

Academic Program Proposals

October 22, 2004

The following is a list of academic program proposals being considered for approval for the October 22, 2004 Arkansas Higher Education Coordinating Board Meeting.

The Institution's Name, Program Title, and Program Summary are listed below. To download a PDF copy of the complete proposal, click on the link below the Program Summary.

If you have concerns, objections, questions or comments concerning a specific proposal, please send them to the contact person listed on the full proposal, as well as to Cynthia Moten at ADHE, no later than **August 31, 2004**.

Also you may download a copy of the ADHE publication "[Criteria and Procedures for Preparing Proposals for New Programs](#)".

Download program proposals in Adobe Acrobat PDF (portable document format). If you do not have an Acrobat reader, you can obtain it free of charge from Adobe.

<http://www.adobe.com>

Arkansas State University-Jonesboro

Doctor of Philosophy in Molecular Biosciences

Program Summary

Arkansas State University (ASU) is proposing an interdisciplinary Doctor of Philosophy degree program in Molecular Biosciences to begin in January of 2005. The proposed Doctoral degree is required to support the Arkansas Biosciences Institute (ABI) and the students and faculty involved. This will be an interdisciplinary program integrating the knowledge and technical skills of several disciplines in the science and techniques related to biotechnology. This proposal has been reviewed by external experts and has been modified based upon their comments.

Molecular Biosciences addresses classical and contemporary problems in biology through creative integration of cellular, molecular, developmental and genomic information and knowledge. Among other topics, Molecular Biosciences research may include the study of biomolecular interactions, the engineering and design of metabolic pathways to produce bioactive proteins, discovery and development of novel biomaterials, etc. It also involves development of methods for molecule detection and diagnostics, tools for bioinformatics, and genetic engineering technologies. As such, Molecular Biosciences contributes fundamental knowledge as well as the basis for biotechnological applications, including novel biological patents. Cell Biology is the study of various aspects of cell function, structure, metabolism, and chemical functions on, within, and between cells. Molecular Biology is generally defined as the study of biomolecular interactions, the relationships between biomolecular reactions and observed cellular properties, molecular genetics, protein chemistry, and biological structures, as well as the use of molecular detection methods to detect or characterize biological states in animal and plant sciences, systematics, forensics and health care. Cell Biology and Molecular Biology are the fundamental bases for biotechnology and are expanding areas of research. Thus, rapid growth has sprung out of the biotechnology revolution which has affected state, national and international aspects of agriculture, life sciences, human health, and commercial enterprises.

This proposal is an extension of a well-established need for broadly based and interdisciplinary technical training of graduate students to meet state, regional and national needs in the coming years. The program is in direct support of the state's ABI mandate and funding and a logical extension of faculty recruitment and an increased focus on Molecular Biosciences at the department and college levels. As such, dissertation research will focus on plant-made pharmaceuticals, nutraceuticals and other high-value modifications of plant products through biotechnology. This research training focus complements the strengths of our partner institutions in the ABI consortium and our existing masters programs.

The University is continuing to expand its research and teaching capacities and is continuing to recruit and hire new faculty members in this area, primarily in the College of Agriculture, the College of Sciences and Mathematics and the ABI Research Center. Taken together, the increased need for trained Molecular and Cell Biologists in Arkansas and nationally has made it apparent that degree programs are required to foster interdepartmental and intercollegiate graduate student training and research. The proposed doctoral program in Molecular Biosciences at ASU will serve both state and student needs.

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Arkansas State University-Jonesboro

Master of Science in Environmental Sciences

Program Summary

The College of Sciences and Mathematics at Arkansas State University proposes to develop an interdisciplinary Master of Science degree in Environmental Sciences at the main campus in Jonesboro. It is anticipated that the program will have the same high demand as the current Ph.D. program in Environmental Sciences. This degree is highly appropriate in light of the importance of managing and balancing use of the state's unique natural resources and the numerous environmental issues requiring both educational and research support.

Arkansas' natural resources are uniquely distributed among the various ecoregions that span from the Mississippi River Basin (Deltaic) to the Ozark and Ouachita Mountains. This area is a complex tapestry of plateaus, river valleys, rolling uplands, and gorges woven together by the Mississippi River and its tributaries. Novel and thoughtful stewardship is at times necessary to insure sustainability of these ecosystems in the face of growing demands for societal needs.

Craighead County is one of the fastest growing counties in the state. Environmental challenges have already surfaced due to the impact of a rapidly growing population on the area's natural resources. Maintaining ecological integrity with systems management is seen as critical to the entire Mississippi River Basin, where up to 80 percent of all fish and wildlife in the basin use the riparian habitat at one time or another. These ecosystems have been altered with human influences, leading to demands on the state's water quality and quantity related to ecosystem services. These services that comprise a largely undervalued resource, furnish cycles that are critical to food production and water provision and treatment of wastes. This, in turn, affects the types of wildlife, fish, and plants that can survive in the area. Furthermore, both point- and non-point source pollution and groundwater contamination have profound impacts on human health.

In the Mississippi River Delta, the abundance of wetlands make conservation and restoration issues particularly relevant. As a result, many area employers are seeking employees with advanced knowledge from areas of hydrology, geology, biology, ecology, water chemistry, engineering, modeling, and ecotoxicology that can integrate one or more disciplines in problem solving. It is the applied blending of these areas that fall under the heading of environmental sciences. The Environmental Sciences program would be expected to produce scientists with the knowledge needed to support the assessment, maintenance and recovery of environmental resources. This includes an appreciation of the economic, social, political, and aesthetic context that shapes our interaction with and knowledge of the environment. Measuring and understanding the balance between environmental protection, sustainable resource management, and economic growth is a major theme that can be integrated into courses and research available to students seeking the Masters degree at ASU.

Relationship to Institutional Role and Mission

The mission for Arkansas State University's main campus is to provide access to higher education for upper division and graduate students from the Mississippi Delta region. The graduate degree for environmental sciences would fulfill this mission. Students would likewise be expected to be involved with research topics and service of global scale similarly as in our current doctoral environmental program. This degree is specifically being developed to meet environmental needs that are unique to the Mississippi River Delta region and surrounding communities.

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Arkansas State University-Jonesboro

Master of Business Administration Offered at Arkansas Tech University

Program Summary

This proposed program is a Master of Business Administration degree to be offered at Arkansas Tech University in Russellville and will be patterned after the current MBA degree program at Arkansas State University-Jonesboro. The target starting date is January, 2005, pending approval to offer the program.

[Click here to download a copy of the proposal in PDF format.](#)

Arkansas State University-Jonesboro

Associate of Applied Science in Nursing Offered at Mid-South Community College

Program Summary

The proposed program is an Associate of Applied Science in Nursing (AASN) degree to be offered at Mid-South Community College (MSCC) and is the same traditional AASN program offered at Arkansas State University-Mountain Home. The proposed starting date is January 2005, pending approval to offer the program.

The AASN Program at Arkansas State University (ASU) is offered to two types of students. One group is students with no previous preparation in nursing. This option is a

four-semester program. Currently this option is available on the ASU-Mountain Home campus and is the one selected for MSCC. The second option is for Licensed Practical Nurses (LPNs) desiring to become RNs with an associate of applied science degree. The option for LPNs is a three-semester program following successful completion of their educational program and the licensing exam. Distance sites currently approved include ASU-Beebe, ASU-MH and Ozarka Technical College. Nursing Faculty at the distance sites provide clinical instruction and supervision.

The AASN curriculum offered at MSCC will be exactly the same as that for the program approved and offered at ASU-MH.

[Click here to download a copy of the proposal in PDF format.](#)

Consortium of Six Two-Year Colleges (Arkansas Rural Nursing Education Consortium)

Associate of Applied Science in Registered Nursing

Program Summary

This program proposal to offer an Associate of Applied Science Degree in Registered Nursing is submitted by the Arkansas Rural Nursing Education Consortium (ARNEC) consisting of six institutions—Arkansas State University-Newport, Black River Technical College, and Cossatot Community College of the University of Arkansas, Ozarka College, South Arkansas Community College, and the University of Arkansas Community College at Morrilton. The purpose of the program is to increase the number of registered nurses available for employment in rural Arkansas. The program will help address the critical shortage of nurses in the service areas of the colleges and will also provide a career path for Licensed Practical Nurses and Licensed Psychiatric Technician Nurses (LPNs/LPTNs) who aspire to become registered nurses. The colleges formed the consortium for the purpose of developing an LPN/LPTN to RN transition program. The program will be reviewed by the Arkansas State Board of Nursing at the June 10, 2004 meeting.

The program will be an AAS degree LPN/LPTN to RN Transition Program designed for those LPNs/LPTNs who wish to complete an associate degree program leading to licensure as a registered nurse. The program will allow the ARNEC member institutions to offer a new and innovative approach via a nontraditional delivery format by interactive video. The program will serve ten students at each distance-learning site. Other distance learning tools will include on-line testing and virtual clinical excursions. Theory and clinicals will be scheduled during evenings and on weekends.

A Memorandum of Understanding (MOU) (Appendix A) has been executed between the chief executive officers of each institution within the consortium. The MOU details the procedures to be used in the program.

The proposed program is scheduled to begin January 2005 and is consistent with the mission and purposes of each institution. The ARNEC member institutions hold full accreditation by the Higher Learning Commission of the North Central Association (NCA).

The curriculum will consist of 75 credit hours: 37 hours of general education prerequisite courses, 32 hours of nursing courses, and 6 hours of articulated credit for the PN licensure, which will be awarded after completion of the first semester of the program.

The colleges have the required classrooms, science and nursing labs, compressed video equipment, and clinical sites to support this degree program. All of the general education

courses are either already offered as part of each college's general education core or have been developed to meet the prerequisite core of the program. The six colleges will utilize common nursing faculty to reduce the number of faculty needed to support the program. Theory courses will be delivered via interactive (compressed) video. Additional clinical assistants will be employed to supervise students in the clinical experiences. The instructional materials and library resources are adequate.

The purposes of the program are to provide a quality educational nursing program that:

1. Helps to ease the nursing shortage in the service area counties of the ARNEC member institutions by providing program accessibility to area LPNs and LPTNs.
2. Provides an alternative to traditional RN programs through interactive video, web-based support, and timeframes that provide choices to LPNs/LPTNs currently employed in the health care field.
3. Facilitates the delivery of quality curriculum through hiring masters and baccalaureate prepared faculty within each of the member institutions' service areas who would provide instruction in their specialties to distant consortium schools.
4. Combines fiscal resources of the member institutions to provide a cost effective mode of educational delivery of the LPN/LPTN to RN students in rural Arkansas.

Prepares program graduates with foundational skills that allows for seamless transfer to state baccalaureate nursing programs.

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East Arkansas Community College

Associate of Applied Science/Technical Certificate/Certificate of Proficiency in Environmental/Health and Safety Technology

Program Summary

The proposed Environmental/Health & Safety Technology program consists of an Associate of Applied Science Degree (60 credit hours), a Technical Certificate (36 credit hours), and a Certificate of Proficiency (15 credit hours). The program provides students the opportunity to obtain and validate increasing levels of expertise ranging from the entry-level skills needed for employment as a technician to the knowledge and skills needed for employment as entry-level managers in the field.

The program emphasizes programmatic understanding of environmental and safety regulations, sampling and analysis procedures and safety protocols and requirements. HAZWOPER training required fewer than 29 CFR 1910.120 is also included.

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Henderson State University

Master of Business Administration Offered On-line

Program Summary

The proposed program is not a new program, but a distance delivery of our existing M.B.A. (See attached curriculum.)

The instructional process will be a combination of limited classroom and web teaching. The web portion will be enhanced using specialized teaching software, Tegrity, which allows lectures to be viewed and heard over the internet. Additionally, students can view the lecture at their convenience and as many times as needed via the internet. Students will take one course at a time lasting 5 to 6 weeks until finishing 10 courses and thus completing the M.B.A. degree in approximately 16 to 18 months. There will be an initial 6 to 8 hour class on a Saturday with the remainder of the class to be completed using the web based teaching model. The initial class meeting can be at Henderson State University or any other location where there was an adequate student base.

The student will be able to buy the required texts and materials on the internet, relieving the University of that logistical problem. Announcement of the required texts and other materials will be made early enough to permit each student to be prepared with the required materials when the course started.

Students will progress through the program with a cohort group of students. The Maximum cohort size will be limited to 30. Additional classes in cohorts can be started at almost any time if needed

Testing will be proctored by local staff or by the staff of HSU. Research papers will be sent either by email attachment (preferable) or via postal service.

Proposed tuition and fees are \$21,000 per student for the program. This tuition is more than a student would pay for the traditional M.B.A. A major factor in the increased tuition is from the prerequisite requirements that are built into the courses. This allows students without an undergraduate degree in business to enroll and complete the M.B.A. degree.

Library facilities will be provided through the electronic library resources of HSU, local libraries and internet resources. There will be no need for any remote equipment requirements except for possibly having to arrange for testing facilities.

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Pulaski Technical College

Associate of Arts in Teaching with Option in Early Childhood Education

Program Summary

The AAT in Early Childhood Education is designed to give students interested in pursuing a bachelor's degree in early childhood education a foundation to build upon at a four-year institution. The curriculum outline was developed by joining core courses from UALR's ECE degree plan and the early childhood courses at PTC that articulate to UALR. The early childhood department at PTC currently has 2 full-time and 7 adjunct instructors. Because an AAS in early childhood has been in place for the past seven years, there will be no new costs to add this program. All courses are currently being offered and all resources are already in place. The library contains periodicals and videos to support the early childhood program and a Teacher Learning Resource Center was created through a DHS/Department of Labor Apprenticeship grant. The TLRC contains a variety of

materials and equipment to provide students the resources they need to successfully complete course requirements.

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Pulaski Technical College

Associate of Applied Science in Occupational Therapy Assistant

Program Summary

This degree is the result of a partnership between Pulaski Technical College and the Baptist Health School for Occupational Therapy Assistant. The occupational therapy assistant is a healthcare professional whose training is focused on treatment and structure activities that include specified areas of self-care, employment, recreation and spiritual aspects. Pulaski Technical College adds to the Occupational Therapy Assistant curriculum general education courses that enhance the overall training of a well-educated professional.

This degree consists of 72 credit hours. Thirty-two credit hours (44%) are provided by Pulaski Technical College including: English/writing – 6 hours; mathematics – 3 hours; social sciences – 3 hours; and computer applications/fundamentals – 3 hours. Forty credit hours (56%) in the technical area (occupational therapy assistant) are provided by the Baptist Health School for Occupational Therapy Assistant.

Pulaski Technical College courses are taught by its fully-qualified general education faculty holding at least a master's degree with a minimum 18 hours in the discipline taught. Baptist Health School for Occupational Therapy Assistant courses are taught by a fully-qualified instructor with a master of science in occupational therapy. Library resources, facilities and equipment on both campuses are more than adequate for the courses taught.

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South Arkansas Community College

Technical Certificate in Medical Coding and Technical Certificate in Medical Transcription

Program Summary

South Arkansas Community College is requesting approval from the Arkansas Higher Education Coordinating Board to implement new programs entitled Technical Certificate in Medical Coding and Technical Certificate in Medical Transcription. The college will request to discontinue a Certificate of Proficiency in Office Occupations with an emphasis on Medical Secretary, but will maintain some of the courses in that program.

In today's healthcare market, there exists a shortage of qualified medical coding personnel and medical transcriptionists. In the rural areas of South Arkansas and North

Louisiana, hospitals and physicians offices are constantly in search of qualified medical coders and medical transcriptionists to meet their needs. Our market research has identified the need for health information employees to increase their skills in electronic health data management. In addition to coding and transcription, these programs will also provide graduates the skills to insure quality control in record keeping and maintain patient record security. This is being dictated by the Federal Department of Health and Human Services (DHH) and it soon will be required that all patient records be electronically stored.

The goal of these programs is to provide courses that will lead to marketable skills and national certification with the American Health Information Management Association (AHIMA) and the American Association for Medical Transcription (AAMT). These programs will encourage economic development in the region by providing employers with a skilled workforce. The programs are also designed to articulate to other senior colleges where graduates can complete a four-year degree and beyond.

The programs are designed to prepare individuals for diagnostic and procedural coding positions and/or medical transcription positions in hospitals, physician offices and clinics, long-term care facilities, insurance companies, home care agencies, managed care organizations, and surgical centers.

Currently, the closest Health Information Program to South Arkansas Community College is located at Louisiana Tech University, which offers Associate and Bachelor Degree programs in Health Information Management. The program does not offer a certificate in specific disciplines such as medical coding and medical transcription, and is unable to meet immediate workforce needs. They are proposing the establishment of a relationship with South Arkansas Community College to create a feeder program for their Bachelor Degree Program. We have full support for the development of these programs from Louisiana Tech, and the University has offered curriculum and instructional support to our college. Articulations have also been designed to facilitate the transfer of these students. (Articulation agreement developed with Louisiana Tech University, see Appendix 17.6).

The programs at South Arkansas Community College will consist of a one-year technical certificate in medical coding and a one-year technical certificate in medical transcription. Infused in both of these programs will be the latest technology in electronic record keeping and communications.

Medical Coding is the transformation of disease, injury, and procedure descriptions into alphanumeric designations. Originally, coding was performed to classify mortality (cause of death) data on death certificates. However, in the United States, medical coding has also been used to classify morbidity (disease) and medical procedural data. Coding of health-related data facilitates the digital analysis of medical records for use in clinical care management, research, and education (see more information about medical coding in Appendix 17.1).

Since the implementation of the federal government's prospective payment system in 1983, there has been a great deal of emphasis placed on coding. Currently, the reimbursement of hospital and physician claims for Medicare patients depends entirely on the assignment of codes to describe diagnoses, services, and procedures provided. Additionally, other third party payers have followed Medicare's lead and are using coded data for claims processing. In the 1990's, the federal government attacked the problem of healthcare fraud and abuse. Coding became the method of choice for specification of services rendered at the point of care. As the basis for reimbursement, appropriate coding has become crucial as healthcare providers seek to assure compliance with official coding guidelines.

In the broadest sense, medical transcription is the act of translating from oral to written form (on paper or electronically) the record of a person's medical history, diagnosis, prognosis, and outcome. A program goal is to prepare the student for entry-level employment as a medical transcriptionist by providing the basic knowledge, understanding, and skills required to transcribe healthcare dictation and prepare patient care documents with accuracy, clarity, consistency, and timeliness while applying the principles of professional and ethical conduct (see more information about medical transcription in Appendix 17.2).

The industry is moving toward electronic health records, allowing storage of an individual's health history, so the physicians and healthcare providers can access this information anywhere. Our curriculum addresses this trend and will be ready to meet both current and future needs of the medical community.

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University of Arkansas, Fayetteville

Bachelor of Science in Education in Elementary Education, Additional Option for P-4 Teachers to be Offered at NorthWest Arkansas Community College

Program Summary

Northwest Arkansas Community College (NWACC) would like to enter into an arrangement with the College of Education and Health Professions (COEHP), University of Arkansas, to provide junior and senior coursework that would result in a University of Arkansas Bachelor of Science in Education degree and an initial teaching license in elementary education (P-4). Currently the Elementary Education/Childhood Education program only endorses individuals for a teaching license in Arkansas through the Master of Arts in Teaching (MAT) program. While this program has been recognized as an award winning teacher preparation program, teacher shortages in Arkansas have resulted in a need to expand the program to include licensure at the BSE level. NWACC is interested in developing a joint program where students complete the BSE degree on their campus. This joint program would greatly alleviate the teacher shortage in northwest Arkansas and would serve as a model for collaborative efforts between the University of Arkansas and NWACC.

Courses and internships/practica for the program would be delivered on the NWACC campus and surrounding communities via on-site instructors or distance education.

This proposal is for the creation of a partnership between the University of Arkansas, Fayetteville, and the Northwest Arkansas Community College to develop a program for caring early childhood scholar-practitioner educators who are eligible for initial P-4 teacher certification in the state of Arkansas.

This will be a four-year plus one half summer sequenced program. Classes for the senior year are blocked and must be taken together. The senior year is also site-based student teaching four days of the week with one day for classes. The first two years of classes are primarily from those already available at NWACC. The junior and senior year classes will include four new courses to be included with others selected from those currently offered by the University. The eleven new proposed classes include an early childhood preschool/kindergarten class of 3 hours, with a one-hour practicum; a behavior management class (3 hrs.); a student teaching course (3 hrs.), a senior project (3 hrs.), a curriculum design course (3 hrs.), a senior seminar (3 hrs.); a measurement, research,

and readings course (3 hrs.); and three new methods courses. The total proposed program will be 129 hours that will include four academic years plus a summer session prior to the senior year.

Faculty to teach classes and supervise student teachers plus an administrator for the student teaching program would need to be hired. This would be the equivalent of 2.0 FTE clinical faculty for the first year of course offerings, and 3.0 for each year thereafter. The program cannot be delivered without these additional faculty lines. Arrangements with public schools to host student teachers and to be part of an advisory board along with other interested parties would need to be established. Designing the assessment program and check points prior to the start of the program would also need consideration.

It is proposed that the seminar class be a large group meeting on the class day. Within schools the supervisor will have a weekly or biweekly lunchtime meeting with students to handle scheduling observations and other concerns. A director of supervisors will be responsible for overseeing the supervision operation and will report to a director of student teaching who will be responsible for school placements, school policies, evaluation and general administration of the program.

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University of Arkansas, Fayetteville

Doctor of Philosophy in Space and Planetary Sciences

Program Summary

The recently formed Arkansas-Oklahoma Center for Space and Planetary Sciences (the “space center”) brings together faculty from ten departments in four colleges at two Universities; the chemistry, physics, biology, geology, and mechanical engineering departments (under various names) in the Arts and Sciences Colleges and the Engineering Colleges at the University of Arkansas (UArk) and the Oklahoma State University (OSU). Research collaborations already exist between most of the faculty in the programs, and many teach courses in their respective departments that provide substantial education in these individual research areas. The situation is well suited to providing a formal structure for the creation of a new integrative multidisciplinary degree program that will provide unique opportunities for the students, their mentors, the two universities, the region and the nation. The new program will be called space and planetary science with the four-letter identifier SPAC.

The program will provide a comprehensive, multidisciplinary graduate-level education space and planetary sciences. The program will consist of a general component and five core areas, planetary astronomy, planetary geology, planetary atmospheres, theory of the origin and evolution of life and astronautics and orbital mechanics. The required courses will include one survey course from each of the core areas, a graduate-level laboratory course, seminars in space and planetary sciences, three two-week workshops in communication, ethics and entrepreneurship, and a one-month internship at a north American or overseas national, military or university laboratory. Electives will be taken from within the core areas depending on the student’s interests. Collectively, the program will provide a strong academic foundation and advanced training in one or more of the core areas, and will provide an awareness of societal issues and needs at the national and global level. It will be consistent with the recommendations of the National Academy’s 1995 Report “Reshaping the Graduate Education of Scientists and Engineers.”

An important element of the program is that it is associated with the space center. About one-third of the courses will be offered in Stillwater, Oklahoma, and about two-thirds will be offered in Fayetteville, Arkansas. In this manner, the intellectual and physical resources of two universities are brought to the teaching and research programs of the center. Collaboration between the two schools is through live two-way interactive video and frequent visits. Preliminary indications at the space center, and several recent government reports, indicate that the proposed Ph.D. program will be popular with students and that graduates will be highly competitive for positions in the space and planetary sciences in academe, industry, government and the military. Diplomas will be issued by the University which houses the mentor of the student, but if the mentor is at Arkansas, the diploma will read "Doctor of Philosophy from the University of Arkansas", and in smaller print, "in collaboration with Oklahoma State University." Likewise the diplomas from OSU will include "in collaboration with the University of Arkansas."

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University of Arkansas, Fayetteville

Concentrations of Space and Planetary Sciences to Existing Doctor of Philosophy Programs in Biology and Physics

Program Summary

The recently formed Arkansas-Oklahoma Center for Space and Planetary Sciences (the "space center") brings together faculty from ten departments in four colleges at two Universities; the chemistry, physics, biology, geology, and mechanical engineering departments (under various names) in the Arts and Sciences Colleges and the Engineering Colleges at the University of Arkansas (UArk) and the Oklahoma State University (OSU). Research collaborations already exist between most of the faculty in the programs, and many teach courses in their respective departments that provide substantial education in these individual research areas. The situation is well suited to providing a formal structure for the creation of a new integrative multidisciplinary degree program that will provide unique opportunities for the students, their mentors, the two universities, the region and the nation.

The program will provide, for the first time in a U.S. university, graduate degree programs in biology and physics that will incorporate a component involving a comprehensive, multidisciplinary graduate level education in space and planetary sciences. The program will consist of general courses and courses in planetary astronomy, planetary geology, planetary atmospheres, the origin and evolution of life and orbital mechanics/astronautics. The general requirements will consist of a graduate level laboratory course and seminars in space and planetary sciences, a thesis, a candidacy examination, three two-week workshops in communication, ethics and entrepreneurship, and a one-month internship at a north American or overseas national, military or university laboratory. All students in the program must take at least three of these courses in three of the core areas. Collectively, the program provides a strong academic foundation and advanced training in one or more of the core areas, and it provides an awareness of societal issues and needs at national and global levels.

An important element of the program is that it is associated with the space center. About one-third of the courses will be offered in Stillwater, Oklahoma, and about two-thirds will be offered in Fayetteville, Arkansas. In this manner, the intellectual and physical resources of two universities are brought to the teaching and research programs through

live two-way interactive video and visits. Preliminary indications at the space center, and several recent government reports, indicate that the proposed Ph.D. program will be popular with students and that graduates will be highly competitive for positions in the space and planetary sciences in academe, industry, government and the military.

[Click here to download a copy of the proposal in PDF format.](#)

University of Arkansas, Fayetteville

Master of Science in Space and Planetary Sciences

Program Summary

The recently formed Arkansas-Oklahoma Center for Space and Planetary Sciences (the "space center") brings together faculty from ten departments in four colleges at two Universities; the chemistry, physics, biology, geology, and mechanical engineering departments (under various names) in the Arts and Sciences Colleges and the Engineering Colleges at the University of Arkansas (UArk) and the Oklahoma State University (OSU). Research collaborations already exist between most of the faculty in the programs, and many teach courses in their respective departments that provide substantial education in these individual research areas. The situation is well suited to providing a formal structure for the creation of a new integrative multidisciplinary degree program that will provide unique opportunities for the students, their mentors, the two universities, the region and the nation.

The program will provide an opportunity to introduce a comprehensive, multidisciplinary master's-level course in space and planetary sciences. The program will consist of a graduate-level laboratory course and seminars in space and planetary sciences, three two-week workshops in communication, ethics and entrepreneurship, and a one-month internship at a North American or overseas national, military or university laboratory. In addition, students will be required to take three of the survey courses in the five core areas of space and planetary sciences, planetary astronomy, planetary geology, planetary atmospheres, theory of the origin and evolution of life and orbital mechanics and astronautics. Collectively, the program will provide a strong academic foundation and advanced training in one or more of the core areas, and it will provide an awareness of societal issues and needs at the national and global levels. It will be consistent with the recommendations of the National Academy's 1995 Report "Reshaping the Graduate Education of Scientists and Engineers."

An important element of the program is that it is associated with the space center. About one-third of the courses will be offered in Stillwater, Oklahoma, and about two-thirds will be offered in Fayetteville, Arkansas. In this manner, the intellectual and physical resources of two universities are brought to the teaching and research programs of the center. Collaboration between the two schools is through live two-way interactive video and frequent visits. Preliminary indications at the space center, and several recent government reports, are that the proposed M.S. program will be popular with students and that graduates will be highly competitive for positions in the space and planetary sciences in academe, industry, government and the military. Diplomas will be issued by the University which houses the mentor of the student, but if the mentor is at Arkansas, the diploma will read "Master of Science from the University of Arkansas," and in smaller print, "in collaboration with Oklahoma State University." Likewise the diplomas from OSU will include "in collaboration with the University of Arkansas."

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University of Arkansas, Fayetteville

Add Concentration of Space and Planetary Science to Master of Arts in Geography and Master of Science in Geology

Program Summary

The recently formed Arkansas-Oklahoma Center for Space and Planetary Sciences (the "space center") brings together faculty from ten departments in four colleges at two Universities; the chemistry, physics, biology, geology, and mechanical engineering departments (under various names) in the Arts and Sciences Colleges and the Engineering Colleges at the University of Arkansas (UArk) and the Oklahoma State University (OSU). Research collaborations already exist between most of the faculty in the programs, and many teach courses in their respective departments that provide substantial education in these individual research areas. The situation is well suited to providing a formal structure for the creation of a new integrative multidisciplinary degree program that will provide unique opportunities for the students, their mentors, the two universities, the region and the nation.

The program will provide, for the first time in a U.S. university, masters degree programs in geology and geography that will incorporate a component involving a comprehensive, multidisciplinary graduate level education in space and planetary sciences. The program will consist of general courses and courses in planetary astronomy, planetary geology, planetary atmospheres, the origin and evolution of life and orbital mechanics/astronautics. The general requirements will consist of a graduate level laboratory course and seminars in space and planetary sciences, a thesis, a candidacy examination, three two-week workshops in communication, ethics and entrepreneurship, and a one-month internship at a north American or overseas national, military or university laboratory. Collectively, the program provides a strong academic foundation and advanced training in one or more of the core areas, and it provides an awareness of societal issues and needs at the national and global level.

An important element of the program is that it is associated with the space center. About one-third of the courses will be offered in Stillwater, Oklahoma, and about two-thirds will be offered in Fayetteville, Arkansas. In this manner, the intellectual and physical resources of two universities are brought to the teaching and research programs through live two-way interactive video and visits. Preliminary indications at the space center, and several recent government reports, indicate that the proposed masters degree program will be popular with students and that graduates will be highly competitive for positions in the space and planetary sciences in academe, industry, government and the military.

[Click here to download a copy of the proposal in PDF format.](#)

University of Arkansas, Fayetteville

Doctor of Philosophy in Educational Foundations: Educational Statistics and Research Methods

Program Summary

The increased emphasis on educational accountability and data-driven school improvement both in Arkansas and the nation has led to greater demand for experts in educational statistics and research methods. The proposed Ph.D. program in Educational Statistics and Research Methods will develop professionals who can lead in these areas.

The mission statements for the College of Education and Health Professions (COEHP) and the University of Arkansas stipulate the goal of creating a “nationally competitive, student-centered research university”. Further, as part of the 2010 Commission Report, *Picking Up the Pace*, a recommendation is made to benchmark against other national research universities and strive to compare favorably and identify best practices, and apply them within the University of Arkansas.

The Five-Year Strategic Plan for Educational Foundations (EDFD) included the creation of a nationally competitive student-centered research program, with a Doctor of Philosophy degree in Educational Statistics and Research Methods. We envisioned generating annual external funding of more than \$1,000,000, producing 15 national publications, 25 national presentations, continued academic excellence in the classroom, nationally prominent service, in addition to the creation of a master’s degree and four graduate certificate programs to support the doctoral degree.

We have completed, ahead of schedule, all aspects of our Five-Year plan, except the creation of a doctoral program. The creation of the doctoral program and our academic productivity benchmarked against our “peer” institutions, as identified in the 2010 Commission: *Making the Case* report, would result in the recognition of the EDFD Educational Statistics and Research Methods doctoral program as a nationally competitive program in this area.

The EDFD faculty represents a unique aggregate of faculty within COEHP. First, all of the faculty members were academically trained or have been tenured professors at Research I/AAU academic institutions. Consistent with leading national programs, EDFD faculty maintain academic rigor within the courses they teach, and are productive in scholarship and securing external grants. A brief synopsis of their productivity is provided as Appendix 5.

The seven faculty members in the Educational Foundations program area teach educational statistics and research methods courses to doctoral students throughout the College of Education and Health Professions. Coursework in the proposed degree program will consist of doctoral level courses that are currently offered plus an additional three-course sequence of advanced methods in educational statistics and doctoral dissertation credit hours. By offering larger sections of master’s level courses and using graduate assistants specializing in educational statistics and research methods, no additional faculty positions are required.

Library resources supporting research in educational statistics and research methods include over 6000 monographs and subscriptions to 33 relevant journals, with another 18 journals available in electronic form. Facilities include a statistics/research computer lab and computer-enhanced classrooms in the Graduate Education building. The National Office of Research, Measurement and Evaluation Systems (NORMES) employs 10-15 graduate research assistants for various funded research and service projects.

The traditional methods for creating and funding new degree programs are based on academics, economics, or a combination of both. Given the limited economic resources available, and how in the near future this situation seems unlikely to improve, it is paramount that faculty be more creative in maximizing and capitalizing on their available resources to expand and grow program areas. We believe we have accomplished this with our approach to creating the doctoral degree in educational statistics and research methods.

The area of educational statistics and research methods at Research I/AAU institutions is a vital academic component to support college wide research efforts, with graduate

degree programs at the master's and doctoral levels designed to that help provide the need for this expertise. In fact, all 50 of the top 50 colleges of education, as identified by US News & World Report, and all of the benchmark schools in the 2010 Commission reports, offer masters and doctoral degrees in Educational Statistics and Research Methods.

Given the mission statements and goals of the College and University, the College of Education and Health Professions is provided an opportunity to realize a new nationally prominent program, using an approach that represents a departure from the traditional funding approaches, i.e., no requirements for large commitments in new funding. The approach presented by the educational foundations faculty is representative of a new model of fiscal and academic creativity, to grow new program areas given the difficult economy, consistent with many current business models of "streamlining" resources. The reorganization and changes associated with the core EDFD faculty in the last 8 years makes this new doctoral degree possible, a situation-specific and somewhat fortunate set of events.

EDFD is already a leading program in COEHP in scholarly productivity, external funding, and national service. It has the potential, with proper doctoral student support, consistent with other Research I/AAU institutions, to be a national leading program.

[Click here to download a copy of the proposal in PDF format.](#)

University of Arkansas, Fayetteville

Master of Information Systems Offered at Bentonville, Lowell, and Springdale

Program Summary

The Master of Information Systems degree program is currently offered only on the Fayetteville campus. Part-time students must come to Fayetteville two nights per week for over two years to complete the program. Area employers in Bentonville, Lowell, and Springdale have significant numbers of information systems employees. A survey conducted in Fall 2002 was completed by 779 individuals in Northwest Arkansas. Of those, 51% rated their interest in the MIS program as "strong" or "very strong". When asked about scheduling options, 55% of the respondents preferred classes offered one night per week.

By offering classes at or near key employers' facilities, scheduling classes one night per week, and increasing the use of technology to deliver curriculum, the MIS program is made more accessible to a large population of working adults. We anticipate that enrollment in the program will increase. In addition, we will increase the presence of the University of Arkansas in Benton County by offering this graduate degree program there.

[Click here to download a copy of the proposal in PDF format.](#)

University of Arkansas, Fayetteville

Bachelor of Science in Electrical Engineering and Bachelor of Science in Mechanical Engineering Offered at University of Arkansas at Fort Smith

Program Summary

The programs offered at the University of Arkansas at Fort Smith will have the same requirements as stated in the University of Arkansas, Fayetteville *Catalog of Studies*. The University of Arkansas at Fort Smith will offer the first two years of the program, and the University of Arkansas, Fayetteville, will offer the junior and senior level engineering courses in Fort Smith. A combination of on-site and distance education methods will be used to deliver the junior and senior level course with University of Arkansas, Fayetteville, faculty. The University of Arkansas's academic programs in engineering at the University of Arkansas at Fort Smith will be under the supervision of the Dean of the College of Engineering at the University of Arkansas, Fayetteville.

[Click here to download a copy of the electrical engineering proposal in PDF format.](#)

[Click here to download a copy of the mechanical engineering proposal in PDF format.](#)

University of Arkansas at Fort Smith

Bachelor of Science in Spanish with Teacher Licensure

Program Summary

The University of Arkansas at Fort Smith requests approval of the Arkansas Higher Education Coordinating Board to offer a new program in Spanish with teacher licensure, leading to the Bachelor of Science Degree. The program capacity is 10 students the first year and 15 students per year thereafter.

Just over one year ago, Westark College had the opportunity to become a four-year institution as the University of Arkansas at Fort Smith. At that time, the Board of Trustees, administration, faculty, and area citizens were very clear about the type of institution we wanted to become. Specifically, the "owners" of our institution insisted that four-year status would only add to the educational opportunities we offer, rather than completely change the institution. We pledged to continue the one semester certificates of proficiency, one-year technical certificates, associate of applied science and associate of arts degrees, and the pioneering noncredit business and industrial workforce training which the region has strongly supported for the past twenty years.

UA Fort Smith has, through objective outside surveys, identified the region's strongest education needs, and we intend to focus on developing five major areas in which to offer bachelor's degrees that meet documented and specific needs. UA Fort Smith does not have the resources or intent to duplicate the breadth and extent of bachelor's and advanced degree programs offered by regional universities or the University of Arkansas – Fayetteville. Rather, we plan to create a unique university that focuses on those programs and niches, limited in number, that best serve the region and our service area and our students' and clients' needs.

The five major areas in which we plan to emphasize bachelor's degrees that meet regional needs include the following:

- Education
- Health Sciences
- Business
- Information Technology and other technical programs for which need has been identified
- Liberal Arts

This proposal for a Bachelor of Science in Spanish with teacher licensure is one of the key programs in the identified areas.

The program focus will be to provide candidates with the Spanish knowledge and pedagogical skills to serve as a Spanish teacher in grades P-12. In addition to specialized coursework, the program will include the general education coursework to provide the background knowledge and skills necessary for a liberal education and the ability to establish effective interpersonal relationships. Since there presently exists a shortage of Spanish teachers, there is a demand as expressed by area school superintendents for programs to prepare Spanish teachers for P-12 classrooms.

Many schools can no longer offer Spanish due to the shortage of qualified teachers for these classes. The supply of qualified Spanish teachers is becoming critical in many rural areas. Therefore, it behooves higher education institutions to recruit, prepare, and help retain Spanish teachers for the classrooms of Arkansas.

The degree program will be housed in the Department of Foreign Language. It will be under the direction of the Dean of the College of Arts and Sciences. However, the teacher licensure component will be under the direction and auspices of the Dean of the College of Education. The program will require 124 semester hours of coursework for completion and will include the general education requirements, coursework in the major, and coursework in professional education.

[Click here to download a copy of the proposal in PDF format.](#)

University of Arkansas for Medical Sciences and University of Arkansas at Little Rock

Master of Science and Doctor of Philosophy in Bioinformatics

Program Summary

The University of Arkansas at Little Rock (UALR) and the University of Arkansas for Medical Sciences (UAMS) are drawing from their specific strengths and pooling their resources to offer Arkansas novel programs of graduate study: a research-based doctoral program and a coursework-centered master's program in **bioinformatics** (see *Appendix A* for an operational definition). These two programs integrate unique expertise and research opportunities at both campuses. UALR is a Carnegie/Research Intensive doctoral institution offering graduate and undergraduate programs in computer science, information sciences and biology. UAMS is a nationally-recognized biomedical research center, and Arkansas' only medical school, which offers numerous graduate and undergraduate educational programs through its Colleges of Medicine, Nursing, Health-Related Professions, Pharmacy, and Public Health. Located in the same city just two miles apart, UAMS and UALR are administratively autonomous campuses in the eleven-campus University of Arkansas system, with a significant history of successful educational and research collaboration. Through a close-working relationship, multidisciplinary Ph.D. research committees, and jointly-taught bioinformatics courses, these two universities will be able to provide to Arkansas students a leading-edge educational and research experience in bioinformatics.

Research initiatives at the main University of Arkansas campuses (and shortly at multiple other campuses around Arkansas) are requiring, now more than ever, expertise in bioinformatics. Two unique interdisciplinary programs in bioinformatics are proposed, in which core areas or disciplines – once viewed as very distinct – are brought together and

integrated into a cohesive whole. Through coursework and research projects, the graduates of these programs become unique experts in assimilating the diverse disciplines and applying computational methodologies. As bioinformatics specialists, students in these programs will learn how to apply mathematics, statistics and computer/information science to life science problems and how to acquire, organize and “mine” vast quantities of biological/biomedical data.

With an equal emphasis on **four core areas** of study – bioinformatics, the life sciences, biostatistics, and the computer/information sciences – students graduating from these programs will be uniquely qualified to fill the demanding role of bioinformaticists in industry, government, or academia. The principal curriculum is built upon four laboratory rotations, four “introductory level” graduate courses, and four “advanced level” graduate courses, one each in each of the four core areas. The **Masters degree** culminates in an individual graduate capstone project that brings all four core areas into focus; the **Ph.D.** culminates in a dissertation offering a unique contribution to the field.

Since all of the graduate courses required for this program are already offered (or planned to be offered as “special topics”) on one or both of the campuses and there are sufficient requisite faculty (including recent new faculty additions) and research laboratories on both campuses, any new costs to implement this program will be limited to new graduate assistantships, specific administrative support, and release time for the Program Director and campus coordinators at both UALR and UAMS. Through existing facilities, including the computational and reference resources available at the MidSouth Bioinformatics Center (UALR) and existing classrooms at UALR and UAMS, this program will not require any new facilities.

[Click here to download a copy of the proposal in PDF format.](#)

University of Central Arkansas

Master of Science in Education in Advanced Studies in Teaching and Learning

Program Summary

The Master of Science in Education in Advanced Studies in Teaching and Learning (ASTL) prepares candidates to become highly skilled and articulate classroom teachers. It is designed to enhance and expand existing knowledge, skills, and dispositions of candidates while fostering the development of competencies expected of advanced educators. The program rests on the assumption that accomplished educators engage in reflective decision making as they assess and extend their own professional practice. In addition to addressing the eight essential elements of UCA’s Professional Education Unit’s Conceptual Framework, the program incorporates standards and propositions from appropriate national professional organizations such as IRA, NAEYC, NCATE, NCTE, NCTM, and NBPTS.

Upon completion of the program, ASTL graduates will demonstrate the knowledge, skills, and dispositions necessary to

1. Respond positively to classroom practices that enhance student learning
2. Critically analyze their own classroom practices and appropriately respond to their findings
3. Articulate the rationale for decisions they make regarding professional practice, classroom instruction, and classroom/school policies and procedures
4. Make informed decisions by reflecting on experiences both past and present to improve teaching practices that enhance student learning

5. Become change leaders for the improvement of their schools

This 30-hour graduate degree program consists of a 21-hour core plus 9 hours of electives chosen from courses in advanced study in middle-level education, secondary education, early childhood education, special education, reading, technology, career orientation, English as a Second Language (ESL), gifted/talented (GT), and/or subject-area content. Graduate candidates will complete 10 courses for the degree with the culminating experiences being the creation of a professional portfolio and the successful completion of a written comprehensive exam.

Coursework will be offered in a variety of formats (e.g., online, compressed video, and on-campus). A support structure to maintain both the development and delivery of online courses already exists at UCA, and the university currently employs a Dean of Academic Outreach and Extended Programs (formally Continuing Education) and a WebCT administrator. WebCT is the primary courseware used at UCA for online courses. Support for training in and development of online courses is provided through the Instructional Development Center (IDC). On-campus courses will be offered in the evenings, on Saturdays, and using compressed schedules (e.g., five-week courses).

[Click here to download a copy of the proposal in PDF format.](#)

ADHE

Institutional Certification Advisory Committee

ITT Technical Institute, Little Rock, Arkansas

ITT Technical Institute of Little Rock, Arkansas, submitted an application for recertification of the Associate of Applied Science degrees in Information Technology, Computer & Electronic Engineering, and Computer Drafting and Design. ITT Technical Institute of Little Rock is accredited by the Accrediting Council for Independent Colleges and Schools as a branch of ITT Technical Institute, Thornton, Colorado. The Associate of Applied Science degrees are the first two years of the Bachelor of Science degrees which were certified in 2003. ICAC will review the application at the September 21, 2004, quarterly meeting.

Tulane University, New Orleans, Louisiana

The School of Public Health and Tropical Medicine of Tulane University submitted a request for decertification of the Master in Public Health degree program that was offered in Arkansas in cooperation with the University of Arkansas Medical Sciences. No students are currently enrolled in the program in Arkansas. The request for decertification will be presented to the ICAC at its September 21, 2004, quarterly meeting.

University of Phoenix, Phoenix, Arizona

The University of Phoenix submitted an application for initial certification of the following programs which will be offered via distance delivery: Bachelor of Science in Business additional specializations in Information Systems, Public Administration, Retail Management, and Information Technology/Software Engineering; Master of Business Administration in Human Resources Management, Master of Business Administration in Marketing; Master of Information Systems; and Master of Management in Human Resources Management. The University is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Sixteen other on-

line degree programs offered by the University of Phoenix received Arkansas Higher Education Coordinating Board certification in 2003. The application for initial certification will be presented to the ICAC at its September 21, 2004, quarterly meeting.