the realm of wired technologies such as peer-to-peer networks, future internet, real-time applications, smart grid and IPv4 and IPv6 integration and translation. Students will learn about these technologies through lectures and explore some of them though a class project.

## CMPS 631: Network Modeling and Analysis

The course provides comprehensive exposition of the core concepts in network modeling and simulation. It will cover both graph theoretical and statistical models of complex networks such as the Internet and social networks. It also introduces different types of modeling techniques and simulation tools. The course also systematically addresses some practical and theoretical consideration for developing complex modeling. It offers real world examples to illustrate the process of modeling to address specific problems. Students will need one statistics course to be successful in this class.

# CMPS 632: Network Management

This course provides an introduction to network management concepts with hands-on laboratory sessions in developing network management applications and using it to study and analyze the performance of networks, data communications hardware and software, and use of these components in computer networks. Topics include but are not limited to introduction to network management concepts, the five basic network management functions namely fault management, configuration management, performance management, accounting management and security management; introduction to SNMP and its versions; remote monitoring and different network management architectures.

# • CMPS 650: Advanced Large-Scale Computing

This course explores, in depth, large-scale systems (mainframes, clusters/grids) from an advanced perspective in the environment, networking, storage, security, and system administration topics. Students in this course gain the ability needed to design and justify, and administer those large-scale systems.

## • CMPS 651: Emerging Computing and Networking Technologies

Computer networking and computer system technologies have dramatically changed the way that businesses operate and how they accomplish their organizational goals. Most of the current technologies used today have their roots in the early days of the Internet and computing. The changes that have occurred since then have been largely at the margins, rather than developed in a wholesale fashion. As our discipline moves forward there are a substantial number of emerging technologies in development to address the inadequacies of the currently deployed technologies. If widely adopted, these technologies will change how technologies support organizations and individuals creating a whole new paradigm for computing, networking, and the security of our computing

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environment. Students will be researching the current state of several of the most significant emerging technologies. The course will consist of a combination of lectures where technologies will be presented and explained; independent labs, modeling and simulation exercises that will reinforce the students' understanding of the technologies by allowing them to work with them in a hands-on fashion; and independent literature research do serve as a foundation for future work in this degree program. Knowledge of networking, systems, and security technologies is necessary.

# CMPS 652: Advanced Storage Technologies

Data storage is an integral and essential component of every computer system. This course explores the spectrum of storage technologies ranging from DAS to JBODS to SANs. Media types including Ramdisk, Flash, SSD, magnetic, optical and other emerging technologies will be investigated. The issues to be faced as systems grow to enterprise scale will also be addressed. Features of local, distributed, and networked storage including SANs will be introduced as well as issues such as capacity planning, virtualization, decentralized storage, security, crash recovery and load balancing, and maintenance in support of high performance systems and maintenance. Knowledge of networking, systems, and security technologies is necessary.

## CMPS 770: Thesis

A formal treatise presenting the results of study submitted in partial fulfillment of the requirements for the applicable degree. The process requires extensive and intensive one-on-one interaction between the candidate and professor with more limited interaction between and among the candidate and other members of the committee.

#### ASSESSMENT PLAN:

# Program Education Objectives (PEOs) or "Unit Goals":

- 1. Graduates will be competent professionals, able to:
  - a) Employ a pallet of multiple hardware platforms and software development environments, integrated with the appropriate theoretical constructs, to develop practical solutions to technological problems,
  - b) Deploy those solutions, and
  - c) Provide for their maintenance and administration.
- 2. Graduates will be able to effectively integrate research methods, appropriate theory, mathematics, and computational technology to analyze and solve problems encountered in the development of technological solutions.
- 3. Graduates will be able to assimilate new methodologies and advances in computer technology in an ever-evolving discipline.
- 4. Graduates will be effective in the elicitation of requirements for a software specification, and the written and oral communication of results to technical and non-technical colleagues and clients.
- 5. Graduates will be able to work independently and in collaboration with colleagues.
- 6. Graduates will be able to integrate the ethical standards of the profession and their professional knowledge and skills to contribute to society.

# **Student Outcomes (SOs):**

The student outcomes, encompassing all the ABET outcomes for Computer Science, are listed below:

- 1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- 2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- 3. Communicate effectively in a variety of professional contexts.
- 4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- 5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- 6. Apply computer science theory and software development fundamentals to produce computingbased solutions.

	PEO1	PEO2	PEO3	PEO4	PEO5	PEO6
SO[1]	X	X	X			
SO[2]	X	Х		X	X	
SO[3]		X		X		
SO[4]				X	X	
SO[5]						X
SO[6]				X		

Table 1: Program Educational Objectives and Student Outcomes

Mappings – Core Courses to SOs

Course	[SO]1	[SO]2	[SO]3	[SO]4	[SO]5	[SO]6
580	x	x				x
609	х	x				
615	х	х				х
616		х			х	х
711		х	х	x	X	

Table 2: Core Course - Student Outcome Mapping

# Specific Performance Indicators for each SO (Corresponding Rubrics will be developed)

Student Outcomes	Performance Indicators
1	<ul> <li>Students are able to formulate and decompose a problem into appropriate components.</li> <li>Students are able to apply the knowledge of the foundations of math, logic, and statistics to algorithm development</li> <li>Students are able to estimate resources required for the proposed solution</li> </ul>
2	<ul> <li>Students will demonstrate the ability to conceptualize</li> <li>Students will demonstrate the ability to develop</li> <li>Students will demonstrate the ability to validate</li> </ul>
3	<ul> <li>Students are able to prepare documents and presentation materials</li> <li>Students are able to deliver project presentation</li> </ul>
4	<ul> <li>Students will demonstrate an understanding of the responsibilities of a computing technology professional with respect to individuals and society</li> <li>Students will demonstrate understanding of intellectual property issues.</li> <li>Students will demonstrate working knowledge of a code of ethics.</li> </ul>
5	<ul> <li>Students will demonstrate an understanding of the organization and responsibilities</li> <li>Students will demonstrate working interaction</li> <li>Students will demonstrate working productivity</li> </ul>
6	<ul> <li>Students demonstrate an ability to apply mathematical foundations in the modeling and design of computer-based systems</li> <li>Students demonstrate an ability to apply algorithmic principles in the modeling and design of computer-based systems</li> <li>Students demonstrate an ability to apply computer science theory in the modeling and design of computer-based systems</li> </ul>

Table 3: Student outcomes and performance indicators

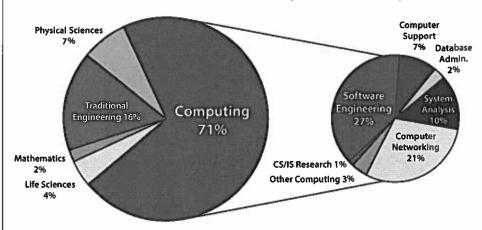
X

#### 2. Need

Outline how this program is essential for the wellbeing of the state/region/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. Also, identify similar programs in the state and explain why the intended one should not be perceived as unnecessary duplication.

Nationwide, computer science is still a top paying college degree, and the job demands for graduates with a degree in computer science are growing at two times the national average according the Bureau of Labor Statistic (BLS), Department of Labor. The bureau projected that new computing jobs will account for 71% of all STEM jobs. Furthermore, Computer Networking and Administration will be the major portions of the computing job market. See figures 1 and 2 below.

# Percentage of New STEM Jobs by Area through 2018



Data Source: US-BLS Employment Projections, 2008-2018 (http://www.bls.gov/emp/ep\_table\_102.pdf).

Figure 1: This figure shows illustrates how the need for new computing professionals is dominating STEM-related professions. Also note how that the focus area of computer networking is a substantial portion of the overall need.

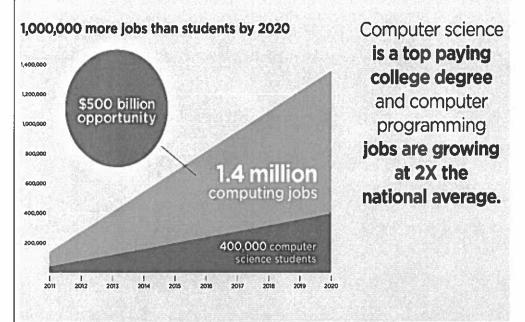


Figure 2: This figure shows that the need for computing professionals is outpacing the rate at which academic institutions are training them. Data sources: Bureau of Labor Statistics and the National Center for Education Statistics (NCES).

The map of Top IT Occupations by metropolitan area (MSA) from CompTIA (see figure 3) shows that the demands for computing jobs in southeastern Louisiana and the surrounding areas are exceptionally high, especially for Computer Networking and Administration.

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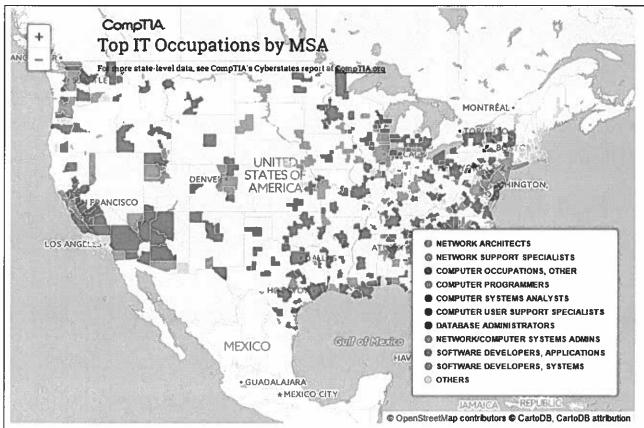


Figure 3: Map of Top IT Occupations by metropolitan area (source: CompTIA)

The latest statistics from BLS further enhance our analysis, that there are both current and evolving needs for graduates with skills in Computer Networking and Administration within the state and the region. Tables 4,5 and 6 show the data for Louisiana, the New Orleans MSA and Baton Rouge MSA areas.

Occupation code	Occupation title (click on the occupation title to view its profile)	Level	Employment	Employment RSE	Employment per 1,000 jobs	Location quotient	Median hourly wage	Mean hourly wage	Annual mean wage	Mean wage RSE
15-0000	Computer and Mathematical Occupations	major	20,000	3.5%	10.516	0.35	\$28.13	\$30.63	\$63,700	1.3%
15-1121	Computer Systems Analysts	detail	1,930	7.6%	1.015	0.25	\$31.08	\$34.73	\$72,230	3.9%
15-1122	Information Security Analysis	detail	460	8.4%	0.244	0.33	\$33.63	\$36.88	\$76,710	5.7%
15-1131	Computer Programmers	detail	2,340	19.3%	1.229	0.71	\$30.16	\$32.68	\$67,970	2.9%
15-1132	Software Developers. Applications	detait	1,160	14.6%	0.611	0.10	\$35.39	\$36.87	\$76,700	2.9%
15-1133	Software Developers, Systems Software	detail	1,200	7.9%	0.629	0.23	\$34.42	\$36.18	\$75,250	2.8%
15-1134	Web Developers	detail	460	18.1%	0.244	0.28	\$27.14	\$26.54	\$55,200	5.2%
15-1141	Database Administrators	detail	440	7.9%	0.229	0.29	\$37.99	\$42.50	\$88,390	5.4%
15-1142	Network and Computer Systems Administrators	detail	2,790	8.6%	1.469	0.56	\$28.87	\$31.30	\$65,090	3.4%
15-1143	Computer Network Architects	detail	350	18.9%	0.183	0.17	\$33.69	\$38.69	\$80,480	7.2%
15-1151	Computer User Support Specialists	detail	3,590	5.5%	1.886	0.44	\$20.72	\$21.75	\$45,250	1.7%
15-1162	Computer Network Support Specialists	detall	1,370	15.4%	0.720	0.55	\$22.71	\$24.36	\$50,660	2.4%

Table 4: Computing Jobs for the State of Louisiana in 2017 (Source: BLS. Extracted in July 2018)

Occupation code	Occupation title (cite on the occupation tit to view its profile)		Employment	Employment RSE	Employment per 1,000 jobs	Loca	tion h	edian ourly vage	Mean hourly wage	Ann mean		Mean wage RSE
15-1121	Computer Systems Analysis	detail	640	14.0%	1.165	0.29	\$32.57	\$35	.94	\$74,750	6.5%	
15-1122	Information Security Analysts	detail	190	15.7%	0.347	0.47	\$35.38	\$41	.20	\$85,690	12.5%	
15-1131	Computer Programmers	detail	690	20.5%	1.241	0.71	\$32.41	\$32	.37	\$67,320	4.4%	
15-1132	Software Developers. Applications	detail	630	24.0%	1,133	0.19	\$35.96	\$36	.48	\$75,870	3.9%	
15-1133	Software Developers. Systems Software	detail	430	13.8%	0.775	0.28	\$34.70	\$36	.56	\$76,050	5.6%	
15-1134	Web Developers	detail	190	29.0%	0.350	0.40	\$28.08	\$29	.26	\$60,850	3.1%	
15-1141	Database Administrators	detail	180	14.6%	0.326	0.41	\$41,17	\$47	.47	\$98,740	10.7%	
15-1142	Network and Computer Systems Administrators	detail	1,100	16.3%	1.994	0.76	\$29.83	\$32	.88	\$68,390	7.0%	
15-1143	Computer Network Architects	detail	130	44.5%	0.232	0.21	\$25.48	\$30	.88	\$64,220	17.2%	
15-1151	Computer User Support Specialists	detail	1,300	12.2%	2.353	0.55	\$19.86	\$21	.08	\$43,860	2.7%	
15-1152	Computer Network Support Specialists	detail	390	16.3%	0.702	0.54	\$25.56	\$27	311	\$56,390	4.1%	
15-1199	Computer Occupations, All Other	detail	1,440	10.5%	2,599	1.17	\$36.61	\$35	.83	\$74,530	6.8%	
15-2031	Operations Research Analysis	detail	310	29.9%	0.561	0.75	\$27.42	\$28	.56	\$59,400	7.7%	9

Table 5: Computing Jobs for New Orleans MSA in 2017 (Source: BLS. Extracted in July 2018)

Occupation cods	Occupation title (click on the occupation title to view its profile)	Level	Employment	Employment RSE	Employment per 1,000 jobs	Location quotient	Median hourly wage	Mean hourly wage	Annual mean wage	Mean wage RSE
	Occupations									
15-1121	Computer Systems Analysts	detail	620	7.6%	1,580	0.39	\$32.76	\$36.49	\$75,900	8.5%
15-1122	Information Security Analysts	detail	120	18.4%	0.306	0.41	\$33.41	\$34.78	\$72,330	4.1%
15-1131	Computer Programmers	detail	620	24.0%	1.575	0.91	\$28.41	\$31.97	\$66,490	8.1%
15-1132	Software Developers. Applications	detail	200	25.7%	0.501	0.08	\$32.99	\$34.89	\$72,570	7.5%
15-1133	Software Developers, Systems Software	detail	270	15,7%	0.876	0.24	\$34.52	\$36.40	\$75,720	4.6%
15-1134	Web Developers	detail	120	33.7%	0.308	0.35	\$21.41	\$20.66	\$42,980	11.1%
15-1141	Database Administrators	detail	100	13.5%	0.248	0.31	\$44.44	\$46.81	\$97,360	6.2%
15-1142	Network and Computer Systems Administrators	detail	710	18.6%	1.809	0.69	\$28.02	\$29.00	\$60,310	6.4%
15-1143	Computer Network Architects	detail	120	17.6%	0.318	0.29	\$39.87	\$41.67	\$86,670	7.0%
15-1151	Computer User Support Specialists	detall	1,090	5.0%	2.789	0.65	\$21.94	\$22.61	\$47,030	7.2%
15-1152	Computer Network Support Specialists	detail	420	45,4%	1.070	0.82	\$21.18	\$23.16	\$48,180	4.8%
15-1199	Computer Occupations, All Other	detail	640	15.6%	1.629	0.74	\$30.31	\$30.55	\$63,550	4.9%

Table 6: Computing Jobs for Baton Rouge MSA in 2017 (Source: BLS. Extracted in July 2018)

It can be seen that the need for Network and System Administrators is second only to Support Specialists and even exceeds the need for Programmers and greatly exceeds the need for Security Analysts. This targeted degree program will directly address the current and evolving needs for graduates with skills in Computer Networking and Administration within the state and the region.

DXC Technology, a Virginia-based tech service company with nearly 6,000 major clients across 70 countries announced plans to establish a 2,000-job Digital Transformation Center in the region.

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Southeastern has agreed to help by providing a steady stream of well-prepared graduates and higher degree professionals. This confluence of events is a great boon to the region, and it puts further emphasis on the need for Southeastern to establish this program.

As an example of the increased demand for Computing Professional, DXC Technology recently announced a large expansion in New Orleans. DXC's Digital Transformation Center will host their next-generation technology services that support clients' digital transformations that will be developed and delivered beginning January 2018. DXC will hire 300 IT and business enterprise professionals during 2018, then ramp up to 2,000 jobs over five years and an annual payroll exceeding \$133 million by 2025. In addition to the 2,000 new direct jobs, Louisiana Economic Development estimates the project will result in 2,257 new indirect jobs, for a total of more than 4,250 new jobs in the state's Southeast Region. Clearly with the success that the State has had in recruiting high-tech companies such as DXC, there is every reason to believe that more companies will grow here, thus ensure a continued demand for graduates from this program.

## Graduate Programs at Other Louisiana Institutions:

The proposed program will prepare graduate students for career-oriented jobs in the rapidly growing computer networking and administration industries in the State of Louisiana, and the nation. Since none of the current programs at other Louisiana institutions emphasize Computer Networking and Administration, our proposed program does not duplicate any program in the state. In fact, we believe that the proposed program will complement the other graduate programs at other institutions while allowing us to attract our alumni as well as professionals employed in various computing fields who are seeking career-enhancing training. In the paragraphs below, the programs of the state's various institutions are compared with our proposed program.

Several institutions across the state, offer a Master's degree in Computer Science. The principal difference between these programs and this proposed MS in Computer Networking and Administration from Southeastern is that our program emphasizes the practical application of computer science, specifically networking and administration, rather than the theoretical aspects of computer systems and computability. Furthermore, our proposed program will have the option of being delivered 100% on-line; none of the other programs has this delivery method. As this program emphasizes both the knowledge and the technical skills needed for the workforce, Southeastern will help to faster prepare graduate students for jobs in the rapidly growing computer networking and administration industries. This MS program will provide a large pool of applicants for the workforce need not only in our local area, but also regionally, and nationwide. Below is a summary of the relevant programs with links to their websites and commentary about their respective programs.

LSU Shreveport: Master of Science in Computer Systems Technology

(https://www.lsus.edu/academics/graduate-studies/graduate-programs/master-of-science-in-computer-systems-technology) To quote their web-site, this is "an interdisciplinary program with a computer science core. Graduate coursework can also include study in mathematics, biology, and business. Current concentrations include computer science, biomedical informatics and business administration." This is substantially different from Southeastern's program, which is focused on the organizational and the technological issues involved in enterprise scale networking including emerging network technologies, network processing, high-performance computing, network programming, and security. Our degree will prepare students for positions such as computer network administrator, network specialist, network design engineers, system software developer, and system administrator.

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Louisiana Tech: MS in Computer Science

(https://coes.latech.edu/graduate-programs/computer-science-ms/) To quote their web-site, "The program places a strong emphasis on fundamental theoretical and practical computing foundations, preparing graduates for academic and industrial careers. It aims to produce graduates who can practice computer science in various fields such as software, high-tech, manufacturing, healthcare and service degrees, as well as pursue advanced degrees."

University of New Orleans: MS in Computer Science

(http://new.uno.edu/academics/cos/computer-science/computer-science-ms) This program offers two concentrations, one in cyber security and another in bioinformatics. To quote their website, "The program is designed to be flexible enough to accommodate the needs of two kinds of students: those who have recently completed an undergraduate degree in computer science and want to further their education, and those practicing professionals who want to acquire specific academic experience relevant to their work." Our program is more specifically directed toward Network Administration, which is one of the most in-demand from a workforce perspective.

Louisiana State University: MS in Computer Science

(https://www.lsu.edu/eng/cse/academics/graduate/mscomputerscience.php) This is a traditional MS in Computer Science that is more theoretically-based than our proposed degree and is very well-suited for students who wish to pursue a Ph.D. Ours has a more specific workforce focus.

University of Louisiana at Lafayette: MS in Computer Science

(https://computing.louisiana.edu/computer-sciences/computer-science/masters)

This program is similar to that at LSU, in that it is a general computer science MS that (to quote their website) "is best for students and professionals who want to broaden and deepen their understanding of computer science and software development." This is the only other program with an on-line option.

#### 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 or quality of life of the people of Louisiana.

Southeastern's mission is to lead the educational, economic and cultural development of southeast Louisiana. With around 500 students, enrollment has doubled over the past decade, Southeastern's highly-regarded Computer Science and Information Technology undergraduate programs are recognized as one of the state's fastest-growing computing and information technology undergraduate programs. Hence, it is quite relevant to develop a graduate program based upon our successful undergraduate ones. As the third largest public University in the State, it is quite natural for Southeastern to develop programs in response to regional workforce needs.

Our committed, highly qualified and gifted faculty is well positioned to develop talent that will meet the needs of the 21st century economy. Our faculty members have worked tirelessly to prepare our students for the best jobs and are committed to preparing our students to be nationally competitive in both the workforce and graduate studies. We focus on providing students with the skills and experience to prepare them for a career in technology.

Southeastern has invested in enhancing the computer science programs with a newly-constructed 70,000 square-foot Computer Science and Technology Building (see photo below), which encompasses modern, high-tech classrooms and specialty labs. Computer Science at Southeastern

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is poised to expand, and furthermore, the department stands ready as pivotal partners in Louisiana's growing technology sector.

With the previously mentioned public-private partnership with DXC, Southeastern is in the position to play a crucial role in helping to meet workforce demands in the near future for Louisiana, the region, and the nation. We are a pivotal part of the \$25 million higher education initiative to meet workforce demands and expand the number of degrees awarded annually in computer science, management, science and technology, engineering and math, or other STEM-related studies facilitated by Louisiana Economic Development, the State of Louisiana.



#### 4. Students

Summarize student interest/demand for the proposed program, and provide evidence (e.g., enrl/completers of component courses or closely related minors, concentrations; details of program requests or interest surveys). Estimate expected enrollment (majors) in first three years, and justify expectations.

The proposed Masters program seeks to address the interests of both traditional and non-traditional students in the Department of Computer Science. The program is designed to maximize the acquisition of advanced practical skills and produce well-rounded professionals for the economic development of southeastern Louisiana.

The program will target two main streams of potential candidates—alumni of traditional undergraduate programs in Computer Science and professionals with non-computer science degrees who are currently working in computing areas or are seeking a career change.

Southeastern's BS program in Computer Science, with nearly 500 majors will be a primary feeder, but the ultimate goal is to establish a degree with regional and national reputation. Unlike traditional MS programs in CS, the emphasis of the proposed MS in Computer Networking and Administration will not be the development of advanced theoretical skills, but on building a deep understanding of the computer network systems, software development processes, operational cyber threat environment, and the needs of the modern IT enterprise.

Traditional Students:

The new program will provide a natural extension of the existing BS in Computer Science programs for students seeking advanced professional placement, and for those seeking a path to a graduate degree in Computer Science.

The BS programs have experienced rapid growth over the last ten years, with enrollment doubling from 222 in Fall 2007 to 462 in Fall 2017. The BS programs yielded 65 alumni in 2017 and is projected to graduate more in the next five years. The department is working for an NSA-designated Center of Academic Excellence in Cyber Operation for our undergraduate programs. We expect 15%-20% of the students entering the MS program to be graduates of our undergraduate programs in Computer Science.

#### Non-Traditional Students:

With more than 4000, who are working professionals in the computing areas, we project that many of our alumni will seek to have an MS. degree to advance their career. Also, with a high demand for computing jobs from DXC Technology and other tech companies in southeastern Louisiana and the region, our MS program will appeal to professionals with non-computer science degrees who are currently working in computing areas or are seeking a career change. Also, since this program will be able to be delivered 100% on-line, we will have access to students from throughout the country, and should also be able to recruit international students. We model our program after many successful MS programs in Computer Networking at Dakota State University and Wichita State University where they are able to attract up to 800 MS students for the programs in Computer Networking.

#### Estimated enrollments:

- 1. Year 1: Estimated enrollment of 15 students, assuming an even mix of in-state and out-of-state students. This estimation is based upon the requests from our alumni.
- 2. Year 2: Estimated 30 students, equal mix of in state and out of state with 15 new students and 15 students in the pipeline.
- 3. Year 3: Estimated 45 students, equal mix of in state and out of state with 30 new students and 15 students in the pipeline.
- 4. Year 4: Estimated 60 students, equal mix of in state and out of state with 45 new students and 15 students in the pipeline.
- 5. Year 5: Estimated 60 students, equal mix of in state and out of state with 45 new students and 15 students in the pipeline.

#### 5. Cost

Estimate new/additional costs of the projected program for the first five years, particularly for: faculty, equipment, software, facilities. Describe and explain expected funding sources, including needs for additional appropriations (if any). Commit to provide adequate funding to initiate and sustain the program.

The proposed program will be integrated into our Department of Computer Science, which just moved into a newly-constructed 70,000 square-foot Computer Science and Technology Building, which encompasses modern, high-tech classrooms and specialty labs. Hence, the new program will require no new physical infrastructure, and will share existing faculty resources.

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Since the program is intended to have the ability to be delivered 100% on-line, we will continue to use on-line hands-on lab service providers Cisco and Infosec for our program. These leading providers will be able to provide services immediately with no additional cost for the program. We have been using virtual hands-on lab services from Infosec for undergraduate courses and assessment results show that the virtual hands-on labs satisfy requirements from ABET accreditation agency and requirements from the National Security Agency for Centers of Academic Excellence in Cyber Operations.

## Cost Estimate

As previously indicated, the Department of Computer Science currently offers undergraduate courses in the areas of computer networks and administration so the existing curricula and faculty expertise provide a solid foundation for building the MS program. The only additional cost anticipated by the introduction of the MS degree is the addition of one tenure-track faculty member in order to accommodate the increased frequency of graduate course offerings. We estimate the additional load will be equivalent to three courses per semester.

Based on recent hiring experience, the annual cost of hiring a new tenure-track Assistant Professor is estimated at \$78,000 (\$110,760 including benefits). If we meet our anticipated growth targets, we will request a second tenure-track faculty member or full time instructor for the third year \$78,000 (\$110,760 including benefits).

Chief Academic Officer	6/5/19 Date
Management Board	Date of Approval by Board

# BOARD OF SUPERVISORS FOR THE UNIVERSITY OF LOUISIANA SYSTEM

## ACADEMIC AND STUDENT AFFAIRS COMMITTEE

June 27, 2019

Item G.5. University of Louisiana at Lafayette's request for approval of the University's 2015-2020 Strategic Plan.

#### **EXECUTIVE SUMMARY**

In December 2017 the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) approved various modifications to *The Principles of Accreditation: Foundations for Quality Enhancement* which went into effect on January 1, 2018. One change calls for the institution's governing board to "ensure the regular review of the institution's mission" (Section 4.2.a). As UL Lafayette prepares for reaffirmation in 2020, review and approval of the University's Mission Statement by the Board of Supervisors for the University of Louisiana System is needed in order to be in compliance with the SACSCOC standard noted.

## RECOMMENDATION

It is recommended that the following resolution be adopted:

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Supervisors for the University of Louisiana System hereby approves the University of Louisiana at Lafayette's 2015-2020 Strategic Plan.

P. O. Drawer 41008 Lafayette, LA 70504-1008 (337) 482-6203 Fax: (337) 482-5914 e-mail: president@louisiana.edu

June 6, 2019

Université des Acadiens

G 5

Dr. James B. Henderson President University of Louisiana System 1201 North Third Street, Suite 7-300 Baton Rouge, LA 70802

Dear Dr. Henderson:

This is to request review and approval of the attached 2015-2020 Strategic Plan for the University of Louisiana at Lafayette. The Mission Statement and Values also is included in the plan for review and approval.

Please place this item on the agenda for consideration at the June 2019 meeting of the Board of Supervisors.

Sincerely,

E. Joseph Savoie President

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Attachments

# University of Louisiana at Lafayette Strategic Planning Report: 2015 – 2020 November 10, 2015

# Strategic Planning Steering Committee

Dr. Melinda Oberleitner, Associate Dean, College of Nursing and Allied Health Professions & Professor,
Department of Nursing (Co-Chair)

Dr. Vanessa Hill, Associate Professor and Head, Department of Management, B.I. Moody III College of Business Administration (Co-Chair)

Dr. Aeve Abington-Pitre, Assistant Professor, College of Education

Mr. Dane Adams, President, Student Government Association

Mr. Andrew Benoit, Assistant Vice President, Enrollment Management & Director, Undergraduate
Admissions and Recruitment

Ms. Rae Brodnax, Development Officer

Mr. Gordon Brooks, Dean, College of the Arts

Dr. Jack Damico, Assistant VP of Research

Ms. Emily Deal, Head of Distance Learning and Online Services, Dupré Library

Mr. Scott Farmer, Athletic Director

Mr. Eugene Fields, Chief Information Officer

Ms. Jane Heels, Graduate Student Representative

Mr. Ruben Henderson, Assistant Director, Marketing & Leadership, Office of Student Engagement and Leadership

Dr. Helen Hurst, Associate Professor and Director, Graduate Programs, College of Nursing and Allied Health Professions

Ms. Heidie Lindsey, Associate Dean of Students & Director of Student Engagement and Leadership Dr. Susan Mopper, Professor of Biology and Director, Center for Ecology and Environmental Technology Mr. Tom Pears, Director, Auxiliary Operations

Dr. Catherine Roche-Wallace, Assistant Professor, College of the Arts

Dr. Geoffrey Stewart, Associate Professor, B.I. Moody III College of Business Administration

Dr. Charles Taylor, Assistant Professor, College of Engineering

Dr. John Troutman, Associate Professor, College of Liberal Arts

Mr. Xiang Xiyue, Graduate Student Representative

# **Executive Summary**

The Strategic Steering Committee was charged with developing a five-year strategic plan for Academic Years 2015 – 2020. The members of the steering committee began by considering the current University mission and vision statements. The committee proposed to update the existing statements in order to reflect the growth and transition of the University from a regional university to a nationally competitive research-intensive institution, as designated by our Carnegie Classification. The proposed update is articulated in the first section of this document.

After reflection on the mission and vision of the University, the committee conducted a SWOT analysis that explored our progress toward realizing the strategic goals identified in the 2009 - 2014 Strategic Plan, by inviting subject matter experts to provide updates on advancements achieved within that timeframe in their respective areas. The committee then used this information to conduct a second SWOT analysis to identify areas of strength and weakness, as well as opportunities for growth and factors that threaten the viability of the University's continued improvement.

The SWOT analyses revealed that great progress has been made toward realizing strategic initiatives focusing on student life, leisure, and extra-curricular activities. Significant resources have been invested in improving the facilities and programming related to student life outside of academics. Conversely, facilities and resources related to instruction, research, and the enhancement of intellectual engagement outside of the classroom have not received the same amount of attention and investment. This observation is externally validated by assessments indicating low levels of student academic engagement and low faculty and staff morale. Of particular note, the current status of the University Libraries holdings is a source of extreme concern across strategic areas.

As a result, the committee decided that strategic imperatives that emphasize enriching the intellectual life of the University should be prioritized over the next five years. Members of the steering committee partnered with multiple campus stakeholders and worked in task forces to propose strategic goals that address the weaknesses and threats identified in the SWOT analyses. The SWOT analyses identified four areas of priority:

- Student experience as it contributes to academic success
- Faculty resources to facilitate teaching, research and service
- Research resources that support cutting-edge research and insightful scholarship
- Governance structures that will improve the capacity of the administration to prioritize, enhance, and support the academic functions of the university

Subsequent sections of this report identify weaknesses and threats in each area and propose initiatives to address these issues. These initiatives are prioritized in a timeline for completion. The report offers key performance indicators and protocol recommendations for assessing progress. The committee acknowledges the funding challenges associated with achieving some of the targets set for the key performance indicators given the fact that the University of Louisiana at Lafayette has historically lagged well behind its peers in terms of total funding (state funding plus tuition and fees) per student. We recommend that our relative position in total funding be included in annual performance reports on the accomplishment of the strategic plan to provide context for the achievement of key performance indicators. The committee notes that while our Strategic Vision is to be included in the top 25% of our peers institutions, the key performance indicators focus on achieving peer averages in a variety of categories, and we believe that to be a reasonable approach within an appropriate funding model. Finally, the report concludes with suggestions for improving and streamlining the strategic planning process going forward.

## Mission Statement and Values

The committee reflected on the current mission statement and concluded that it provides a good foundation and represents an accurate expression and documentation of our history. However, the committee proposes a revision to the statement that reflects the University's evolution from a regional institution and its recent emergence as a national presence that aspires to achieve the Carnegie Classification of "Research University/Very High Research Activity." The committee therefore proposes the following update to the mission and values statements:

#### **Our Mission**

The University of Louisiana at Lafayette offers an exceptional education informed by diverse worldviews grounded in tradition, heritage, and culture. We develop leaders and innovators who advance knowledge, cultivate aesthetic sensibility, and improve the human condition.

#### **Our Values**

We strive to create a community of leaders and innovators in an environment that fosters a desire to advance and disseminate knowledge. We support the mission of the university by actualizing our core values:

Equity: striving for fair treatment and justice

Integrity: demonstrating character, honesty, and trustworthiness

Intellectual Curiosity: pursuing knowledge and appreciating its inherent value

Creativity: transcending established ideas

Tradition: acknowledging the contributions of the Acadian and Creole cultures to this region and to our University's history

Transparency: practicing open communication and sharing information

Respect: demonstrating empathy and esteem for others

Collaboration: understanding our connection with others and working to realize synergies through teamwork and collegiality

Pluralism: believing in the inherent worth of diverse cultures and perspectives

Sustainability: making decisions and allocating resources to meet the needs of the present, while preserving resources for the future

# Strategic Vision Statement

In an effort to realize our mission and live our values, the committee proposes to articulate our strategic focus over the next five years by the following statement:

We strive to be included in the top 25% of our peer institutions by 2020, improving our national and international status and recognition.

We identify our peer group for this vision statement as public universities in the category of "Research University/High Research Activity," as defined by the Carnegie Classification. Furthermore, appropriate performance measures in the categories of student achievement, faculty resources, and productivity in research, scholarship, and creative activities are delineated in the rationale sections that accompany each strategic imperative.

# **Introduction of Strategic Imperatives**

#### Overview

Members of the steering committee partnered with colleagues across campus to develop strategic initiatives to address weaknesses and to develop opportunities for growth in four areas: Students, Faculty, Research, and Governance. Task forces were instructed to consider and articulate resources and structural changes necessary to achieve their proposed initiatives. All initiatives were to include an examination of the following questions:

- What changes in faculty support and personnel are necessary to enable us to achieve our strategic vision?
- What changes in the student body, student support, and student engagement are necessary to enable us to achieve our strategic vision?
- What changes in the support of research, scholarship, and creative activities are necessary to enable us to achieve our strategic vision?
- What changes in governance are necessary to enable us to achieve our strategic vision?

The following sections describe the strategic imperatives by area (Faculty, Students, Research, and Governance), as well as key performance indicators for each one. The parts of the report that follow this section provide a detailed explanation of each initiative and a suggested timeline for completion.

# Strategic Imperatives (SI) related to Faculty:

Create a stimulating academic environment supported by the latest innovations in technology and informed by best practices, in which faculty members can realize their full potential as educators and scholars.

Key Performance Indicators (KPI): Intermediate goals that monitor progress toward the achievement of the strategic imperative. KPIs will be listed after each strategic imperative.

# SI 1: Significantly upgrade academic facilities related to instruction in order to meet or exceed the quality of those at peer institutions.

- KPI 1: Within the first year, develop a master plan to evaluate and prioritize upgrades to academic facilities.
- KPI 2: Increase spending for instruction and academic support to correct significant deficits in these areas and strive to reach our comparison peer averages for instructional and academic support.
- KPI 3: Equip 90 percent of all classrooms with minimum digital technology: internet access, laptop/computer workstations, LCD projectors, screens, and sound systems.
- KPI 4: Allocate sufficient funds to increase library expenditures for provision of research and information resources to meet or exceed the average of our comparative peer institutions.
- KPI 5: Determine and provide the minimum supply budget required by each department.
- KPI 6: Meet the comparative peer average for maintenance, space allocation, ADA standards, and adjacency to faculty offices for instructional spaces.

# SI 2: Expand faculty staffing to meet or exceed peer standards for student to faculty ratios, choices of course offerings, and faculty diversity

- KPI 7: Reduce the full-time undergraduate student to faculty ratio for students taking traditional curricula to the current comparison peer average of 15:1 and ensure that the staffing for distance learning meets or exceeds the peer average for instruction.
- KPI 8: Expand the recruitment and retention of new tenured and tenure-track faculty.
- KPI 9: Ensure diversity and equity in faculty appointments with the aid of the Office for Campus Diversity.

# SI 3: Offer competitive faculty salaries to recruit and retain the best faculty

KPI 10: Offer salaries competitive with those offered by our comparative peer institutions.

# SI 4: Provide professional development

- KPI 11: Establish a campus center to train faculty in new pedagogical and instructional techniques and technologies that support both traditional and distance delivery of curricula.
- KPI 12: Provide faculty with the infrastructure needed to observe, evaluate, and provide constructive feedback on their instruction.

 KPI 13: Provide faculty support including but not limited to computing technology, relocation support, travel funding, start-up budgets, and GA/TA assistance that is competitive with institutions in our peer group.

# Strategic Imperatives related to **Students**:

Cultivate a student body that is intellectually curious and civically engaged by developing an infrastructure that ensures student success.

Key Performance Indicators (KPI): Intermediate goals that monitor progress toward the achievement of the strategic imperative. KPIs will be listed after each strategic imperative.

# SI 1: Recruit, retain, and graduate outstanding students (undergraduate and graduate; traditional and nontraditional; transfer and returning adults).

- KPI 1: Implement and sustain student support to retain and graduate students.
- KPI 2: Expand recruitment of high-potential undergraduate and graduate students, which embraces diversity and enhances the university's image nationally and internationally, in both distance and traditional degree programs.
- KPI 3: Maximize opportunities for student enrollment and progression in traditional and distance education curricula, including strengthening transfer partnerships with community colleges.
- KPI 4: Improve student success through engagement in high impact practices.
- KPI 5: Expand and enhance incentives for graduate students' enrollment.

# SI 2: Enhance student engagement in co-curricular activities through a vigorous, energetic, and culturally diverse university community

- KPI 6: Develop and institute a defined plan/model for co-curricular activity at UL Lafayette.
- KPI 7: Implement a co-curricular transcript for all students.
- KPI 8: Obtain Carnegie Foundation's Classification for Community Engagement recognition.

# SI 3: Increase student productivity and success through engagement in mentored research, innovative projects, and creative endeavors.

- KPI 9: Expand support for graduate programs; develop new doctoral programs in areas of graduate excellence and new graduate programs in areas of undergraduate excellence.
- KPI 10: Promote a comprehensive chain of research mentoring for graduate students via studentfaculty interactions, peer activities, and apprenticeships.
- KPI 11: Develop an undergraduate research initiative that will provide research opportunities for all undergraduate students, regardless of major.

SI 4: Expand and strengthen UL Lafayette's relationship with alumni and the community locally, nationally, and globally, in direct support of student achievement.

• KPI 12: Double the proportion of alumni giving to the University.

# Strategic Imperatives related to Research:

Foster a stimulating academic environment for all members of the university community that supports the development and advancement of knowledge and creative works.

Key Performance Indicators (KPI): Intermediate goals that monitor progress toward the achievement of the strategic imperative. KPIs will be listed after each strategic imperative.

# SI 1: Enhance supporting infrastructure for the conduct of research and innovation.

- KPI 1: Ensure that support services are sufficient to sustain the efforts of University researchers.
- KPI 2 Provide incentives and training to increase faculty and staff engagement in research and innovation.
- KPI 3: Establish a mechanism for tracking unit-level performance metrics.

# SI 2: Increase and diversify external funding revenue through grants and contracts, entrepreneurial activities, and fund-raising.

- KPI 4: Provide more resources and enhance administrative infrastructure to support procurement of external funding, intellectual property development, entrepreneurial start-ups, and patents.
- KPI 5: Invest in research mentoring, and professional development efforts aimed at increasing research productivity.
- KPI 6: Collaborate with University Advancement to increase the number of external relationships and explore various opportunities for fund-raising and gifts to support research, graduate education, and entrepreneurial ventures.

# SI 3: Expand research programs beyond our existing strengths and take advantage of our historical, cultural, and geographical setting for research and scholarly purposes.

- KPI 7: Develop interdisciplinary initiatives leading to the growth and creation of research centers and institutes.
- KPI 8: Provide programs and incentives for collaborations across disciplines, including on-going research networks (Communities of Interest) that regularly provide opportunities for researchers to extend their activity outside of their disciplines and colleges.

# Strategic Imperatives related to Governance:

Institute a system for shared governance based on trust, collaboration, and continuous improvement.

Key Performance Indicators (KPI): Intermediate goals that monitor progress toward the achievement of the strategic imperative. KPIs will be listed after each strategic imperative.

# SI 1: Establish a shared governance model that facilitates trust, teamwork, and cross-functional collaboration, and aligns all stakeholders to the Vision and Mission.

- KPI 1: Establish an elected, representative body of governance for each of the primary constituent groups on campus: faculty, students, classified staff, and unclassified staff.
- KPI 2: Establish a University Senate, with representatives from each of the above governance bodies, which will support broad participation in the determination of University initiatives and resource allocations.
- KPI 3 Connect each stakeholder to the primary and support activities that drive University performance toward achieving the Vision.
- KPI 4: Provide each stakeholder with a clearly articulated authority structure and method of performance evaluation, with both tied to the Vision and Mission.
- KPI 5: Align all UL Lafayette committees' mission, membership, and reporting with the governance model.

# SI 2: Provide each level of governance with data analytics capabilities that create a collaborative culture and increase the University's overall impact.

 KPI 6: Build enterprise-wide data analytics capabilities that provide a wide array of performance metrics that are transparent, based on our Vision and Mission, and broadly embraced.

# SI 3: Develop the Human Resources function in support of the Mission and Vision.

• KPI 7: Establish an HR System that will manage all stages of the employment relationship to provide a community of employees focused on achieving the Mission and Vision of the University.

# SI 4: Establish a process for continuous academic and nonacademic professional development.

• KPI 8: Cultivate professional development programming that has a measurable impact on improving pedagogical innovation, managerial effectiveness, and essential job skills in support of the effective operation and governance of the University.

# Detailed Discussion of Strategic Imperatives and Key Performance Indicators

# 1. Faculty

Co-Chairs: John Troutman & Michael McClure

Task force committee members: Emily Deal, Aeve Abington-Pitre, Karyn Sutton; Joshua Vaughan, Lisa Broussard, and Curtis Matherne

The purpose of this task force is to propose initiatives that ensure a strong faculty that is equipped to teach, research, and meaningfully contribute to the campus and local communities. Proposed initiatives address but are not limited to:

- Academic Facilities
- Faculty Compensation
- Professional Development
- · Fully-staffed Faculty
- Financial resources dedicated to instructional resources

# Synopsis of Proposed Initiatives and Key Performance Indicators

Significantly upgrade academic facilities related to instruction to meet or exceed facilities in peer institutions.

Expand faculty staffing to meet or exceed peer standards for student to faculty ratios, course

offerings, and faculty diversity.

Offer competitive faculty salaries to recruit and retain the best faculty.

Provide professional development.

- Within the first year, develop a master plan to evaluate and prioritize upgrades to academic facilities.
- Increase spending for instruction and academic support to correct significant deficits in these areas and strive to reach our comparison peer averages for instructional and academic support.
- Equip 90% of all classrooms with minimal technology package: internet access, laptop/computer workstation, LCD projector, screen and sound system.
- Allocate sufficient funds to increase library expenditures for provision of research and information resources to meet or exceed the average of our comparative peer institutions.
- Determine the minimum supply budget required by each department.
- Meet the comparative peer average for maintenance, space allocation, ADA standards, and adjacency to faculty offices for instructional spaces.
- •Reduce the full-time undergraduate student to faculty ratio for students taking traditional curricula to the current comparison peer average of 15:1, and ensure that the staffing for distance learning meets or exceeds the peer average for instruction.
- Ensure diversity and equity in faculty appointments with the aid of the Office for Campus Diversity.
- •Offer salaries competitive with those offered by our comparative peer institutions.
- •Establish a campus center to train faculty in new pedagogical and instructional technologies that support both traditional and distance delivery of curricula.
- Provide faculty with the infrastructure needed to observe, evaluate, and provide constructive feedback based on their instruction.
- Provide faculty support including but not limited to computing technology, relocation, travel, start-up budgets, and GA/TA assistance that is competitive with institutions in our peer group.

# Proposed Timeline to benchmark progress (Years are fiscal rather than chronological)

- Develop master plan to evaluate and prioritize upgrades to academic facilities.
- Set spending for instruction at a minimum of 60% of peer average.
- Equip 60% of our classrooms with minimal technology package.
- Increase library spending to at least 40% of peer average
- Assign a task force to conduct internal study of appropriate department budgets.
- Assign a task force to conduct study of instructional spaces.

  Restore 20% of frozen faculty lines.
- Assign a task force to conduct audit on equity and diversity of faculty.
- · Adjust faculty salaries to at least 80% of peer average.
- Assign a task force to develop plan for campus instruction center.
- Conduct a study to determine peer average for direct support.
- Set spending for instruction at a minimum of 75% of peer average.
- · Equip 75% of our classrooms with minimal technology package.
- Increase library spending to 50% of peer average.
- · Complete study of appropriate department budgets, and report results with recommendations to Provost
- · Submit recommendations for instructional space to the Provost, leading to a prioritized list of academic facility improvements.
- Restore 40% of frozen faculty lines.
- Complete audit on equity and diversity of faculty, and report results with recommendations to the Provost.
- Adjust faculty salaries to 85% of peer average.
- Complete plans for campus instruction center and send out bids for construction.
- Submit recommendations for indirect faculty support to Provost.

# 2017

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- Set spending for instruction at a minimum of 90% of peer average.
- Equip 80% of our classrooms with minimal technology package.
- Increase library spending to 70% of peer average
- Implement recommendations for department budgets, instructional spaces, and indirect support.
- · Implement action on recommendations from the audit on equity and diversity
- Adjust faculty salaries to 90% of peer average.
- Begin construction for campus instruction center.
- Modify department budgets according to recommendations for indirect support.

2018

- · Set spending for instruction to meet or exceed the peer average.
- Equip 90% of our classrooms with minimal technology package.
- Increase library spending to 80 90% of peer average.
- · Conduct evaluation of actions implemented for modifying department budgets, instructional spaces, and indirect support.
- · Ensure that faculty salaries meet or exceed peer average.
- · Continue construction on campus instruction center.

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# **Detailed Discussion of Initiatives: Faculty**

**Purpose:** Create a stimulating academic environment supported by the latest innovations in technology and informed by best practices, in which faculty members can realize their full potential as educators and scholars

SI 1: Significantly upgrade academic facilities related to instruction in order to meet or exceed the quality of those at peer institutions.

• KPI 1: Within the first year, develop a master plan to evaluate and prioritize upgrades to academic facilities.

Rationale: In recent years, comprehensive master planning efforts at the University have been focused on guiding the physical growth of the campus into the next several decades and on providing direction for major expansion of athletic facilities. Neither of these plans focuses on the upgrade and expansion of core academic facilities such as classrooms, research, and laboratory spaces. Many of the academic buildings on campus have deteriorated significantly, and their condition is in stark contrast to the state-of-the art Student Union, as well as athletic and residence hall facilities. As classroom and laboratory areas are the academic core of any university, instructional spaces are in dire need of upgrade and expansion to meet current needs and to facilitate academic success at the highest levels.

• KPI 2: Increase spending for instruction and academic support to correct significant deficits in these areas, and strive to reach our comparison peer averages for instructional and academic support.

#### Rationale:

- Comparison Peer Data Set: According to 2014 IPEDS data, the core expenses figure per FTE enrollment for instruction at UL Lafayette is \$4,963. The average for our comparison peers is \$8,742. The average for our aspirational peers is \$8,546.1 UL Lafayette currently maintains the lowest instructional expenditures/Total FTE among all of our comparison peer institutions.
- Comparison Peer Data Set: According to 2014 IPEDS data, the core expenses per FTE enrollment for academic support at UL Lafayette are \$1,166. The average for our comparison peers is \$2,245. The average for our aspirational peers is \$2,246.2
- KPI 3: Equip 90 percent of all classrooms with minimal digital technology: internet access, laptop/computer workstation, LCD projector, screen, and sound system.

Rationale: In order to provide our students with a relevant education in the twenty-first century, it is imperative that we equip and maintain each classroom with a minimum of digital technology. According to the UL Lafayette IT office, as of 2015, only 43 percent of our classrooms feature any sort of digital instructional technology; the comparison peer institutions that responded to our query regarding instructional technology in their classrooms, in contrast, currently maintain a minimum of digital technology in 93-100 percent of their classrooms.<sup>3</sup>

• KPI 4: Allocate sufficient funds to increase library expenditures for provision of research and information resources to meet or exceed the average of our comparative peer institutions.

Rationale: In order to provide faculty with the necessary research resources to direct undergraduate and graduate education, we must ensure that the university adequately supports library collections and services. Our students and faculty have struggled to function with essentially no campus library budget for books, electronic materials, audiovisual materials, electronic serials, and current serial subscriptions for the last 6 years.

The chart below demonstrates the gross deficits in our library budget in comparison with our comparative peer institutions, and identifies a failure to provide adequate research and information resources to our undergraduates, graduate students, and faculty. Attached charts indicate how far behind we lag in library resource support in comparison not only with our comparative peer institutions, but with our state peers as well. We fear that failure to prioritize library resources significantly in the 2015-2020 strategic plan will create catastrophic and irreparable conditions at UL Lafayette for our students and faculty.

Table 1: Library Expenditures: 2012

	Books, serial back files, other materials	Electronic materials	Audiovisual materials	Electronic serials	Current serial subscriptions
UL Lafayette	126.00	0.00	27.00	29,200.00	695,558.00
Peer Average	699,499.00	263,420.00	22,972.00	2,306,554.00	2,965,997.00

National Center for Education Statistics "Library Statistics Program." Accessed February 11, 2015: http://nces.ed.gov/surveys/libraries/Academic.asp.

KPI 5: Determine the minimum supply budget required by each department.

Rationale: This study will ensure that faculty receives adequate operational support (e.g. photocopying access, office supplies) to meet instructional needs.

• KPI 6: Meet the average for maintenance, space allocation, ADA standards, and adjacency to faculty offices for instructional spaces.

Rationale: We must meet the minimum legal standards in our instructional facilities in order to maintain the health and wellbeing of our campus community. We must maintain sufficient maintenance and upkeep of existing instructional facilities. We suggest that we benchmark our progress according the specifications identified in the "Space Planning for Institutions of Higher Education" by the Council of Facility Planners International (CFPI).

# SI 2: Expand faculty staffing to meet or exceed peer standards for student to faculty ratios, choices of course offerings, and faculty diversity.

• KPI 7: Reduce the full-time undergraduate student to faculty ratio for students taking traditional curricula to the current comparison peer average of 15:1, and ensure that the staffing for distance learning meets or exceeds the peer average for instruction.

Rationale: Our students enrolled in traditional face-to-face courses experience higher student to faculty ratios than students enrolled at comparison peer institutions. Out of 132 universities in our report, only four had higher student to faculty ratios than UL Lafayette, and only two had higher ratios at Carnegie RH or RVH universities. Furthermore, according to 2012 IPEDS, the student to faculty ratio at UL Lafayette is 22 to 1. This is the **highest** ratio among our peer institutions. The next highest ratio among our peers/comparison schools is 19 to 1. The average of our comparison peer schools is 15.4 to 1. The average of our aspirational schools is 14.14 to 1. As a result, we propose to work toward a student to faculty ratio of 15 to 1 for students enrolled in traditional curricula. For students enrolled in distance education courses, we propose that student to faculty ratios be established in these courses that meet or exceed the peer average for instruction in distance education courses.

We can begin the process of reducing the student to faculty ratio by unfreezing/filling unfilled tenure-track lines.

KPI 8: Expand the recruitment and retention of new tenured and tenure—track faculty.

Rationale: We need to implement this initiative in order to diversify and expand our course offerings.

• KPI 9: Ensure diversity and equity in faculty appointments with the aid of the Office for Campus Diversity.

Rationale: We recognize the need to conduct a faculty-wide diversity and equity audit to ensure EEO compliance, salary equity, and appropriate diversity training for our faculty and staff. The audit report should be released to Faculty Senate and should provide a plan for correcting any deficiencies by the end of 2018.

## SI 3: Offer competitive faculty salaries to recruit and retain the best faculty

• KPI 10: Offer salaries competitive with those offered by our comparative peer institutions.

Rationale: Offering competitive salaries ensures high faculty standards, morale, student success, and research productivity.

#### SI 4: Provide professional development

KPI 11: Establish a campus center to train faculty in new pedagogical and instructional techniques and technologies that support both traditional and distance delivery of curricula.

Rationale: The creation of a campus center to train faculty would facilitate ongoing innovation in faculty pedagogy, which would contribute to enhancing the academic experience of our students. Investment in enhancing faculty development in instruction contributes to improving student engagement.

• KPI 12: Provide faculty support including but not limited to computing technology, relocation, travel funding, start-up budgets, and GA/TA assistance that is competitive with institutions in our peer group.

Rationale: Support for faculty would help attract and retain high quality faculty.

Additional documentation to support these initiatives is included in Appendix B.

1 A functional expense category that includes expenses of the colleges, schools, departments, and other instructional divisions of the institution and expenses for departmental research and public service that are not separately budgeted. Includes general academic instruction, occupational and vocational instruction, community education, preparatory and adult basic education, and regular, special, and extension sessions. Also includes expenses for both credit and non-credit activities. Excludes expenses for academic administration where the primary function is administration (e.g., academic Deans). Information technology expenses related to instructional activities are included if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in academic support). Institutions include actual or allocated costs for operation and maintenance of plant, interest, and depreciation.

2 A functional expense category that includes expenses of activities and services that support the institution's primary missions of instruction, research, and public service. It includes the retention, preservation, and display of educational materials (for example, libraries, museums, and galleries); organized activities that provide support services to the academic functions of the institution (such as a demonstration school associated with a College of Education or veterinary and dental clinics if their primary purpose is to support the instructional program); media such as audiovisual services; academic administration (including academic Deans but not department chairpersons); and formally organized and separately budgeted academic personnel development and course and curriculum development expenses. Also included are information technology expenses related to academic support activities; if an institution does not separately budget and expense information technology resources, the costs associated with the three primary programs will be applied to this function and the remainder to institutional support. Institutions include actual or allocated costs for operation and maintenance of plant, interest, and depreciation.

3 Our task force solicited IT offices from all of our comparison peer institutions. Five IT offices responded. Of those, the University of Texas at El Paso reports: "100% of our classrooms have a projection and sound system with connectivity for laptops. Most, also have a computer in the instructor's podium. We are in the process of replacing physical computers in 139 classrooms with thin clients accessing Virtual desktops." The University of Massachusetts, Boston reports that "100% of 'Level 1' classrooms [are equipped with] data/video projector, projection screen, VHS video playback, DVD video playback, audio amplifier with stereo speakers, wall mounted control panel, cable for connecting a laptop computer, cable for connecting to the campus network and Internet, laptop computers available for use in TEC's from Media Labs." The University of South Dakota reports that "96%- 101 of 105 classrooms contain a projector or TV display, computer, and sound system." The University of Reno-Nevada reports that "we currently have 139 centrallyscheduled classrooms and of those, 129 are 'smart classrooms.' We also provide varying degrees of support for technology in a number of departmentally or college-controlled spaces, including about 18 video conferencing rooms. All told, we support over 200 installed multi-device systems." Wright State University was less specific, reporting that it has "about 130 classrooms on campus and 10 more in remote locations offsite. Most of these classrooms are electronic; equipped with a computer, monitor, video projector/screen, DVD or Blu-Ray players and document cameras. We have recently started upgrading these classrooms to digital HDMI. We now have about 15 digital classrooms with the rest being equipped with VGA/Analog technology. We hope to be completely digital within 4 years."

<sup>&</sup>lt;sup>4</sup> Taniecea Arceneaux Mallery, Ph.D., our new Director of Equity, Diversity and Community Engagement provided some constructive initial ideas in correspondence to our co-chairs, dated February 25, 2015: "I'd encourage you to consider ways to increase the diversity of the faculty that we are recruiting and hiring. This may mean that we are being creative in terms of outreach on job boards, databases, and at different conferences where we may reach untapped pools of potential candidates. I like to think not in terms of recruitment, but in terms of attraction. What is it about our University that will make it an attractive place to work (and particularly for underrepresented scholars)? And, what can we do to make it more attractive? This may also mean that there should be increased resources and support for (minority) faculty. That way, we are ensuring that we consider ways to recruit them successfully to our campus, but we also want to support them so that they will thrive when they arrive."

## 2. Students

Co-Chairs: Helen Hurst and Andy Benoit

Task force committee members: Gordon Brooks; Emily Deal; Mary Farmer-Kaiser; Jenny Faust; Ruben Henderson, Heidie Lindsey, Dane Adams, Jane Heels

The purpose of this task force is to propose initiatives that provide an environment that enhances the student experience as it contributes to academic success. Proposed initiatives should address but are not limited to:

- Recruitment
- Retention
- Graduation Performance
- Alumni Support

Recruit, retain, and graduate outstanding students.

- Implement and sustain student support to retain and graduate students.
- Expand recruitment of high-potential undergraduate and graduate students, which embraces diversity and enhances the University's image nationally and internationally, in both distance and traditional degree programs.
- Maximize opportunities for student enrollment and progression in traditional and distance education curricula.
- Improve student success through engagement in high impact practices.
- · Expand and enhance incentives for graduate students' enrollment.

Enhance student engagement in co-curricular activities through a vigorous, energetic, and culturally diverse university community.

- Develop and institute a defined plan/model for co-curricular activity at UL Lafayette.
- Implement a co-curricular transcript for all students.
- Obtain Carnegie Foundation's Classification for Community Engagement recognition.

Increase student productivity and success through engagement in mentored research, innovative projects, and creative endeavors.

- Expand support for graduate programs; develop new doctoral programs in areas of graduate excellence and new graduate programs in areas of undergraduate excellence.
- Promote a comprehensive chain of research mentoring for graduate students via student-faculty interactions, peer activities, and apprenticeships.
- Develop an undergraduate research initiative that will provide research opportunities for all undergraduate students, regardless of major.

Expand and strengthen UL Lafayette's relationships with alumni and the community locally, nationally, and globally in direct support of student achievement,

• Double the proportion of alumni giving to the University.

# **Detailed Discussion of Strategic Initiatives: Students**

Purpose: Cultivate a student body that is intellectually curious and civically engaged by developing an infrastructure that will ensure student success.

SI 1: Recruit, retain, and graduate outstanding students (undergraduate and graduate; traditional and nontraditional).

<u>Rationale</u>: Students are the backbone of the university. We must attract outstanding students who have the ability to succeed, and provide them with support for matriculation. The recommendations articulated in the strategic initiatives are formulated with the goal of bringing us up to par with comparable peer institutions.

KPI 1: Implement and sustain student support to retain and graduate students.

Rationale: Our research concludes that current practices do not adequately support matriculation and graduation. The task force found that the primary obstacles to student matriculation and graduation are financial aid, academic advising, and the first year experience as previously structured.

Consequently, the task force proposes that the University increase access to financial aid with the continued implementation of the "One Stop Shop" model for financial aid. This program is in progress, and the task force recommends continued investment in this initiative. In addition, the task force recommends that the University adopt a professional advisor model to guide students through the scheduling of courses. Professional advisors provide students with more consistent mentoring that is often critical in the first years of their university experience. Professional advisors can also facilitate the pairing of students with faculty.

Quality of interaction with academic advisors in the first year was one of UL Lafayette's lowest performing areas on the 2014 NSSE Snapshot, relative to other universities in the UL System. According to the National Survey of Academic Advising (2011), advising caseloads for faculty advisors at medium-sized universities (enrollment between 6,000 – 23,499 students) in the 25<sup>th</sup> percentile is 1:25, 1:45 in the 50<sup>th</sup> percentile, and 1:85 in the 75<sup>th</sup> percentile. For public doctoral universities that participated in the survey, the 25<sup>th</sup> percentile reported 1:30, 50<sup>th</sup> percentile 1:50, and 75<sup>th</sup> percentile 1:50 caseloads. To remain consistent with the student-centered focus of our mission, it is recommended that we aspire to be comparable to the 25<sup>th</sup> percentile of medium-sized universities. As a result, we recommend that each faculty advisor should have no more than 20 advisees, as mentoring relationships require a lot of time and careful consideration. In order to facilitate these one-on-one relationships, faculty to advisee ratios need to be kept relatively low.

• KPI 2: Expand recruitment of high potential undergraduate and graduate students that embraces diversity, and enhances the university's image nationally and internationally, in distance programs and in traditional degree programs.

Rationale: UL Lafayette aspires to achieve "Research University/Very High Research Activity" status, as described in the Carnegie Classification. The universities with such a status are not regional; their academic reputation is established nationally as well as internationally. A student body that represents the best talent from every state in the United States, as well as from multiple countries, will be a testimonial to the quality of our curriculum, faculty, and research.

In order to accomplish this initiative, the task force recommends that the University fully integrate the ERP/CRM program. We should also strengthen the prestige of our academic brand by adhering to admissions deadlines. Data on matriculation and graduation indicate a strong correlation between stating intent to attend and success in college. Students who state their intent to attend the University at or before the deadline are more likely to graduate.

Finally, the task force recommends that careful attention be given to the Honors Program. Indeed, the task force feels that the Honors Program could be a great asset in recruiting, retaining, and graduating high potential students. We recommend a thorough examination, evaluation, and re-design of the program to maximize its potential to enhance student engagement for talented students.

• KPI 3: Maximize opportunities for student enrollment and progression in traditional and distance education curricula.

Rationale: As enrollment grows at UL Lafayette, demand for gateway courses creates a bottleneck for student progression. The University must find additional methods of providing enrollment opportunities for students. While hiring additional faculty and renovating academic facilities will help alleviate these issues, the development of additional enrollment opportunities during the summer should be pursued. Enrollment management must be thoughtfully engaged to ensure that summer offerings support student learning, are an affordable option, and engage our best faculty.

The growth of enrollments of students in community colleges provides an opportunity to build on the partnerships that currently exists with those community colleges to serve students who may not be ready to enter the University or find a community college to be a better fit for their initial higher education experience. Students who complete an associate of arts or associate of science degree often succeed at a very high rate at the university level, and the University has a tremendous opportunity to increase our service to the State of Louisiana through transfer admissions.

UL Lafayette could use innovative programs such as dual enrollment or distance learning to create more opportunities for students to connect with the University in addition to the rolling admission currently employed. Providing more points of access for students to engage with the University could enhance UL Lafayette's appeal to potential students.

There is also an opportunity to increase the number of course offerings available as hybrid or online for our non-traditional students looking for professional development in our continuing education program, or seeking to advance an existing credential, such as in the RN to BSN program in Nursing. In the Spring 2015, 80% of our online enrollment was from our two programs in Nursing. UL Lafayette has an opportunity to increase its online enrollment in continuing education and professional development for existing credentials, as we currently rank in the middle of institutions in Louisiana with regard to number of online programs.

KPI 4: Improve student success through engagement in high impact practices.

<u>Rationale</u>: Student research, internships, industry engagement, study abroad, and mentoring are shown to enhance student engagement, which in turn is proven to support matriculation and graduation.

Participation in these activities can be improved by a concerted effort to foster collaboration between units

on interdisciplinary projects. Interdisciplinary collaborations can be encouraged by creating research networks within the university.

It would be productive to incentivize faculty to develop, teach, and participate in recognized high impact practices such as summer courses, study abroad, lecture series, and mentoring. The University has been working toward making summer salaries competitive with peer institutions. We encourage the University to continue this important work. In addition to making summer salaries competitive, the administration should strengthen the support structure that would encourage faculty involvement in these enrichment activities.

For example, faculty participation in study abroad may be increased if faculty could focus on developing the class and would not be charged with recruiting students for the classes as well. Recruiting to make minimum enrollment for study abroad is counterproductive. The responsibility for recruiting diverts faculty attention away from developing an engaging class to the logistics of recruiting students to meet the minimum class size requirements. In addition, it is often demoralizing to spend a significant amount of time planning a course, only to be told less than a month ahead of time that it will be cancelled.

Faculty are expected to engage in research and scholarship. This is a time-consuming effort, and for many teaching faculty, summer is the only stretch of uninterrupted time that can be solely devoted to research and scholarly activities. Increasing the level of graduate/teaching assistance as well as exploring creative scheduling options may provide the support needed to enable faculty to teach in the summer without adversely affecting research productivity. The administration can demonstrate the importance of these summer enrichment opportunities by compensating instructors well and providing necessary logistical and administrative support to encourage involvement.

Additional investment in Career Services personnel who specialize in recruiting companies to supply internships to students in the Liberal Arts, as well as in the STEM and professional disciplines would increase the participation of students in internships.

KPI 5: Expand and enhance incentives to enroll as graduate students.

Rationale: The current level of support for graduate student funding is significantly below comparable peer institutions. According to the Graduate School, over one half of graduate students currently enrolled (53.26%) do not receive any funding. In addition, we need to revise our funding cycle so that it is consistent with competitor practices. For example, promptly extending offers to graduate assistants and fellows is imperative in order to encourage commitment to attend, and in order to retain continuing students.

SI 2: Enhance student engagement in co-curricular activities through a vigorous, energetic, and culturally diverse university community.

Rationale: A defined plan for co-curricular activities can increase student academic engagement, and lead to positive effects on progression, retention, and academic success.

• KPI 6: Develop and institute a defined plan/model for co-curricular activity at UL Lafayette.

Rationale: Co-curricular activities contribute to student engagement, which supports matriculation and graduation. Currently, activities have focused on leisure activities targeted to traditional students. Co-curricular activities seek to support students' classroom experience through events that demonstrate the connection between scholarship and the "real world." Co-curricular activities such as lectures, performances, panel discussions, conferences, study abroad, community service, etc. encourage students to integrate what they study with how they live. In addition, these activities are relevant to all of our students regardless of life stage (non-traditional, veterans) or medium (traditional, distance learning, or hybrid).

KPI 7: Implement a co-curricular transcript for all students.

Rationale: Including credit earned for co-curricular activities on a student's transcript demonstrates the importance placed on these activities. A co-curricular transcript adds an element of accountability and provides additional incentives for full participation.

KPI 8: Obtain Carnegie Foundation's Classification for Community Engagement recognition

Rationale: The Carnegie Foundation's Classification for Community Engagement is an elective classification that is evidence-based documentation of a university's commitment to collaborating with the larger community for the "mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity." The UL Lafayette Office of Community Service provides extensive opportunities for students, faculty, and staff to participate in community partnerships, leadership, service, and citizenship activities. Receipt of this designation would validate the efforts of countless students, faculty, and staff in contributing to the public good while enriching curricula, scholarship, research, and creative activity. Currently, only four universities in Louisiana (and none in the University of Louisiana System) are recipients of the Carnegie Foundation's Classification for Community Engagement: LSU, Loyola University, Our Lady of the Lake College, and Tulane University.

# SI 3: Increase student productivity and success through engagement in mentored research, innovative projects, and creative endeavors.

Rationale: Activities such as student engagement in mentored research and innovative and creative endeavors are considered high impact practices, which enrich the educational experience and can have life-changing effects for a student. These types of practices typically consist of meaningful and extensive interactions with faculty in and outside of the classroom, are challenging, and demand considerable time and effort from the student.

• KPI 9: Expand support for graduate programs, develop new doctoral programs in areas of graduate excellence, and new graduate programs in areas of undergraduate excellence.

Rationale: There is an important interrelationship between research and graduate education. Graduate students – particularly doctoral students – are frequently essential collaborators who stimulate and inspire academic faculty to research. At the doctoral level, many students are talented and creative researchers who often conduct excellent research themselves. Additionally, graduate enrollment and the awarding of doctoral degrees are important metrics in evaluating universities for various classifications (e.g., Carnegie, AAU). At UL Lafayette, we have a low percentage of enrolled graduate students when our total student enrollment is considered (9%), and this reflects negatively on us when compared with both our peer

universities and our aspirational comparison group. As indicated by the Dean of the Graduate School, Dr. Mary Farmer-Kaiser, our 9% enrollment in Fall 2014 compared unfavorably with all of our comparison peers, including Louisiana Tech University, Bowling Green State University, University of Southern Mississippi, and others. Furthermore, we have fewer graduate programs (27 Master's Degree programs and 10 Doctoral Degree programs) than all of our peer comparisons, including Louisiana Tech University and the University of New Orleans. If we are to move toward a higher tier of universities, we must increase the size and number of our graduate programs, and our graduation rates. This is especially true in doctoral education. As a University, we have committed to moving toward the "Research University with Very High Research Activity" classification. For this purpose, we must award 100 doctoral degrees per year. We are currently at half that level (49-51). UL Lafayette must increase the number of Master's Degree programs and Doctoral Degree programs if we are to rise in prestige and rankings. Early start programs for excellent undergraduates and 4+1 programs can help to increase numbers in current programs, but the most effective solution involves creating and supporting more graduate programs.

Graduate education – particularly doctoral education – is very competitive. Students often are influenced by the amount of support they receive while pursuing graduate degrees. Graduate funding at UL Lafayette should be increased, and other value-added incentives should be established, such as the graduate student incentive on external grants, initiated by the VP for Research. Annual review of graduate student stipends should be informed by data such as that provided by the OSU GA Stipend Survey. Reducing incidental expenses and hidden costs, giving incentives in the form of preferred housing, or even offering sliding scales for meals and housing are potential ways to incentivize graduate students to attend our University.

 KPI 10: Promote a comprehensive chain of research mentoring for graduate students via student/faculty interactions, peer activities, and apprenticeships.

Rationale: The research mentoring of promising undergraduate and graduate students by academic researchers, advanced students, and more experienced peers can yield powerful and beneficial learning opportunities for students who are researchers-in-training. It is important, however, that mentors are experienced and/or trained in providing careful mentoring. With the collaboration of the Research Office, the Graduate School should design and establish mentoring training.

Recognition, friendly evaluation, and competition create both communication and pride in one's efforts. Research showcases encourage and increase the quality of research conducted by our graduate and undergraduate students, and should continue to be promoted.

• KPI 11: Develop an undergraduate research initiative that will provide research opportunities for all undergraduate students, regardless of major.

Rationale: The benefits of undergraduate research have been extensively studied and disseminated. According to the Council on Undergraduate Research, these benefits include the development of critical thinking, creativity, problem-solving, and intellectual independence of students. Participation in undergraduate research is also linked to increased student retention at the undergraduate level, and increased enrollment in graduate education. Providing university-wide opportunities for undergraduate research promotes an innovation-oriented culture.

SI 4: Expand and strengthen UL Lafayette's relationship with alumni and the community locally, nationally, and globally, in direct support of student achievement.

<u>Rationale:</u> Increasing alumni and overall philanthropic giving is integral to the growth of the University. It is also a measure of student engagement and satisfaction.

KPI 12: Double the proportion of alumni giving to the University.

Rationale: Alumni giving is an indirect measure of student engagement and satisfaction. Currently, 4% of our alumni donate to the university. Focusing on alumni giving provides an opportunity to the University to interact with alumni to determine how the University can remain a part of their lives. Also, this is an opportunity for self-reflection on the current level of engagement and satisfaction. Do students fully appreciate the value that they get for what they pay? Do students perceive that they are getting the best education possible? If not, how can we improve? The answers to these questions not only improve the University for future generations, but may also result in reinforcing students' commitment and interest in their education.

In addition, this effort provides an opportunity to reach out to our alumni to develop relationships that go beyond appealing for donations. How do we provide opportunities for alumni to continue lifelong learning? How do we facilitate relationships between alumni and current students? Engaging alumni as partners through mentoring, research, and acting as ambassadors for the University makes their common experience as UL students salient, and may establish a bond between previous and current generations of students.

The task force therefore recommends that the University examine, refine, and develop policies and procedures related to fundraising. This includes thoughtful consideration of the effectiveness of the current centralized structure and exploration of the benefits of decentralizing the fundraising function.

<sup>&</sup>lt;sup>1</sup> Information from the National Center for Education Statistics. "Library Statistics Program". Accessed February 11, 2015, http://nces.edu.gov/surveys/libraries/Academic.asp.

 Reach a pass rate for UNIV 100 of 70%. · Ensure that 40% of UNIV 100 instructors are permanent faculty. Increase percentage yield of international applications: 40% UG, 5% GR. · Evaluate current doctoral student stipends Conduct research to evaluate scholarship/stipends for Masters students at peer institutions. 2016 · Identify task force to investigate criteria for Carnegie Foundation's classification for Community Engagement recognition Convene a committee to develop a culture change initiative that would increase student awareness and appreciation for high impact engagement activities (such as collaborating on research with faculty). Increase the number of alumni contributions by 10% Reach an undergraduate 6 year graduation rate of 51%. Reach a first to second year retention rate of 80%. Reach a pass rate for UNIV 100 of 80%.  $\bullet$  Increase the percentage yield of out-of-state applications: 20% UG; 40% GR. Increase percentage yield of international applications: 45% UG 15% GR. Ensure that doctoral student stipends are at 80% of peer institutional average.
 Increase the number of awarded doctorates by 7. · Esatblish co-curricular activity plan 2017 · Propose two new Doctoral Programs Apply for Carnegie Foundation's classification for Community Engagement. Increase the number of alumni contributions by 10% Reach an undergraduate 6 year graduation rate of 53%.
Reach a pass rate for UNIV 100 of 90%. • Ensure that 50% of UNIV 100 instructors are permanent faculty. Increase the percentage yield of out-of state applications: 35% UG; 45% GR. Increase percentage yield of intenational applications: 60% UG; 35% GR. Ensure that graduate enrollment represents 15% of total student enrollment. · Increase the number of awarded doctorates by 10. 2018 Ensure that doctoral student stipends are at 90% of peer institutional average. · Identify task force to explore opportunities for research involvement for all students. Increase the number of alumni contributions by 10% Reach an undergraduale 6 year graduation rate of 55%. Reach a first to second year graduation rate is 82%. Reach a pass rate for UNIV 100 of 96%. · Ensure that 60 % of UNIV 100 instructors are permanent faculty. Increase the yield of out-out-state applications: 70% UG; 50% GR. Increase percentage yield of international applications: 65% UG; 35% GR. · Ensure that doctoral student stipends meet the average of our peer institutions. 2019 · Increase the number of awarded doctorates by 15 · Implement co-curricular transcript. Increase the number of alumni contributions by 10%

Reach an undergraduate 6 year graduation rate of 50%.
Increase doctoral student enrollment by 20%.
Increase the number of awarded doctorates by 5.

### 3. Research

Co-chairs: Jack Damico & Charles Taylor

Task force members: Mary Farmer -Kaiser, James Dent, Bill Ferguson, Craig Forsyth, W. Geoff Gjertson, Karl Hasenstein, Jennifer Lemoine, Mary Neiheisel, Saeed Salehi, Pavel Samsonov, Doug Williams

The purpose of this task force is to propose initiatives that will foster an environment that supports cutting edge research and encourage insightful scholarship that enables members of the university community to advance and disseminate knowledge in a meaningful way. Proposed initiatives address but are not limited to:

- Research Facilities
- Faculty Development
- Graduate Education
- Undergraduate Research

## Synopsis of Proposed Initiatives and Key Performance Indicators

Enhance supporting infrastruture for the conduct of research and innovation.

- Ensure that support services are sufficient to sustain research efforts of University researchers.
- Provide incentives and training to increase faculty and staff engagement in research and innovation.
- Establish a mechanism for tracking unit-level performance metrics.

Increase and diversify external funding revenue through grants and contracts, entrepreneurial activities, and fund-raising.

- Provide more resources and enhance administrative infrastructure to support procurement of external funding, intellectual property development, entrepreneurial start-ups, and patents.
- Invest in research/mentoring professional development efforts aimed at increasing research productivity.
- Collaborate with University Advancement to increase the number of external relationships and explore various opportunities for fundraising and gifts to support research, graduate education, and entrepreneurial ventures.

Expand research programs beyond our existing strengths and take advantage of our historical/cultural/geographical setting for research and scholarly purposes.

- Develop interdisciplinary initiatives leading to the growth and creation of research centers and institutes.
- Provide programs and incentives for collaborations across disciplines, including on-going research networks (Communities of Interest) that regularly provide opportunities for researchers to extend their activity outside of their discipline and college.

# **Detailed Discussion of Strategic Initiatives: Research**

Purpose: Foster a stimulating academic environment that supports the development and advancement of knowledge and creative works for all members of the university community.

## SI 1: Enhance supporting infrastructure for the conduct of research and innovation:

• KPI 1: Ensure that support services are sufficient to sustain research efforts of University researchers.

Rationale: The task force recommends that we work toward establishing research support services – both centralized and decentralized – that are available to sustain and significantly expand the research efforts of researchers across the University. This should include establishing shared scientific service facilities (such as a shared scientific computing center, a central vivarium), joint appointments, and on-going research networks (Communities of Interest) to provide regular opportunities for researchers to extend activities outside of their disciplines.

The task force suggests that all necessary departmental and university procedures for grant-related activities (both pre-award and post-award) be streamlined and standardized in such a way that these procedures and their implementation are customer-service oriented and easily accessible to all interested researchers. During both the research task force meetings and the focus groups' conversations, there were discussions regarding a lack of understanding of appropriate university procedures for submitting research proposals. Numerous complaints were lodged regarding accessibility difficulties, problematic interpretation of grant management procedures, over-aggressive implementation of federal and state grant agency guidelines due to risk-aversion, and inconsistent implementation of stated policies and procedures. These discussions focused on both pre-award and post-award activities, and were exacerbated by the administrative separation of these two functional areas, whose processes should be customer-centric instead of being broken down (or perceived by many as broken) along administrative chains of command.

In meetings with various unit-level administrators and researchers, issues were brought up about challenges with Purchasing and HR offices related to the procurement of products and services, as well as the hiring of research personnel on grant funds. While the procedures and their accessibility may not be as problematic as some individuals suggested, there is a general need to streamline procedures, increase process transparency and efficiency, and provide very tangible training and accessibility. These measures should decrease negative perceptions related to the overall research enterprise.

• KPI 2: Provide incentives and training to increase faculty and staff engagement in research and innovation.

Rationale: Establishing personal contact with funding officers is an essential component and is considered a best practice in regard to preparing and submitting grant proposals. Furthermore, in order to gain valuable feedback on one's research, it is essential that data and analytical conclusions be presented at conferences where colleagues can evaluate the research. In order to visit funding agencies and to present papers at conferences, however, researchers need travel funds, which are currently very limited at the University. While the Office of the Vice President for Research provided approximately \$100,000 to faculty for travel to funding agencies and conferences this past year, it is still necessary to provide more (and more stable) funding for travel. A commitment from the University and initiatives such as the OVPR funding and full allocation of Endowed funds to designated Endowed Professors (See Initiative 8) are all needed to provide sufficient travel funding.

Finally, the task force strongly encourages that consideration be placed on incentives to increase faculty and staff engagement in research and innovation, including placing a priority on extramural funding, industry engagement, intellectual property, and patents, as legitimate and sufficient metrics on tenure, promotion, and workload documents.

KPI 3: Establish a mechanism for tracking unit-level performance metrics.

Rationale: It is important to ensure that all scholarly and research metrics be captured if the University is going to employ various systems of evaluation. While Research and Development Expenditures, submitted grant proposals, and intellectual property handled by OIM are easily tracked and counted, metrics involving publications and their quality, books and chapters published, creative and performance pieces, and other scholarly activities (such as faculty members recognized as members of the NAS, NAE, NEH, etc.) must also be documented. The University should invest in an appropriate tracking system that can be appropriately inclusive of all disciplines and levels of scholarly activity.

The Office of VPR has initiated conversations with all academic colleges and research units to establish and evaluate performance metrics for research and innovation. In addition to utilizing WEAVE, the university is encouraged to utilize *Academic Analytics*<sup>TM</sup>, a research performance assessment system, being implemented system-wide, under the leadership of the UL System.

# SI 2: Increase and diversify external funding revenue through grants and contracts, entrepreneurial activities, and fund-raising.

• KPI 4: Provide more resources and enhance administrative infrastructure to support procurement of external funding, intellectual property development, entrepreneurial spin off and/or start-ups, and patents.

Rationale: While our University has a strong research portfolio that ranks it in the top 200 universities according to the last available National Science Foundation rankings (we were ranked 179 in FY 2013), only 47% of our total R& D expenditures (\$31,615,000 of \$67,580,000) were from external sources, according to the HERD survey. To continue growing as a research university, and to achieve a higher tiered ranking ("Carnegie Research University /Very High Research Activity") our amount of external research expenditures should be increased, and participation in funding should be expanded across the university. An indication of this need is that only 16% of our total R&D Expenditures (\$10,666,000) came from Federal funding sources in FY 2014. Additionally, approximately \$12,000,000 (\$\approx\$ 18%) of our R&D expenditures came from the academic units on the main campus, with 32% (133/409) of the faculty holding active research and development grants/contracts, or serving as a PI or co-PI. Research Centers/Institutes currently generate our largest amounts of R&D Expenditures (approximately 67% of current R&D Expenditures, according to the recent GRAD ACT Report). Collaborations, therefore, should help to stimulate more proposals from and funding for academic units. Opportunities to diversify funding across agencies and to increase the number of proposals by strengthening faculty engagement are needed.

A comparison of UL Lafayette with our NSF HERD Comparison group further shows the evolution of our ranking over the last 7 years (this data is publicly available up to 2012). This suggests that, while we have made significant progress, we still need to establish more extramural expenditures in order to move to the next tier that contains approximately 108 Universities. Currently, we are within the top 40% of this group. In order to move to the next tier (RU/VH), we need to move to the top of this comparison group and beyond.

Higher education R&D expenditures, ranked by FY 2012 R&D expenditures: FYs 2006-12

(Dollars in Thousands)

			(Dollars II	n inousanus,	<u> </u>			
Rank (of all institutions reporting	Institution	2006	2007	2008	2009	2010	2011	2012
156	U. NV, Reno	100,643	99,286	104,841	109,151	95,423	89,740	85,72
164	U. TX, El Paso	42,882	47,410	50,603	59,983	68,870	74,069	79,64
165	U. TX, Arlington	29,408	33,324	48,475	55,005	71,414	72,483	78,55
170	Southern IL U., Carbondale	75,564	65,074	67,435	66,658	69,924	71,130	71,09
174	U. Toledo	32,745	54,342	61,082	67,464	70,399	74,149	68,22
179	U. LA, Lafayette	55,427	60,203	65,462	75,474	69,412	69,978	65,27
180	U. WI, Milwaukee	45,219	52,523	52,443	56,196	71,181	65,648	61,77
181	Wichita State U.	37,934	53,392	60,640	75,655	51,524	63,538	61,27
184	U. MA, Lowell	29,383	36,117	40,873	56,664	59,345	60,013	60,62
185	U. MA, Boston	22,347	37,441	38,018	47,028	56,416	57,040	60,08
186	U. Southern MS	40,845	48,595	47,582	47,205	42,059	46,591	60,07
187	U. MT, Missoula	53,333	56,119	58,557	59,791	63,540	60,159	59,31
189	Portland State U.	32,308	30,203	35,705	44,574	56,533	58,975	58,48
199	U. Memphis	56,686	57,264	56,075	54,970	49,517	48,321	51,19
205	Wright State U	47,749	49,798	47,803	48,215	48,575	48,501	46,21
234	U. SD	22,892	21,473	22,742	34,690	30,616	28,959	31,98

Further, as a modern research university, we need to provide more attention to the development of intellectual property and the tangible products that can result from various research and creative activities. In several ways, UL Lafayette is behind in promoting such an orientation. This deficiency is corroborated by the fact that, in our focus groups, only 4 of the 34 faculty members that attended any of the three sessions had any grasp of how intellectual property was defined and protected, and how various research ideas could be transformed into viable intellectual property and patents.

When actual comparisons are made between UL Lafayette and a set of our comparison peers from the Association of University Technology Managers (AUTM) U.S. Licensing Activity Survey FY 2013, we note that we are behind many of these institutions in several innovation metrics (See Tables Below). These metrics are important, given the increasing attention paid to them by the State legislature, the Louisiana Board of Regents and the UL System, various think-tanks and advocacy groups such as the Louisiana Innovation Council and the Public Affairs Research (PAR) Council, LED, and other groups that influence funding decisions, legislators, and public perceptions of the value of academy and the comparative performance level of institutions.

Intellectual Property and Technology Transfer Measures for UL Lafayette Peer Institutions for AY 2013.

Institution Year Bega		Total Research Expenditures (m)	Invention Disclosures Received	Licenses/Options	Start-Ups Formed
Utah State U	1987	\$158	71	15	4
U. Arkansas Fayetteville	1990	\$126	44	40	2
Rice U	1998	\$110	112	12	2
NJ Institute Technology	1990	\$107	84	30	1
U. Alabama in Huntsville	1999	\$ 97	25	2	0
U. of Rhode Island	1991	\$ 96	16	6	-
U. of Idaho	1986	\$ 96	16	8	1
Montana State U.	1980	\$ 94	17	40	0
U. of Oregon	1992	\$ 87	42	48	4
Clemson U.	1987	\$ 76	102	9	2
U. of Akron	1995	\$ 70	69	4	6
Simon Fraser U.	1985	\$ 68	24	5	1
U. Louisiana - Lafayette	2012	\$ 67.5	15	4	0
South Dakota State U.	2008	\$ 64	33	8	0
Univ. of Mississippi	1992	\$ 62	1	3	2
San Diego State U.	1997	\$ 60	32	14	1
Portland State	2005	\$ 59	24	38	3
Lehigh U.	2004	\$ 46	25	1	12

Source: AUTM U.S. Licensing Activity Survey: AY 2013

In this first Table, the actual data for Inventions Received, Licenses/Options Issues, and Start-ups Formed are given for each of our 17 comparison peer institutions. In a simple number count, our University ranks 17/18 in Invention Disclosures Received (11<sup>th</sup> percentile), is tied for 15/18 in Licenses/Options Issued (20<sup>th</sup> percentile), and is tied for last --12/12 (<10<sup>th</sup> percentile) in Startups formed during FY 2013.

The second Table uses another AUTM benchmark, comparing these actual numbers as an average of the institutions' total R&D expenditures during FY 2013.

# IP Measures for UL Lafayette Peer Institutions for AY 2013, using R&D Expenditures

Institution	Year Began	Total Research Expenditures (m)	1 invention disclosure per R&D million	1		nillion issued per R&D Form		r R&D million issued per R&D Formed	
Utah State U	1987	\$158	\$2	\$11	\$40				
U. Arkansas Fayetteville	1990	\$126	\$3	\$ 3	\$63				
Rice U	1998	\$110	\$1	\$ 9	\$55				
NJ Institute Technology	1990	\$107	\$1	\$ 4	\$107				
U. Alabama in Huntsville	1999	\$97	\$4	\$49	79				
U. of Rhode Island	1991	\$96	\$6	\$16					
U. of Idaho	1986	\$96	\$6	\$12	\$96				
Montana State U.	1980	\$94	\$6	\$ 2					
U. of Oregon	1992	\$87	\$2	\$ 2	\$22				
Clemson U.	1987	\$76	\$1	\$ 8	\$38				
U. of Akron	1995	\$70	\$1	\$17	\$12				
Simon Fraser U.	1985	\$68	\$3	\$14	\$68				
U. Louisiana - Lafayette	2012	\$67.5	\$4.5	\$17					
South Dakota State U.	2008	\$64	\$2	\$ 8					
Univ. of Mississippi	1992	\$62	\$62	\$21	\$31				
San Diego State U.	1997	\$60	\$2	\$ 4	\$60				
Portland State	2005	\$59	\$2	\$ 2	\$20				
Lehigh U.	2004	\$46	\$2	\$46	NA				

Source: AUTM U.S. Licensing Activity Survey: AY 2013

As noted in this second Table, when a more appropriate benchmark is used — number of each of these metrics per million in R&D Expenditures — our University ranks 14/18 for number of Invention Disclosures Received per million dollars in R&D Expenditures (27<sup>th</sup> percentile), is tied for 13/18 in Licenses/Options Issued per million dollars in R&D Expenditures (33<sup>rd</sup> percentile), and is tied for last out of 17 in number of Startups formed per million dollars in R&D Expenditures.

Given that our University has only had a re-vamped Office of Innovation Management for approximately 24 months, as compared to the 20 years during which AUTM peer-universities have been surveyed (GRAD Act Annual Report FY 2014-2015), and given that we have had a full-time Director of the Office of Innovation Management for less than one year, this should not be surprising. Training and mentoring activities can assist in closing the knowledge gap at UL Lafayette and should result in increased numbers of

new invention disclosures, new licenses and options, and even increased spin off and/or start-up companies based upon the commercialization of such products.

• KPI 5: Invest in research/mentoring professional development efforts aimed at increasing research productivity.

Rationale: In a manner that is consistent with the need for a center focusing on excellence for teaching, a University that aspires to a very high research activity status should offer comparable opportunities for the professional development of skills associated with research. This could include but should not be limited to programs focusing on novice researchers, and programs supporting supplementary training on the latest research methods, designed for mid-career and senior faculty.

As a method for data collection, the research task force conducted three focus groups with a total of 34 faculty members. These participants were selected from across the main campus at all three levels of academic ranking. Data indicated that there was a uniform request that more training be provided for the lower level academic ranks (assistant and associate professor) on grant writing and proposal formulation. This need was particularly stressed by the 26 faculty members from non-STEM departments. While many of the junior faculty in our STEM programs have been mentored before coming to UL Lafayette (many through post-doctoral placements) or have had an opportunity to work with more established faculty in their colleges, most non-STEM faculty have never been mentored in creating a research proposal or grant writing. Although some have attended short (half-to-full day) workshops during their careers, these were not considered beneficial. If we are to increase our research portfolio – particularly with regard to Federal funding – then more focused and hands-on training and mentorship need to be established. While such professional advice most likely must come from senior faculty with research experience, we must build an infrastructure of training and support to facilitate such efforts.

• KPI 6: Collaborate with University Advancement to increase the number of external relationships and explore various opportunities for fund-raising and gifts to support research, graduate education, and entrepreneurial ventures.

Rationale: As State funding of our University is being significantly reduced, we have to look for other ways to generate funds to sustain the academic and research missions of UL Lafayette. One clear source of potential research funding and student support lies with endowments that are made to the University. We have to increase our fundraising activities and ensure that the research mission is not overlooked in favor of contributions to Athletics and other areas outside of the University's academic role.

We need to be creative in the management of our endowments. One example of how such endowments could greatly influence research involves the manner in which we currently provide funds to the faculty members who hold endowed professorships. We currently have approximately 250 Distinguished Professorships at UL Lafayette (though the Foundation) that typically designate approximately 4.3% — 4.7% of the principal in each Endowed Professor account per year, for spending by the designated Endowed Professor. This often results in an amount that ranges from \$4,500 to 6,000 per year, in each of these 250 accounts. However, only \$3,000 are used in any year (designated as a supplement to salary). The other funds generated ( $\approx$ \$1,500 to \$3,000) are not provided to the designated professors, but are left within the designated endowment account. At a time when there are few travel funds for the research faculty to attend conferences in their disciplines, simply changing the policy and allowing the designated Endowed Professors to use all the monies left over in their accounts after the salary supplements have been dispensed would result in approximately 61% of our research faculty immediately being provided \$1,500 or more for travel each year.

# SI 3: Expand research programs beyond our existing strengths and take advantage of our historical, cultural, and geographical setting for research and scholarly purposes

• KPI 7: Develop interdisciplinary initiatives leading to the creation and growth of research centers and institutes.

Rationale: Trends within federal funding programs suggest that interdisciplinary collaborations are preferred when submitting competitive proposals. Historically, at UL Lafayette, we have not encouraged enough collaboration across academic disciplines and between research centers/institutes and academic departments. For example, our largest research center, the New Iberia Research Center, has had surprisingly little collaboration with academic researchers on the main campus, and some of the research centers in our research park (e.g., The Picard Center for Child Development and Lifelong Learning) have only had minimal collaborations with our academic researchers. Often, departments across campus are treated as "intellectual silos" wherein faculty members stay within their own disciplines when working on potential research, thereby forestalling potential collaborations. This unfortunate research isolation is now beginning to change with joint appointments in leadership positions at the Picard Center with the College of Nursing and Allied Health Professions, and the College of Liberal Arts. Several other such joint hires are under development. Consequently, interdisciplinary initiatives continue to be increased as a result of the current efforts from the Office of the Vice President for Research (OVPR) and the Deans of various academic units, with invaluable support from the Offices of the President, the Provost, and the VP for Administration and Finance.

As stated previously, funding agencies are currently favoring collaborative proposals that involve multiple disciplines and even multiple universities. Consequently, a preference for collaboration between different disciplines and between academic faculty researchers and Center/Institute-based researchers should be facilitated. The following are current examples of initiatives created by the OVPR that can be expanded:

1) establish greater collaborations between the New Iberia Research Center and several relevant academic departments on the main campus. This includes appointing a Research Officer for NIRC from the OVPR;

2) hire directors for the research centers and institutes (e.g., Picard, NIRC, IRI, ICEE) who have academic as well as research credentials, and provide tenure lines within selected academic departments, and 3) establish "Communities of Interest" so that researchers from different disciplines who are interested in similar research issues can get together in order to establish various levels of collaborations based on common interests, beyond disciplinary borders. Additionally, in order to break down academic and disciplinary "silos" wherein researchers only interact with similarly trained individuals, providing a series of joint faculty appointments between departments and between academic units and research centers would help facilitate a culture of collaboration.

KPI 8: Provide programs and incentives for collaborations across disciplines including on-going
research networks (Communities of Interest) that regularly provide opportunities for researchers to
extend outside of their disciplines and colleges.

Rationale: Creating joint faculty appointments encourages interdisciplinary research and strengthens academic programs. In addition to joint appointments, the University should identify and convene regular meetings of "Communities of Interest," so that researchers from different disciplines who are interested in similar research issues can get together to establish various levels of collaborations based on common interests. Such research clusters can be extended to issues involving intellectual property, with the assistance of the Office of Innovation Management.

In addition, policies for return of indirect funds, as well as accounting and attribution of grant funds (within the design of the new ERP system) to multiple units, in the event of multi-disciplinary proposals, should be examined and expanded to incentivize collaborations. We should not have a system of winners

and losers within collaborations - our policies and accounting systems need to be revamped to incentivize the equitable behaviors we are seeking on our campus.

## Proposed Timeline to benchmark progress (Years are fiscal years rather than chronological)

- Conduct mentoring workshops (2 in Spring).
- · Form three communities of interest.
- · Increase research proposals for external funding by 5% over previous year.
- · Increase non-STEM research proposals for external funding by 10% over previous year.
- Increase funding for research, development, and other sponsored programs by 10 % over the previous year
- · Increase intellectual property licenses by 5.
- 2016 · Increase business start-ups by 2.
  - Increase travel monies by \$20,000.
  - Complete study of infrastructural changes in OVPR.

2017

- · Move Research Expenditures to the top 25% of our NSF HERD Comparison Group.
- Conduct mentoring workshops (2 in Fall/2 in Spring)
- Form three new communities of interest.
- Increase research proposals for external funding by 10% over previous year.
- Increase non-STEM research proposals for external funding by 10% over previous year.
- Increase funding for research, development, and other sponsored programs by 10 % over the previous year.
- Increase intellectual property licenses by 5.
- Increase business start-ups by 3.
- Increase travel monies by \$50,000
- Complete infrastrucutral changes to steamline pre-award process.

2018

- Move Research Expenditures to the top 10% of our NSF HERD Comparison Group.
- · Conduct mentoring workshops (2 in Fall)
- · Form three new communities of interest.
- Increase research proposals for external funding by 15%.
- Increase non-STEM research proposals for external funding by 10%.
- Increase funding for research, development, and other sponsored programs by 12% over the previous year.
- · Increase business start-ups by 2
- Increase travel monies by \$20,000
- IComplete infrastructural changes to streamline post-award process.

2019

- · Move research Expenditures to the top of our NSF HERD Comparison Group
- Form three new communities of interest
- Increase research proposals for external funding by 20%.
- Increase non-STEM research proposals for external funding by 10%.
- Fincrease finding for research, development, and other sponsored programs by 12% over the previous year.
- · Increase business start-ups by 3.
- · Ensure that each Academic College has a research Institute.

## 4. Governance

Co-Chairs: Geoffrey Stewart & Eugene Fields

Task force members: Gray Bekurs, Christine Brashear, Rae Broadnax, Henry Chu, Ellen Cook, Pearson Cross, Amy Desormeaux, Luke Dowden, Keith Guillory, James McDonald, Timothy McFarland, Susan Miller, Catherine Roche-Wallace, Peter Sheppard, Mark Zappi

The purpose of this task force is to propose initiatives that will improve the capacity of the administration to prioritize, enhance, and support the academic functions of the University. Proposed initiatives address but are not limited to:

- Shared Governance Model
- Data Analytics Capability
- Professional Development of Middle Managers
- HR Management

This task force advances recommendations that will work toward improving the capacity of the administration to prioritize, enhance, and support the mission of the University through improved communications, teamwork, transparency, and professional development.

# Synopsis of Proposed Initiatives and Key Performance Indicators

Establish a shared governance model that facilitates trust, teamwork, and cross-functional collaboration, and that aligns all stakeholders with the Vision and Mission.

- Establish an elected representative body of governance for each of the primary constituent groups on campus: faculty, students, classified staff, and unclassified staff.
- Establish a University Senate with representatives from each of the above governance bodies., which will support broad participation in the determination of University initiatives and resource allocations.
- Connect each stakeholder to the primary and support activities that drive University performance toward achieving the Vision.
- Provide each stakeholder with a clearly articulated authority structure and method of performance evaluation, with both tied to the Vision and Mission.
- Align all UL Lafayette committees' mission, membership, and reporting with the governance model.

Provide each level of governance with data analytics capabilities that create a collaborative culture and increases the university's overall impact.

 Build enterprise-wide data analytics capabilities in ways that provide a wide array of performance metrics that are transparent, based on our Vision and Mission, and broadly embraced.

Develop the Human Resources function in support of the Mission and Vision.

Establish an HR System that will manage all stages of the employment relationship to
provide a community of employees focusing on achieving the Mission and Vision of
the University.

Establish a process for continuous academic and nonacademic professional development

 Cultivate professional development programming that has a measurable impact on improving pedagogical innovation, managerial effectiveness, and essential job skills in support of the effective operation and governance of the University.

# Detailed Discussion of Strategic Initiative: Governance

Purpose: Institute a system for shared governance based on trust, collaboration, and continuous improvement.

SI 1: Establish a shared governance model that facilitates trust, teamwork, and cross-functional collaboration, and that aligns all stakeholders with the vision and mission.

Rationale: This strategic goal seeks to reduce silos and barriers between units, which distract attention from the mission and vision of the University. Initiatives related to this goal facilitate communication, enhance trust, and focus attention on strategic priorities.

Shared governance will only work if the senior executive team demonstrates its commitment to the structure. Without such commitment and advocacy, shared governance is a rhetorical exercise rather than an operating procedure. Senior management demonstrates commitment to shared governance through financial investment

(commitment to competitive employee compensation, training, ERP, and infrastructure), leadership investment (transparency, open communication, proactive engagement across stakeholder groups), active participation, and contribution of expertise, knowledge and skills.

• KPI 1: Establish an elected representative body of governance for each of the primary constituent groups on campus: faculty, students, classified staff and unclassified staff.

<u>Rationale</u>: The current centralized structure inhibits the full use of the knowledge, skills, and abilities of university stakeholders. A shared governance structure would incorporate the expertise of all stakeholders, and would result in leveraging this talent to overcoming challenges and making tough decisions.

The task force recommends that the university reconsider the current governance structure. A revised governance structure should include all stakeholders: Staff, Students, Administration, Faculty, and External Stakeholders. It is recommended that the structure of the Faculty Senate be revised. For example, the total number of Senators for the Faculty Senate could be established first, then each college would be allocated Senate seats based on its proportion of full-time faculty compared to the total number of full-time faculty employed by the university. Each college Senate seat would then be filled by faculty vote within the college. In addition, the Classified Staff and the Unclassified Professional Staff should have similar organizations with elected representatives. Each stakeholder group should have representation on a single council that will operationalize and monitor the governance of the University. The University of Kansas provides an example of such a structure. Its organizational chart is provided in the appendix of this report. The task force recommends that this revised structure be put in place by the end of 2017.

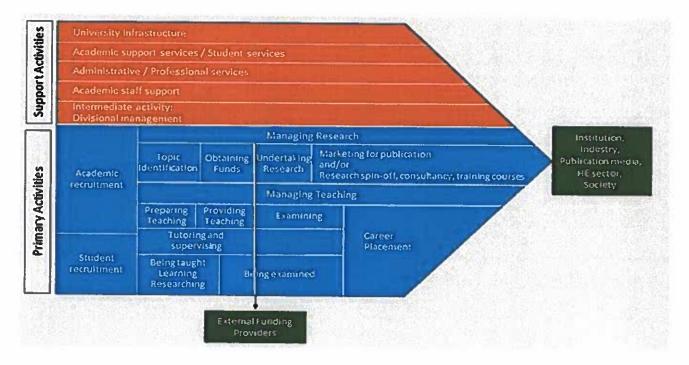
• KPI 2: Establish a University Senate, with representatives from each of the above governance bodies, which will support broad participation in the determination of University initiatives and resource allocations.

Rationale: The task force recommends the University Senate establish performance metrics and time lines for stakeholder reporting. The council should also establish metrics for organizational alignment with university deliverables to improve cross-functional coordination, responsiveness, decision-making capability, and community engagement. This body should also establish metrics for organizational culture and stakeholder satisfaction in terms of trust, equity, engagement, morale, innovation, and service quality. Finally, the University Council should convene a University Budget Advisory Committee charged with reviewing and making recommendations for budget appropriations.

• KPI 3: Connect each stakeholder to the primary and support activities that drive university performance toward achieving the vision.

Rationale: Value chain analysis provides an opportunity for reflecting on how we define our core activities and for determining if our approach to prioritizing core activities is consistent with the mission and vision of the University. An effectively articulated value chain uses data to prioritize resource allocation.

Value Chain: a brief explanation. A value chain is a strategic tool originally developed for businesses in the private sector. In the context of industry, a value chain includes all of the activities in which a business engages, from the conception of a product or service to its delivery. The value chain is then analyzed to identify areas or activities that can be eliminated, improved, or expanded with further investment of resources or time. There are two types of activities in the generic industry value chain model: primary activities and support activities. Primary activities represent the core activities directly related to the creation and distribution of the product or service. Support activities contribute to the success of the primary activities. The term "value" refers to the contribution that each activity provides to the end product or service. The activities that contribute the most to the product or service should be prioritized. Resources should be allocated to those parts of the chain that contribute the most value, so that they can operate at maximum efficiency. This is done so that the business can maximize profit margin/value and maintain a competitive advantage. In recent years, efforts have been made to adapt the generic value chain model for business to Higher Education. The result is the figure represented below<sup>2</sup>:



The green sectors labeled External Funding Providers and Institution, Industry, Publication media, HE sector, Society represent a University's "value added" or profit margin. The figure proposes a generic value chain model for colleges and universities. Each of the components of primary and secondary activities are explained in more detail in Hutaibat's article.

The task force recommends that the University adapt this model to derive a value chain model that is consistent with the mission and vision. This value chain analysis should be used to prioritize investment and advancement priorities.

• KPI 4: Provide each stakeholder with a clearly articulated authority structure and method of performance evaluation, with both tied to the Vision and Mission.

Rationale: Misunderstandings and distrust are mitigated by a clear articulation of responsibility, visibility of decision-making processes, and consistent requirements for reporting among all units. A clearly articulated authority structure and protocol reduces bottlenecks by empowering people to make decisions rather than passing the decision up the chain.

• KPI 5: Align all UL Lafayette committees with the governance model through mission, membership, and reporting.

Rationale: The current university committee structure is ineffective. Some committees meet inconsistently or not at all. Other committees do not have a charge that states their purpose and identifies performance expectations. The task force recommends that committees be evaluated for relevance. Committees that are determined to be irrelevant should be disbanded. The task force recommends a significant reduction in the number of standing committees. Instead, committees convened to address a task or complete an ad-hoc project should be identified as task forces. Remaining standing committees should have a clearly articulated charge specifying their purpose and composition. A protocol specifying conditions for creation, maintenance, and termination of University Committees should be developed. A process for annual reporting of committee activity should also be specified.

SI 2: Provide each level of governance with data analytics capabilities that create a collaborative culture and increase the university's overall impact.

Rationale: Data analytics facilitates evidence based decision-making. Currently, the University has an abundance of information, but lacks the ability to access it, due to outdated information systems.

• KPI 6: Build enterprise-wide data analytics capabilities in ways that provide a wide array of performance metrics that are transparent, Vision and Mission based, and broadly embraced.

Rationale: Building enterprise-wide data analytics capabilities empowers all University stakeholders by providing access to all relevant data and motivation to consume and leverage information in their operations. This would enable us to create a climate where evidenced-based decisions are made. For example, proposals for new programs would require market research to determine the demand and likelihood of success. Effective use of data analytics facilitates the alignment all stakeholders within the University's value chain by establishing work processes that are documented, efficient, and easily monitored.

## SI 3: Develop the Human Resources function in support of the mission and vision.

• KPI 7: Establish an HR System that will manage all stages of the employment relationship to provide a community of employees focused on achieving the Mission and Vision of the University.

Rationale: Establishing an effective HR system that manages all stages of the employment relationship ensures that we recruit, select, and retain talented employees. The task force recommends that a protocol be established for creating job descriptions, recruiting, selecting, and orienting new employees. In addition,

current performance evaluation procedures need to be modified to include protocols for documentation, remediation, and training. Employees that act in a supervisory capacity need to be empowered to provide resources to align existing talent with strategic priorities of the University. Employees that act in a supervisory capacity should participate in management training to ensure the effective application of HR practices mentioned. Finally, HR should engage in developing a succession plan that enables the University to project and plan for the needs created by the retirement and/or separation of the faculty and staff. A succession plan ensures that institutional information remains with the University, and that smooth transitions occur, despite personnel changes.

# SI 4: Establish a process for continuous academic and nonacademic professional development.

KPI 8: Cultivate professional development programming that has a measurable impact on improving
pedagogical innovation, managerial effectiveness, and essential job skills, in support of the effective
operation and governance of the University.

Rationale: An organization operates effectively when its members are knowledgeable and well trained. Continuous improvement should extend to the University staff as well as its systems. As a result, the task force recommends that the University establish and fund a center for excellence in teaching. This center would proactively engage faculty in improving teaching methods and assessing student learning, and would assist department heads in facilitating remediation for poor teaching performance. Professional development for managers should be offered for new and continuing managers that focus on improving decision-making and managerial skills. Professional development should support a growth culture that nurtures innovation and learning, and avoids a climate where people are afraid to fail.

# Proposed Timeline to Benchmark Progress (Years are fiscal years rather than chronological)

2016

- Develop the representative bodies of the University Council (faculty, students, unclassified staff, classified staff).
- Re-evaluate current structure of Faculty Senate to include recommendations described in the rationale for elections to membership in the Senate.
- · Identify and articulate a value chain model for the University.

2017

- Re-evaluate the organizational chart to include shared governance model.
- Reconsider the current committee structure in light of recommendations.
- · Conduct a value chain analysis.

2018

- · Conduct a job analysis, and review and revise job descriptions accordingly.
- Provide training for the effective use of data analytics generated by the newly implemented ERP.
- Make resource allocation decisions informed by results of value chain analysis.

2019

- Develop a formal succession planning process and performance evaluation.
- Train supervisors to conduct and deliver performance feedback, including development of remediation plans for addressing poor performance.

Groves, R.E.V., Pendlebury, M.W. & Stiles D.R. (1997). A critical appreciation of the uses for strategic management thinking, systems and techniques in British Universities. Financial Accountability & Management, Vol.13 No. 4 pp. 293 – 312. & Von Alberti, L. (2003) The Value Chain in Higher Education, Unpublished Master Dissertation, University of Southampton, UK.

<sup>&</sup>lt;sup>2</sup> This model was derived by Khaled Abed Hutaibat (2011). Value chain for strategic management accounting in higher education. *International Journal of Business and Management* Vol. 6 No. 11 pp. 206 - 218.

# Suggested Protocol for Convening Next Strategic Planning Steering Committee

In order to provide a smooth transition to the next strategic planning effort, we offer up the following protocol to guide the establishment of the committee, development of the plan, and implementation of the outcome.

Activity	Person(s) Responsible
Select Committee Co-Chairs	Provost
Develop Timeline of Committee Activities	Co-chairs and Provost
Select Committee Members	Co-Chairs and Provost
Adjust Committee Members' Fall 2019 Teaching Schedules if Needed	Deans and Department Heads of Committee Members
Convene Committee Charge to Committee by Provost Review and Revise Mission,	Co-Chairs Provost Committee
Determine Progress Towards Meeting 2015-2020 Strategic	Committee
Conduct SWOT Analyses Meet with Constituencies Such as Faculty Senate, University Council, Student Government	Committee Co-Chairs
Determine Task Force Foci and	Committee and Co-Chairs
	Committee
Task Forces Present Work to Full Committee	Committee
Co-chairs Finalize Report	Co-Chairs
Strategic Plan Implemented  September 2020: facilitate focus groups to review and modify plan.  October 2020: Identify focus groups responsible	Provost & Co-Chairs
	Select Committee Co-Chairs  Develop Timeline of Committee Activities  Select Committee Members  Adjust Committee Members' Fall 2019 Teaching Schedules if Needed  Convene Committee Charge to Committee by Provost Review and Revise Mission, Vision, Values as needed  Determine Progress Towards Meeting 2015-2020 Strategic Goals and Imperatives  Conduct SWOT Analyses Meet with Constituencies Such as Faculty Senate, University Council, Student Government Senate, etc.  Determine Task Force Foci and Composition  Task Forces Convene  Task Forces Present Work to Full Committee  Co-chairs Finalize Report  Strategic Plan Implemented  September 2020: facilitate focus groups to review and modify plan.  October 2020: Identify

# BOARD OF SUPERVISORS FOR THE UNIVERSITY OF LOUISIANA SYSTEM

## ACADEMIC AND STUDENT AFFAIRS COMMITTEE

June 27, 2019

Item G.6. University of Louisiana at Monroe's request for approval to terminate the Post Baccalaureate Certificate in Unmanned Aircraft Systems Management.

#### **EXECUTIVE SUMMARY**

The University of Louisiana at Monroe requests approval to terminate the Post Baccalaureate Certificate (PBC) in Unmanned Aircraft Systems (UAS) Management. The PBC was granted approval by the Louisiana Board of Regents in 2013. Due to the delay by the Federal Aviation Administration (FAA) in providing final regulations and policies regarding commercial use of UASs (and the requirement that a student earn an undergraduate degree) enrollment in the PBC was adversely impacted. Since an Undergraduate Certificate (UC) option is now available, the University would like to terminate the existing PBC and replace it with a UC. There is no negative impact on faculty or students as result of the proposed termination.

### RECOMMENDATION

It is recommended that the following resolution be adopted:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors for the University of Louisiana System hereby approves the University of Louisiana at Monroe's request to terminate the Post Baccalaureate Certificate in Unmanned Aircraft Systems Management.



### Office of the President

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June 4, 2019

RECEIVED

G 6

Dr. James B. Henderson, President University of Louisiana System 1201 North Street, Suite 7-300 Baton Rouge, LA 70802 JUN 0 6 2019 UNIVERSITY OF LOUISIANA SYSTEM

Dear Dr. Henderson:

The University of Louisiana Monroe (ULM) respectfully requests that the University of Louisiana System Board of Supervisors approve the attached request to terminate the Post Baccalaureate Certificate program in Unmanned Aircraft Systems Management.

It is our opinion that the new undergraduate certificate option is a much better credential for the Unmanned Aircraft Systems Management program and will substantially increase accessibility of the program to students. Therefore, separate from this request, we have submitted a proposal for its creation to replace the PB in UASM.

Attached is a copy of the request. After it is approved, we ask that you forward it to the Louisiana Board of Regents for their consideration.

Sincerely,

Nick J. Bruno, Ph.D.

President

**Enclosure** 



# Request to Terminate an Academic Degree Program or Administrative/Research Unit

1. Institution University of Louisiana Monroe
2. Type of Termination (check one)
X A. Academic Program (If A, complete all remaining sections)
B. Administrative Unit (If B, skip sections 3, 4, 5, and 6)
C. Research Unit – Center or Institute (If C, skip sections 3, 4, 5, and 6)
3. Degree Designation. (BA, MS, PhD, etc.) PBC
4. Title and CIP Code. Unmanned Aircraft Systems Management, CIP 49.0199
5. Semester/year at which no new enrollments will be accepted. Fall 2019
6. Teach-out plan, including semester/year at which reporting of degrees shall cease.
Not applicable. There are no students currently enrolled in the program.
7. Reason for request. (Ex: low demand, job opportunities, changing focus, program duplication, loss of funding sources, etc.)
<b>Explanation:</b> The program plans to replace the PBC with an undergraduate certificate which will increase student access to the program. The delay from the FAA in providing the final regulations and policies regarding commercial use of UASs and the requirement that students had earned an undergraduate degree significantly impacted enrollment in the PBC program. Now that the undergraduate certificate designation is available, students in many degrees across campus could pursue the certification. Majors that have expressed an interest in the undergraduate certificate have included atmospheric sciences, construction management, ag business, and risk management and insurance. Once the program has been approved, we believe others will be interested.
There are no anticipated negative impacts on terminating the PBC and replacing it with a UC on other programs.
* Include statements which address the impact of the termination upon remaining programs/units (if applicable). For example, a request to terminate the Department of Chemistry should also include information about the academic programs in that Department — will they be maintained or terminated as well? If maintained, where will they reside? Will the department maintaining these programs be re-named? How will this further affect the administrative structure at the institution? Append documentation to this form.
8. If collaboration with other institutions is involved, identify partners. Each participating institution must submit a separate request form. Not applicable
9. Program/Unit Contact (name, title, email address, telephone number) Dr. Susie Cox, Professor and Director School of Management scox@ulm.edu, 318-342-1130
Campus Head: Date: 5/30/19
Management Board: Date:

For Academic Program Termination: note the SACS/COC requirements (Substantive Change) for notification, teach-out plan/agreement, and request for SACS approval following BOR approval. Send BOR/AcAf a copy of the SACS/COC response to finalize the action.

# BOARD OF SUPERVISORS FOR THE UNIVERSITY OF LOUISIANA SYSTEM

### ACADEMIC AND STUDENT AFFAIRS COMMITTEE

June 27, 2019

Item G.7. University of Louisiana at Monroe's request for approval to offer Undergraduate Certificates in Computer Programming and Unmanned Aircraft Systems Management.

#### **EXECUTIVE SUMMARY**

At the February 2019 meeting of the Louisiana Board of Regents (BoR) the need for a university-level undergraduate certificate (UC) that would include a blend of foundation courses and a number of upper-level courses to add depth in a particular focus area was recognized. While the two-year system offers incremental credentials with multiple exit points, students who begin at a university have no options for interim credentials other than completing the full 120-credit bachelor's degree, making it difficult for a university to respond to more immediate needs of students, working adults, and area industry. The demand for focused, incremental university education has been brought to the forefront as universities have coordinated with LA Economic Development and companies such as CenturyLink, DXC, and IBM to provide a pipeline of students with industry-aligned skills regardless of major. Based on this reasoning, the BoR established the UC as an approved academic offering option, to be composed of at least 18 credit hours with at least half of the required hours at the upper level. The University of Louisiana at Monroe (ULM) would like to take advantage of this new type of credential and offer Undergraduate Certificates (UC) in Computer Programming and Unmanned Aircraft Systems Management.

## **Undergraduate Certificate in Computer Programming**

In an effort to help meet the demand for entry level programmers in the region served by ULM and across the state, the University has designed a UC that consists of a combination of computer science and computer information systems courses that will provide students with a fundamental understanding of software and database development (Java, Oracle, SOL) in a business setting. The four lower-level courses focus on computer programming and data structures while the four upper-level classes provide a business background in project management, systems analysis and design, networking, database development, and advanced programming. All required courses are existing courses taught by ULM in the Computer Information Systems and Computer Science programs; courses are delivered via face-to-face instruction. Students completing the 24 credit hour UC will be qualified for entry-level programming positions.

Executive Summary G.7. June 27, 2019 Page 2

# Undergraduate Certificate in Unmanned Aircraft Systems Management

The application of Unmanned Aircraft Systems (UAS) is becoming more widespread as the Federal Aviation Administration has finally released regulations and policies related to commercial use of this technology. The University proposes to create a 15 credit hour UC to meet the needs of students seeking coursework and skills necessary to become an FAA certified UAS (drone) pilot. The proposed UC, which would replace ULM's existing Post Baccalaureate Certificate (PBC) in UAS Management, will provide the breadth and depth of instruction needed to ensure completers are prepared to work as pilots/operators and/or development team members of unmanned aircraft systems while fully understanding the operational and safety environments of the National Airspace System. All courses required already exist; no new courses will need to be developed. The proposed UC complements ULM's Bachelor of Science in UAS Management, the only degree program of this nature offered in the state.

### RECOMMENDATION

It is recommended that the following resolution be adopted:

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Supervisors for the University of Louisiana System hereby approves the University of Louisiana at Monroe's request to offer Undergraduate Certificates in Computer Programming and Unmanned Aircraft Systems Management.



## Office of the President

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June 4, 2019

RECEIVED

G 7

Dr. James B. Henderson, President University of Louisiana System 1201 North Street, Suite 7-300 Baton Rouge, LA 70802 JUN 06 2019

UNIVERSITY OF LOUISIANA SYSTEM

Dear Dr. Henderson:

The University of Louisiana Monroe (ULM) respectfully requests that the University of Louisiana System Board of Supervisors approve the attached proposal for a new undergraduate certificate program in computer programming.

This program will help meet the workforce demand for individuals with credentials and experience in computer programming in our region and across the state. Computer programming is listed among the high-demand occupations within our region and across the state, corresponding to 5-star jobs within the first tier prioritized by the Louisiana Workforce Commission. The program will be offered face to face initially but then expand after a pilot year to online delivery so that working individuals can enroll in it while they continue in their present job.

Enclosed is the proposal. After it is approved, we ask that you forward it to the Louisiana Board of Regents for their consideration.

Sincerely

Nick J. Brund, Ph.D.

President

Enclosure

### PROPOSAL to DEVELOP a NEW ACADEMIC CERTIFICATE PROGRAM

(CAS, PAC, UC, PBC, GC, PMC, PPC)

#### Date:

Campus: University of Louisiana Monroe	Program: CIP, Certificate Designation, Title 11.0201 Computer Programming/Programmer, General
Institutional Contact Person & Contact Info (if	clarification is needed)
Ronald Berry	
(318) 342-1103	
rberry@ulm.edu	

#### 1. Certificate Description

Describe the program concept: purpose and objectives; proposed curriculum; mode of delivery (on-site/hybrid/on-line). Indicate which courses are new; describe plan for rolling out new courses.

\*\* Attach catalog descriptions for the required and elective courses, including prerequisites and LCCN, when applicable. \*\*

#### **Program Purpose and Objectives**

In an effort to help meet the demand for entry level programmers in our region and across the state, ULM proposes to develop an undergraduate certificate in Computer Programming for launch fall 2019. The program consists of a combination of computer science and computer information systems courses that will provide students with a fundamental understanding of software and database development (Java, Oracle, SQL) in a business setting. The four lower level courses focus on computer programming and data structures while the four upper-level classes provide a business background in project management, systems analysis and design, networking, database development, and advanced programming. Students completing this certificate will be qualified for entry-level programming positions.

This proposal also addresses the need to increase the number of credentialed and skilled Louisiana citizens in the workforce. The program will adequately prepare individuals, from a broad array of backgrounds, for high-demand, high paying jobs.

## **Proposed Curriculum**

The proposed curriculum consists of 24 credit hours of coursework, including 12 hours of lower level classes and 12 hours of upper level courses. A Board of Regents core math requirement serves as the primary prerequisite for this program. The specific course requirements include:

CSCI 2000 - Introduction to Computer Programming

CSCI 2003 - Intermediate Programming

CSCI 2026 - Introduction to Discrete Structures

CSCI 2073 - Data Structures

CSCI 3020 - Object Oriented Design and Programming OR CSCI 3030 - Internet Programming

CINS 3006 - Database Application Development

CINS 3040 - Networks and Data Communications

CINS 4030 - Information System Analysis

### **Typical Sequence of Courses:**

Fall 2019	<u>Spring 2020</u>	<u>Summer 2020</u>	<u>Fall 2020</u>
CSCI 2000	CSCI 2003	CSCI 2073	CINS 4030
CINS 3006	CSCI 2023	CINS 3040	CSCI 3020 or CSCI 3030

#### **Mode of Delivery and Availability of Courses**

Classes will be initially delivered face to face in a classroom setting. All of the required courses are existing courses taught at ULM in the Computer Information Systems and Computer Science programs. After the first few years of

the program, we anticipate offering the program in an online format as well. The online course format will be developed and delivered by ULM faculty.

#### 2. Need

Outline how this program is deemed essential for the wellbeing of the state, region, or academy (e.g., how is it relevant, how does it contribute to economic development or relate to current/evolving needs). Identify similar programs in the state and explain why the proposed certificate is needed.

According to data provided by the Louisiana Workforce commission (laworks.net), as of March 20, 2019 there are 220 available programmer jobs in Louisiana (listed as a 5 Star job) with an average entry level salary of approximately \$40,000 and a typical salary of almost \$68,000. This program will help meet demand in a 5 star occupation as identified by the Louisiana Workforce Commission. Additionally, according to the US Bureau of Labor Statistics, US employment of software developers is projected to grow 24 percent from 2016 to 2026, much faster than the average for all occupations. Software developers will be needed to respond to an increased demand for computer software. IBM in Monroe has indicated a need to hire a significant number of entry-level programmers as described in the following job description by the end of the year for their Monroe Center:

#### Entry Level Java/J2EE Application Development Specialist

IBM is currently growing its Application Development team. Join our team and utilize leading-edge technology to configure, develop, deliver and support applications for our clients in areas such as mobile, Big Data, Cloud Computing or Smarter Commerce. You will be able to gain valuable on the job training while building in-demand technical skills. Our clients are some of the world's leading companies and you will be part of challenging projects to build and support technical solutions for their needs. As an

Application Development Specialist you will be expected to take on challenging project work designing, building, testing and supporting technical solutions. Depending upon the project, you could find yourself developing advanced skills in technologies such as Java, J2EE, SAP, C#, among others. Candidates must be legally authorized to work in the US without a current or future need for visa sponsorship. Must have basic knowledge in programming languages, methodologies and Object-Oriented programming (Ex. Java, J2EE, C++, Java Script/HTML, etc.), possess basic knowledge in development tools (Ex. Integrated Development environment's (IDE's), debuggers, and code repositories), foundational understanding of Agile Development Practices (Scrum), Behavior Driven and Test-Driven Development.

According to our research, ULM will offer the first undergraduate certificate in Computer Programming in the state that can meet most of the qualifications required in the IBM job description for entry level programmers. Of course, ULM and other institutions have four degree programs in Computer Science and Computer Information Systems that prepare students for similar positions. However, the undergraduate certificate in Computer Programming provides a fast-track for individuals to prepare for in-demand programming careers without a four year college degree. In the Monroe region, representatives from IBM have indicated a need to hire a significant number of programmers within a year's time frame. This program, along with ULM's traditional undergraduate degree programs, will help IBM and other companies fill entry-level positions.

#### 3. Students

Describe student interest. Project enrollment and productivity for the first 5 years; justify projections.

Given the number of job vacancies in our region, especially with IBM, we anticipate a strong student demand for this undergraduate certificate program. We anticipate the demand to come from existing students on campus in non-computer related programs (possibly math, general studies, and social sciences) who want to improve their marketability by adding this certificate to their degree program. Additionally, we envision that students who have already earned a degree in another field might want to return to earn this undergraduate certificate to make themselves more marketable and job ready. A third group of students, our current majors in computer science and computer information systems, may choose to earn this certificate before completing their four year degree to be able to gain employment prior to completing their bachelor's degree. Additionally, we believe that another market may be US veterans who are looking for training opportunities to enter this growing career field. While identifying an exact demand is impossible, our initial estimates include the following:

	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Enrollees	5	10	40	50	50
Graduates	0	5	15	25	25

#### 4. Accreditation

Describe plan for achieving program accreditation.

Neither ABET nor AACSB-International accredit certificate programs. However, the certificate will fall under the University's regional accreditation with SACS COC.

### 5. Faculty, Administration, & Other Resources

How will instructional needs be met: will additional faculty, facilities, equipment, or library resources be required? What department will deliver and oversee the proposed program?

The program will be housed within the College of Business and Social Sciences in the School of Accounting, Financial, and Information Services. The School is supported by a Director and Administrative Assistant who handles the administrative aspects of all programs in the School. As with all programs in the School, the School Director will oversee the program. The Computer Science and Computer Information Systems faculty will deliver the courses as they do for their respective undergraduate degree programs and maintain responsibility for program and course content. In the beginning, no new faculty, facilities, equipment or library resources will be required as there exists some excess capacity in both undergraduate degree programs. However, once the program grows past 50 students, an additional faculty member will be needed to help deliver the classes. As much of the library resources have become electronic, no additional library resources will be required regardless of the enrollment in the program.

#### 6. Cost

Summarize additional costs to offer the program. On separate budget sheet, estimate costs and revenues for the projected program for the first five years, indicating need for additional appropriations (if any).

We do not envision additional costs to develop or deliver this program until 50 students are enrolled in the program. Any new faculty that are required at that point would be funded through the increased tuition generated from the program instead of new state appropriations. We anticipate a new faculty member would be hired in the third year of the program at an estimated cost of \$75,000.

CERTIFICATIONS:	Primary Administrator for Proposed Certificate	 Date	
	Provost/Chief Academic Officer	Date	
	Management Board/System Office	Date	_

# SUMMARY OF ESTIMATED <u>ADDITIONAL</u> COSTS/INCOME FOR PROPOSED CERTIFICATE

Institution: University of Louisiana Monroe Date: March 20, 2019

Certificate Program, Unit: <u>Undergraduate Certificate in Software Development, School of Accounting, Financial and Information Services</u>

FTE = Full Time Equivalent (use the institution's standard definition and provide that definition).

		EX	PENDITUR	ES	AND WE			
	FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
	AMOUNT	FTE	Amount	FTE	AMOUNT	FTE	AMOUNT	FTE
Faculty	\$ 0		\$ 0		\$ 75,000	1	\$ 75,000	1
Graduate Assistants								
Support Personnel								
Fellowships and Scholarships								
SUB-TOTAL EXPENSES	\$ 0		\$ 0		\$ 0		\$ 75000	
	No Replie			WYE'S			A THE	Mary St.
	AMOUN	т	AMOUN	IT	AMOUN	T	AMO	JNT
Facilities	\$		\$		\$		\$	
Equipment								
Travel								
Supplies								•
SUB-TOTAL	\$ 0		\$ 0		\$ 75,000		\$ 75,000	
GRAND TOTAL EXPENSES	\$ 0	259,000 00	\$ 0		\$ 75,000		\$ 75,000	
			REVENUES	No.				
Amount & Percentage of Total Anticipated From:	AMOUNT	%	AMOUNT	%	AMOUNT	%	AMOUNT	%
State Appropriations	\$		\$		\$		\$	
Federal Grants/Contracts								
State Grants/Contracts								
Private Grants/Contracts								
Tuition	26,690	100	53,980	100	213,520	100	266,900	100
Fees								
Other (specify)								
TOTAL	\$26,690		\$53,980		\$213,520		\$266,900	

# **Course Descriptions**

# CSCI 2000 - Introduction to Computer Programming

An introduction to algorithms and programming, with an emphasis on the basic design, implementation, and testing of solutions to numerical and non-numerical problems. 3 cr.

Prerequisite(s): CSCI 1080 or credit or registration in a mathematics core curriculum course.

# CSCI 2003 - Intermediate Programming

Continuation of CSCI 2000, with increased emphasis on program design (including structured and object oriented techniques, data structures, and algorithms). 3 cr.

Prerequisite(s): Grade of "C" or better in CSCI 2000 and credit in MATH 1011 or MATH 1013 or MATH 1031 or permission of the department head.

# **CSCI 2026 - Introduction to Discrete Structures**

An introduction to discrete mathematical structures with applications to Computer Science. Topics include: logic, proof techniques, set theory, combinatorics, and functions. 3 cr.

Prerequisite(s): Credit or registration in CSCI 2000 and credit in MATH 1011 or MATH 1013 or MATH 1031 or permission of the department head.

## CSCI 2073 - Data Structures

An introduction to classic data structures that builds on object-oriented concepts such as abstraction and inheritance. Topics include lists, stacks, queues, trees, graphs, sets, and maps. 3 cr.

Prerequisite(s): CSCI 2003 with a grade of "C" or better and CSCI 2026.

# **CSCI 3020 - Object-Oriented Design and Programming**

Elements of the object model including abstraction, encapsulation, modularity, class hierarchies and inheritance, virtual functions, generic classes, and operator overloading. Methods for identifying classes and objects, notation for object-oriented design, the design process, and case studies. 3 cr.

Prerequisite(s): CSCI 2073.

# **CSCI 3030 - Internet Programming**

The art and science of programming for web-based applications. Topics covered will include human-computer interaction, client-side and server-side programming, interfacing with net-centric databases, and electronic document encoding. 3 cr.

Prerequisite(s): CSCI 2073.

# CINS 3040 - Networks and Data Communications

Concepts of data communications and networks and their impact on the business enterprise; issues pertaining to design, development, and implementation; hands-on experience with a network.

# CINS 3006 - Data Base Application Development

Concepts related to modeling organizational data; emphasis on designing and implementing the Relational database model using both the Structured Query Language (SQL) and a graphical query interface. 3 cr.

Prerequisite(s): CINS 2020

CINS 4030 - Information Systems Analysis

Overview of various system development life cycles, with emphasis on structured tools and techniques for describing data flows, data structures, file designs, input and output designs, and process specifications. 3 cr.

Prerequisite(s): Credit or enrollment in CINS 3006; CINS 3050 and BUSN 3005, or admission to an approved post-baccalaureate or graduate program; or permission of instructor.



April 2, 2019

Dr. Nick Bruno, President
University of Louisiana Monroe
700 University Avenue
Monroe, LA 71209

Dear Dr. Bruno:

I am writing to offer our support of the proposed Undergraduate Certificate program in Software Development being developed by your College of Business and Social Sciences. As you are aware, our Monroe Client Innovation Center is experiencing growth, and as such our technology workforce needs are growing.

Several of our staff members have been working with your Computer Information Systems and Computer Science faculty to share our needs for entry-level programmers and software developers. We have provided them a specific listing of the types of skills that we believe are necessary for success in our Center. The proposed Undergraduate Certificate meets our requirements for our **Entry Level Java/J2EE Application Development Specialist position.** 

When the Undergraduate Certificate is approved, we look forward to working with ULM faculty and staff to ensure a successful implementation and continuous improvement (based on business demands) of the program and hiring successful students for employment opportunities.

Best regards,

Timothy McLachlan

Leader - IBM Client Innovation Center: Monroe

201 Century Blvd. Monroe, LA 71203

Global Business Services



## Office of the President

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# RECEIVED

Dr. James B. Henderson, President University of Louisiana System 1201 North Street, Suite 7-300 Baton Rouge, LA 70802 JUN 06 2019
UNIVERSITY OF
LOUISIANA SYSTEM

Dear Dr. Henderson:

The University of Louisiana Monroe (ULM) respectfully requests that the University of Louisiana System Board of Supervisors approve the attached proposal for a new undergraduate certificate program in Unmanned Aircraft Systems Management.

This program will help meet the workforce demand for individuals with credentials and experience in UAS management in our region and across the state. The Federal Aviation Administration has indicated the need for certified UAS pilots is expected to quadruple in the next few years. The program will be offered in a face to face format. We anticipate the new undergraduate certificate will be of interest to a wide group of existing students as well as new students.

Enclosed is a copy of the proposal. After it is approved, we ask that you forward it to the Louisiana Board of Regents for their consideration.

Sinderely.

Nick J. Bruno, Ph.D.

President

**Enclosure** 

## PROPOSAL to DEVELOP a NEW ACADEMIC CERTIFICATE PROGRAM

(CAS, PAC, UC, PBC, GC, PMC, PPC)

Date: May 28, 2019

Campus: University of Louisiana Monroe	Program: CIP, Certificate Designation, Title 49.0101, UC, Unmanned Aircraft Systems Management
Institutional Contact Person & Contact Info (ii	f clarification is needed)
Dr. Ron Berry	
(318) 342-1100	
rberry@ulm.edu	

#### 1. Certificate Description

Describe the program concept: purpose and objectives; proposed curriculum; mode of delivery (on-site/hybrid/on-line). Indicate which courses are new; describe plan for rolling out new courses.

\*\* Attach catalog descriptions for the required and elective courses, including prerequisites and LCCN, when applicable. \*\*

The application of Unmanned Aircraft Systems (UAS) is becoming more widespread as the FAA has finally released appropriate regulations and policies related to commercial use of this technology. ULM proposes to create an undergraduate certificate to meet the needs of students seeking coursework and skills necessary to become an FAA certified UAS pilot. This proposal would replace ULM's existing PBC in UAS Management with a new undergraduate certificate in UAS Management.

This UC in UAS Management is designed for individuals who are seeking functional competency in UAS (drone) management. The Unmanned Aircraft Systems UC will be offered to those students whose career objectives are aimed at the emerging unmanned aircraft systems industry. The program provides the breadth and depth of instruction needed to ensure graduates are prepared to work as pilots/operators and/or developmental team members of unmanned aircraft systems while fully understanding the operational and safety environments of the National Airspace System. Additionally, the ability to work with software to manage the data collected from use of the UAS is of paramount importance. This UC program prepares students with those skills and abilities.

The objectives of the program would include:

- Providing a well-qualified, ethical workforce for the emerging field of UAS
- Providing students and faculty access and training on leading edge technology that will have practical applications in a variety of disciplines
- Meeting the entry-level educational requirements for individuals interested in pursuing careers in fields related to the vast array of applications for UAS
- Supporting the professional development of individuals who seek to obtain a formal educational credential in the aviation field

#### **Proposed Curriculum**

The certificate would include the following requirements and courses:

- 1. University Admission
- 2. Flight School Security Notice:

To comply with Transportation Security Administration (TSA) regulations, all non-U.S. citizens or other individuals designated by the TSA desiring to receive flight or simulator instruction must register and be approved by the TSA before instruction can begin. As some of the technologies involved with UAS fall under International Traffic in Arms Regulations, students wishing to pursue this certificate program must be able to prove United States citizenship prior to enrolling in the following courses: AVIA 2080, 3080, 3081, 4080, and 4081. Prerequisite: Current

- 3. Successful completion of each required course listed below with a minimum grade of "C".
- 4. Completion of at least 12 hours of the required courses listed below in-residence at ULM.
- 5. Completion of 15 hours of the following aviation courses:
  - a. AVIA 2080 (Intro of Unmanned Aircraft Systems-3 cr. Hrs.)
  - b. AVIA 3080 (UAS Design and Systems 3 cr. Hrs.)
  - c. AVIA 3081 (Unmanned Aircraft Ground Systems and Communication and Telemetry Systems—3 cr. Hrs.)
  - d. AVIA 4080 (Image Interpretation and Geospatial Information—3 cr. Hrs.)
  - e. AVIA 4081 (UAS Operations 3 cr. Hrs)

All of the courses required for this certificate will be offered in a face to face format on ULM's campus. All of the courses already exist; thus, no new courses will need to be developed.

#### 2. Need

Outline how this program is deemed essential for the wellbeing of the state, region, or academy (e.g., how is it relevant, how does it contribute to economic development or relate to current/evolving needs). Identify similar programs in the state and explain why the proposed certificate is needed.

ULM is currently charged with meeting the regional educational needs of students and employers. This program provides students with the opportunity to be on the forefront of the emerging application of UAS technology. The recent release of FAA guidelines and regulations that describe the certification process required for commercial use of UAS dictates a need for this program. For commercial use of UASs, pilots must earn the Part 107 certification. This program prepares students to be successful on this exam.

Given ULM's location and proximity to possible UAS application areas, such as agricultural enterprises, historic locations (Poverty Point), and the area's history and culture of entrepreneurship, developing expertise in UAS technology is in alignment with ULM's role, scope and mission.

By creating the UC in UAS Management, we will:

- Help meet the expected demand for well-trained employees in the aviation industry;
- Provide an alternative educational path for individuals displaced by downturns in other occupational fields;
- Create entrepreneurial opportunities for the commercial application of UAS technology.

Currently, ULM provides the only degree program related to UAS Management in the state. According to the FAA, demand for certified UAS pilots is expected to quadruple by 2020. The proposed UC program goes beyond just preparing students to become certified, though. Being able to capture and interpret the data to help others make more informed decisions is critical to the successful application of UAS technology. This certificate provides that additional skill set to our students.

Describe student interest. Project enrollment and productivity for the first 5 years; justify projections.

While predicting student interest is difficult, we do believe that the release of FAA guidelines for certification will make the program attractive to undergraduate students. We have seen an increase in interest from other programs on campus (atmospheric sciences, ag business, construction management, and risk management and insurance) in the program. We believe once commercial applications become clearer, more individuals will consider the certificate to prepare them for the FAA Part 107 exam.

	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Enrollment	2	5	10	15	25
Graduates	0	2	5	10	12

#### 4. Accreditation

Describe plan for achieving program accreditation.

The program follows the strict guidelines related to the Federal Aviation Administration for UAS pilots and other technically-related aviation and aviation management courses. However, there is no additional accreditation specifically that we are aware of for UAS Management degree programs.

#### 5. Faculty, Administration, & Other Resources

How will instructional needs be met: will additional faculty, facilities, equipment, or library resources be required? What department will deliver and oversee the proposed program?

ULM currently houses a BS degree in UAS Management in its School of Management. This is where the program will be housed and administered. The program is supported by two full-time faculty members who have significant experience in the aviation industry. Additionally, the program is supported by a part-time student worker who is Part 107 certified who helps with the UAS system management and use. We do not anticipate that any additional faculty resources will be required in the initial 5 years unless enrollment significantly exceeds expectations. Through grants and private donations, the program has developed a significant inventory of UAS equipment, including aircraft and sensors, to deliver the bachelor's degree. Those same resources will be used in the delivery of this certificate program. Additionally, all of the classes required for this certificate program are required for the BS in UAS Management; therefore, the additional cost is negligible.

### 6. Cost

Summarize additional costs to offer the program. On separate budget sheet, estimate costs and revenues for the projected program for the first five years, indicating need for additional appropriations (if any).

As identified in section 5, negligible additional resources would be required to deliver this program. No additional state allocations would be requested or required.

CERTIFICATIONS:		
CERTIFICATIONS.	Primary Administrator for Proposed Certificate	Date
	Provost/Chief Academic Officer	Date
	Management Board/System Office	Date

# SUMMARY OF ESTIMATED <u>ADDITIONAL</u> COSTS/INCOME FOR PROPOSED CERTIFICATE

Institution: University of Louisiana Monroe Date: May 28, 2019

Certificate Program, Unit: <u>UC in Unmanned Aircraft Systems Management</u>

FTE = Full Time Equivalent (use the institution's standard definition and provide that definition).

		EXP	ENDITURE	S		11 120		
	FIRST YEAR		SECOND YEAR	!	THIRD YEAR		FOURTH YEAR	
	AMOUNT	FTE	Amount	FTE	AMOUNT	FTE	AMOUNT	FTE
Faculty	\$0		\$0		\$0		\$0	
Graduate Assistants								
Support Personnel								
Fellowships and Scholarships								
SUB-TOTAL EXPENSES	\$0		\$0		\$0		\$0	
							7 79 Y	
	AMOUNT		AMOUNT		AMOUNT		AMOUNT	
Facilities	\$0		\$0		\$0		\$0	
Equipment								
Travel	,							
Supplies								
SUB-TOTAL	\$0		\$0		\$0		\$0	
GRAND TOTAL EXPENSES	\$0		\$0		\$0		\$0	
		RI	EVENUES	470			Maria and	
Amount & Percentage of Total Anticipated From:	AMOUNT	%	AMOUNT	%	AMOUNT	%	AMOUNT	%
State Appropriations	\$0		\$0		\$0		\$0	
Federal Grants/Contracts								
State Grants/Contracts								
Private Grants/Contracts								
Tuition	10,288	100	28292	100	57870	100	90020	100
Fees								
Other (specify)								
TOTAL	\$10288		\$28292		\$57870		\$90020	

# Required Courses 3 Credit Hours Each

# **AVIA 2080 - Introduction of Unmanned Aircraft Systems (UAS)**

An overview of the development, present and future status of the UAS in the civil aviation industry. Specific sections deal with aircraft, ground operations, communication, and launch and recovery systems while emphasizing human integration into the UAS system.

## AVIA 3080 - UAS Design and Systems

Basic design and aerodynamic considerations for UAS, including systems common to most UAS with focus on those that differ significantly from their manned counterparts, and emphasis on autopilot systems and their integration with flight controls and airborne communication systems.

Prerequisite(s): Approval of Instructor

# AVIA 3081 - Unmanned Aircraft Ground Systems and Comm. and Telemetry Systems

Subsystems that comprise the UAS ground control and mission planning system/software and various sensor technologies and communications; launch and recovery systems; theory and practice of normal and degraded operations of UAS comm. and telemetry data link systems.

Prerequisite(s): Approval of instructor

# **AVIA 4080 - Image Interpretation and Geospatial Information**

Examine remotely sensed images from various angles, scales, platforms, resolutions and wavelengths for the purpose of identifying objects and judging their significance.

Prerequisite(s): Approval of instructor

# **AVIA 4081 - UAS Operations**

Safe employment of UAS in practical applications, including aircraft operating software, launch and recovery operations, payload operations, normal and emergency procedures, mission planning and execution. Students must complete appropriate flight lessons to satisfactorily complete the course. Prerequisite(s): Approval of instructor