Academic Program Proposals

April 28, 2006

The following is a list of academic program proposals being considered for approval for the April 28, 2006, 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.

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 **March 1, 2006**.

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.

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Arkansas Northeastern College

Associate Of Applied Science in Service and Retail Business
Certificate Of Proficiency in Service and Retail Applications

Program Summary

Arkansas Northeastern College proposes to add an Associate of Applied Science Degree in Service and Retail Business, as well as a Certificate of Proficiency in Service and Retail Applications. The impetus for these programs emerged from a recommendation by the Advisory Council for the ANC AAS in Business Administration to conduct a needs survey of local non-manufacturing businesses. Local businesspeople comprise this Advisory Council. A survey was developed and delivered to all non-manufacturing members of both the Greater Blytheville Area and Osceola/South Mississippi County Chambers of Commerce. The needs survey revealed a desired skill set that ANC's current program offerings do not address. Particularly relevant was a desire for a hands-on, operational practicum component. The proposed new programs address these needs.

The Associate in Applied Science Degree in Service and Retail Business will prepare students to think, plan, and manage like business owners. This program also will build an entrepreneurial knowledge base for persons interested in small business ownership. Curriculum will include fifteen hours of General Education Requirements, twelve hours of Division Requirements that correspond to course work in other technical AAS degrees at ANC, thirty hours of Major Requirements customized to the needs of service and retail businesses, and six hours of approved electives. The total number of hours required to obtain the Service and Retail Business Associate of Applied Science Degree is sixty-three hours. The Certificate of Proficiency in Service and Retail Applications consists of nine credit hours of core courses in cashier applications, customer service, and store environment.

A new instructor, recently hired using Carl Perkins funding, will deliver several of the Major Requirement courses, including 6 credit hours of hands-on, workplace practicum. Present Business instructors will deliver the balance of the Major Requirements. ANC's cafeteria/student lounge, The Outback, will serve as the vehicle for the workplace practicum. Under the guidance of the Service and Retail Business Instructor, along with ANC's vendor partner, Consolidated Management, students will

work as a team to plan, manage, and operate The Outback as a live entrepreneurial laboratory. During the third and fourth semesters of study, students will participate in a supervised, workplace practicum, up to 10 hours per week for a total of 120 clock hours each semester. Carl Perkins funds, along with TANF (Temporary Assistance for Needy Families) funds, will support equipment needs, including training cash registers, kitchen equipment, and promotional props and materials. Institutional resources will support renovations to The Outback facility. The ANC Adams-Vines Library has a good collection of resources for service and retail business disciplines.

Arkansas State University--Beebe

Associate of Applied Science in Criminal Justice
Technical Certificate in Law Enforcement, Corrections and Forensics

Program Summary

Arkansas State University-Beebe requests approval to offer the Associate of Applied Science degree in Criminal Justice and the Technical Certificate in Law Enforcement, Corrections and Forensics at ASU-Beebe, ASU-Searcy and ASU-Heber Springs. The proposed curriculum consists of 62-63 total credit hours comprised of 26 hours of general education core curricula and 36-37 hours of technical core curricula requirements.

The AAS in Criminal Justice is a terminal degree program designed for individuals planning on going into law enforcement at the local, state and federal level and for currently employed law enforcement personnel seeking to acquire a degree. In addition this degree program is designed to feed into a four-year program in criminal justice.

The program will be an interdisciplinary one that will include existing courses as well as additional courses added to the program. Classes will be offered both in the physical classroom as well as on-line. Existing classroom space is sufficient to teach the program. Library holdings are adequate initially, but additional subscriptions and reference materials will be obtained as needed. Graduates will receive an Associate of Applied Science Degree.

The primary goal of this program is to prepare students for work in the related fields of law enforcement, corrections and forensics and to provide opportunities for currently employed police officers to upgrade their skills and credentials. By offering the program on-line it is also a primary goal to make the program more accessible to currently working police officers. Quite often due to constantly changing work schedules police officers often find it difficult to commit to physical classes with rigid time frames of attendance. The on-line classes will fit more easily into the changing work schedule of currently working police officers. It also will be accessible regardless of a police officer's physical location.

Arkansas State University--Beebe

Associate of Applied Science, Technical Certificate and Certificate of Proficiency in Pharmacy Technician

Program Summary

Arkansas State University-Beebe requests approval to offer the Associate of Applied Science degree, the Technical Certificate and the Certificate of Proficiency in Pharmacy Technician Science at ASU-Beebe, ASU-Searcy and ASU-Heber Springs. The curriculum consists of 66 total credit hours comprised of 35 hours of general education core curricula and 31 hours of technical core curricula requirements. The technical core courses have been developed in line with the "Model Curriculum for Pharmacy Technician Training" as endorsed by the American Society of Health-System Pharmacists. Arkansas State University-Beebe envisions the need to hire a full-time faculty member to teach all technical pharmacy technician courses with growth of the program and will establish a budget to

support the pharmacy technician program. Existing laboratory and classroom space is sufficient to teach the program. Library holdings are adequate initially, but additional subscriptions and reference materials will be obtained as needed. It is expected that this program will be taught evenings and weekends to accommodate persons seeking a career change but who need to maintain concurrent employment.

The pharmacy technician education program requires classroom and laboratory work in a variety of areas, including medical and pharmaceutical terminology, pharmaceutical calculations, pharmacy recordkeeping, pharmaceutical techniques, pharmacy law and ethics, writing and composition, social sciences, lab sciences, and mathematics. Technicians also are required to learn medication names, actions, uses, and doses. The training program includes an internship in which students gain hands-on experience in actual pharmacies. Graduates will receive an Associate of Applied Science Degree.

The purpose of this program is to enable graduates to obtain basic and intermediate level competencies to obtain employment in either direct patient care or retail pharmacy setting. Pharmacy technicians help licensed pharmacists provide medication and other healthcare products to patients. Technicians usually perform routine tasks to help prepare prescribed medication for patients, such as counting tablets and labeling bottles. Technicians refer any questions regarding prescriptions, drug information, or health matters to a pharmacist. Pharmacy technicians who work in retail or mail order pharmacies have varying responsibilities, depending on State rules and regulations. Technicians receive written prescriptions or requests for prescription refills from patients. They also may receive prescriptions sent electronically from the doctor's office. They must verify that the information on the prescription is complete and accurate. To prepare the prescription, technicians must retrieve, count, pour, weigh, measure, and sometimes mix the medication. Then, they prepare the prescription labels, select the type of prescription container, and affix the prescription and auxiliary labels to the container. Once the prescription is filled, technicians price and file the prescription, which must be checked by a pharmacist before it is given to a patient. Technicians may establish and maintain patient profiles, prepare insurance claim forms, and stock and take inventory of prescription and over-the-counter medications.

In hospitals, nursing homes, and assisted-living facilities, technicians have added responsibilities. They read patient charts and prepare and deliver the medicine to patients. The pharmacist must check the order before it is delivered to the patient. The technician then copies the information about the prescribed medication onto the patient's profile. Technicians also may assemble a 24-hour supply of medicine for every patient. They package and label each dose separately. The package is then placed in the medicine cabinet of each patient until the supervising pharmacist checks it for accuracy. It is then given to the patient. (Information from the U.S. Department of Labor-Occupational Outlook Handbook).

Arkansas State University--Beebe

Associate of Applied Science in Veterinary Technology

Program Summary

Arkansas State University-Beebe requests approval to offer the Associate of Applied Science degree in Veterinary Technology on the Beebe Campus. Arkansas State University – Beebe is fully accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools.

Veterinary Technology is the science and art of providing professional support to veterinarians. The associate degree program requires 68 credit hours, with 19 hours of general education core courses and 49 hours of program-specific courses. For off-campus clinical experiences, students will be placed in progressive contemporary facilities that employ graduates of AVMA-accredited programs in veterinary technology and are credentialed as veterinary technicians to act as professional role models and mentors. This curriculum will prepare graduates who will be fully capable of performing in a wide

variety of professional roles within the veterinary field. Graduates will have attained entry-level skills needed to support companion animal, equine, food animal practice, biomedical research and other veterinary medical activities.

Arkansas State University – Beebe will seek program accreditation through the Committee on Veterinary Technician Education and Activities (CVTEA), which is charged with the responsibility of providing and monitoring American Veterinary Medical Association (AVMA) accreditation of programs in veterinary technology.

Arkansas State University--Jonesboro

Master of Social Work

Program Summary

Purpose of the Program

The mission statement of Arkansas State University declares that "We pursue and share knowledge within a caring community that prepares students in challenging and diverse ways to become more productive global citizens."

Arkansas State University has always been an institution of and for its people. Since its early days in 1909 in east Arkansas, the university has been dedicated to the needs for service and education for the people around us.
Leslie Wyatt, President Arkansas State University
(Minority Retention Plan, 1999-2000)

Arkansas State University also stresses a focus on regional service as evidenced by the establishment of the Delta Studies Center (See Arkansas State University Board of Trustees Resolution 94-103). This emphasizes the role of ASU as "the leading university in studying, celebrating and developing the Lower Mississippi River Delta" [cited on p. 14 of The Graduate Education in Arkansas: Doctoral and Specialist Degree Programs, June 2000]. Social work as a discipline and as a profession fits comfortably into that mission. "The primary mission of the social work profession is to enhance human well-being and help meet the basic human needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed, and living in poverty. A historic and defining feature of social work is the profession's focus on individual well-being in a social context and the well-being of society. Fundamental to social work is attention to the environmental forces that create, contribute to and address problems in living" (NASW Code of Ethics, p.1). The social work profession pursues its mission through a body of knowledge of human behavior in the social environment and skills in facilitating change. It is based on the core values service, social and economic justice, dignity and worth of the person, importance of human relations, integrity and competence (Council on Social Work Education 2001).

A Bachelor in Social Work degree is the minimum requirement to qualify a person for a job as a social worker in Arkansas; however majors in psychology, sociology and other fields are often employed due to the lack of persons with social work training. Although a bachelor's degree is required for entry into the field, an advanced degree in Social Work has become the standard for many positions. Master's degree programs prepare graduates for advanced practice (CSWE, Educational Policy and Accreditation Standards, 2001). The focus is on their chosen field of concentration and further develops skills which may include those required to perform clinical assessments, manage large caseloads, and to explore new ways of drawing upon social services to meet the needs of clients (Bureau of Labor Statistics, Occupational Outlook Handbook, 2000).

Master's level social workers practice in a variety of settings. The primary fields of practice or concentration of study for social workers with master's degrees are: aging/gerontological social work; alcohol, drug or substance abuse; child welfare, community planning, corrections/criminal justice;

family services; group services; health; occupational/industrial social work; mental health or community mental health; mental retardation; public assistance/public welfare; rehabilitation; and school social work. Persons holding the MSW are "...the nation's largest providers of mental health and therapy services. Professional social workers are often the only mental health care providers serving residents of many poor, rural counties." (National Association of Social Workers, Social Work Myth Busters).

Graduates of the ASU MSW program will extend the University's commitment to the community, lower Mississippi Delta region, the State of Arkansas, and nation as they provide direct services, manage human services agencies, and promote social justice. A Master's level Social Work degree at Arkansas State University, therefore, complements the University's mission to the community and the region.

The undergraduate Social Work Program at Arkansas State University began in early 1976. It was accredited by the Council on Social Work Education in 1979, which made ASU the first state institution in Arkansas to receive that distinction. The program has grown from 90 majors in 1979 to 195 majors in 2001. There have been on-going requests by students, former students, and community leaders for ASU to initiate a master's degree to complement the undergraduate program. As far back as 1988 a feasibility study demonstrated a need for and support of the master's degree in social work (Clowers, 1988).

Background

In 1991, the University of Arkansas Little Rock, conjointly with ASU, offered the MSW on the ASU-Jonesboro campus. In the initial exploratory meeting on the ASU campus 61 students expressed interest in the program. Of that number 25 applied for admission and 18 were accepted. This was a part time program to accommodate the faculty of UALR and the cohort of students. During the 3 years the program was in progress 8 dropped out and 10 graduated. These students attended graduation ceremonies at UALR on their campus. The program became difficult and expensive to manage because of faculty travel and faculty workloads. UALR therefore chose not to continue with a second cohort.

Interest in an MSW at ASU continued. Despite efforts in the 1997 and 1998 academic years by UALR to offer the Advanced Standing Master's in Social Work degree in Jonesboro the UALR administration did not feel that there was a sufficient number of qualified applicants for a part time program to justify the cost of sending faculty to the ASU campus. The idea of a collaborative effort of providing another cohort of the MSW program was dropped and has not been revived.

Admissions Requirements

It is the policy of ASU and the Department of Social Work to assure equal educational opportunity to qualified individuals, without regard to race, color, religion, age, national origin, ancestry, disability, sex, marital or parental status, or sexual orientation. Applicants must demonstrate that they possess the potential for professional development in clinical social work practice. This potential will be demonstrated by documentation of the presence of personal and scholarly characteristics necessary for successful completion of academic course work, successful completion of social work clinical practice, and a commitment to the value base of the social work profession, as described in the NASW Code of Ethics.

More specifically, to be considered for admission to the MSW program students must meet the requirements of the Graduate School at Arkansas State University. Applicants must have a bachelor's degree from a college or university accredited by the North Central Association of Colleges and Secondary Schools, or a comparable association. There must be evidence of adequate preparation to begin graduate study in social work, including satisfactory completion of broad undergraduate course work in the liberal arts, including, specifically, course work in each of the following areas: social sciences, humanities, English composition, and mathematics. There must also be an indication of satisfactory completion of course work in human biology and in human cultural perspectives/cultural

diversity. Transcripts are reviewed for this purpose by the admissions committee. Students not meeting these liberal arts areas must take relevant courses as preparation.

A minimum overall grade point average of 3.0 on a 4 point scale is required for admission to the MSW program. All applicants must submit an application and three letters of reference. References should be chosen who can provide valid information on academic abilities, commitment to working with diverse populations, and emotional stability and maturity. If the applicant has completed a degree which includes an experiential component (field placement or internship), one reference letter should come from the applicant's supervisor in that component.

Applicants must also submit a personal statement addressing the following areas. 1. Reasons for choosing the profession of Social Work. 2. Describe experiences where leadership, responsibilities, and/or judgment, were exercised and discuss what was learned from the experience. 3. Describe a social problem of great concern or personal interest. Recommend a course of action for social change. Discuss the potential benefits and drawbacks for the plan. 4. Describe an ethical dilemma you personally experienced. What alternative actions were considered and why. 5. Applicants are asked to tell the admissions committee things they would like them to know about themselves. Official transcripts from all colleges or universities in which the applicant has completed any college or graduate level course work must be supplied. The applicant is required to complete in full the Application for Admission to the MSW Program, and an application to ASU Graduate School.

Admission decisions are made by the MSW Admissions Committee, comprised of social work faculty members and one or more individuals from the College of Nursing and Health Professions and/or a member of the professional community. The committee weighs all aspects of the completed application, including academic performance, communication skills, commitment to the values underlying the social work profession, and personal qualities necessary for effective clinical social work practice. These evaluations are reflected in a form (appendix E) completed by each member of the committee and compiled as a single report with a recommendation to the chair of the committee. Transfer of credits from another MSW program will be considered on a case-by-case basis. Only courses taken in a Council on Social Work Education accredited Master of Social Work program will be eligible for transfer. The applicant must have received a grade of B or better in the course(s) being considered. In most instances, transfer of credits will only be granted for first year foundation courses. In accordance with accreditation requirements, academic credit will not be given for life experience or work experience.

Applicants who have a baccalaureate degree in social work from a CSWE accredited social work program may be eligible for advanced standing. Course waivers, determined on a course-by-course basis, will be granted only in foundation courses. Waivers are dependent on the comparability of the course content, as determined by the ASU social work faculty. Applicants may be required to provide a course syllabus for each course for which a waiver is being requested. A grade of B or better in the undergraduate course is required. Modified advanced standing status, for students who qualify for some, but not all course waivers, is individually designed. Advisors will assist in developing a plan to complete the MSW degree consistent with course sequencing and within allotted time frames.

Overview of the Curriculum

Master's level social work programs have a general curriculum mandated by the accrediting body in social work, the Council on Social Work Education. The Master's in social work curriculum is designed to enable students to integrate the knowledge, values, and skills of the social work profession into competent practice. A liberal arts perspective is a prerequisite to the professional degree program in social work. All schools must provide standard foundation curriculum addressing nine content areas, as well as one or more areas of concentration. Two content areas, social work ethics and values, and diversity (gender, race and ethnicity, and sexual orientation) must be infused throughout the curriculum. The concentration area/s are chosen based on institutional mission and area need. Concentrations are of two types: primary method (e.g. direct practice, administration or management) and social problem or field of practice (e.g. alcohol, drug or substance abuse, family services). The

concentration best suited to the needs of Arkansas and especially the lower Mississippi Delta region is Family Well-Being within a rural context.

The Master's in Social Work is delivered in a variety of formats and number of credit hours required. Universities routinely offer full-time, part-time and advanced standing options. However, CSWE policy mandates the equivalent of two academic years of full-time study. Credit hour requirements range by university from 48-60 or more. The MSW at ASU will be delivered in three formats Full-Time Entry, Part-Time Entry and Advanced Standing. The Full Time Entry Program curriculum requires completion of 58 credit hours of graduate work. This is broken down into 44 credit hours of class work and 14 credit hours of field education. A total of 1000 hours of field education are required. This program is designed for individuals with a bachelor's degree in a field other than social work or who graduated more than 5 years prior to application. It is designed to be completed in four semesters over two academic years. The Part-Time Entry level is designed for those who cannot leave their employment to pursue full-time course work. It must be completed in eight semesters over four academic years. The applicant must have a degree from an accredited institution and will be required to complete all of the courses required of the full-time student.

The Advanced Standing Program is designed for qualified students with an undergraduate degree in social work from an institution accredited by the Council on Social Work Education. Students in this program must have completed their degree within five years of making application to the program with an overall GPA of 3.0. The program is designed to be completed in one summer and two semesters over one calendar year. The curriculum for each program appears under item 7, Curriculum Outline. The Advanced Standing Program curriculum requires completion of 43 credit hours of graduate work. This is broken down into 29 credit hours in course work and 14 credit hours in field education. The 14 credit hours of field education represent a total of 900 clock hours of on site field instruction. To meet the requirements of the Advanced Standing Program, students must demonstrate that content in the following courses has been covered in their undergraduate program; HBSE I, HBSE II, Foundations of Practice I, II, Social Welfare Policy and Services, and 100 hours of field education. In no instance can credit be given for prior work or life experience.

Overview of Program Costs, Faculty Resources, Library Resources, Organizational Structure and Governance, Facilities and Equipment

Program costs, library resources. Program development would begin in 2006 with a budget of $18,250 which will increase to $158,360 in 2005 as two full-time equivalent faculty are hired to prepare for students. For Fall 2007, the first year students are enrolled and the program would begin, the proposed budget is $217,114. Year 4 the budget will increase to $280,634. Year five (2009) the budget with all faculty in place and the program well under way would be $289,707. A total of $30,000 in library costs is projected. A five year summary and yearly budgets are displayed in Section 10.

Faculty resources. This proposal calls for five full-time faculty, and a Director with 50% administrative release time. One of the faculty would hold the position of Field Coordinator with 50% release time. This meets CSWE requirement for a Master in Social Work program which calls for a minimum of six full-time faculty and the requirement for administration and field education. The Council recommends a faculty student ratio of 1:12 (See Appendix A, CSWE Evaluative Standard 4). This proposal calls for an increase in faculty when student enrollment exceeds 72 fte students.

Organization, structure and governance. By CSWE standard "The social work program must have the necessary autonomy and administrative structure to achieve its goals and objectives" (Educational Policy Section 2, CSWE EPAS 3.0). The MSW program will be housed in a Department of Social Work with the Director reporting to the Chair of the Social Work Department who reports to the Dean of the College of Nursing and Health Professions.

Space requirements. CSWE standards state that "The social work program must have sufficient jurisdiction over physical space to realize program goals. This includes classroom space, private faculty offices, office space for administrative and clerical workers, and space for student and faculty

meetings and the student organization." (See Appendix A, CSWE Evaluative Standard 2.1.6). This proposal calls for a departmental office, private offices for the Director, Field Coordinator and five faculty and a student lounge. Classrooms dedicated to the new Social Work Department will be needed, including one seminar room. Currently the program is housed in the International Student Building and consists of a Departmental Office, Chair's office, Field Coordinator's office, 5 offices for permanent faculty and 3 offices for Child Welfare Training Grant (IV-E) personnel. The department also has a small storage area and shares a student lounge with the other occupants of the International Student building. There is an open seminar room that is scheduled by the Office of International Programs. Classrooms are shared with the Department of Criminology, Sociology and Geography. Plans are underway to move the entire department to the Chickasaw building and office space will be designed to meet the needs of the Bachelors program as well as the master's program. There will be a departmental office, chair's office, field coordinator's office storage area/work room, offices for 8 permanent faculty in addition to the chair and field coordinator's office. Three offices will be included for temporary faculty which includes IV-E faculty and adjunct faculty. Four small to medium classrooms will be assigned to the department within the structure.

Arkansas State University--Mountain Home

Technical Certificate and Certificate of Proficiency in Welding Technology

Program Summary

The Certificate of Proficiency in Welding Technology leading to the Technical Certificate in Welding Technology will both be non-transferable programs designed to provide students with entry and advanced-level marketable welding skills. Hands-on training, combined with laboratory and classroom experience, will give the student proficiencies in shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, metal fabrication, advanced shielded metal arc welding, advanced gas metal arc welding, advanced gas tungsten welding, and advanced metal fabrication.

The curriculum for the Certificate of Proficiency consists of 16 hours in welding. The curriculum for the Technical Certificate consists of 32 hours in welding.

Both programs will be offered at Mountain Home High School utilizing available equipment.

Arkansas State University--Mountain Home

Technical Certificate in Health Professions

Program Summary

Arkansas State University Mountain Home requests approval to offer a Technical Certificate in the Health Professions. This certificate is designed to provide students with a direct path to employment or to a higher level of varied health programs following graduation. The certificate is comprised of general education courses (15 hours) and three emphasis areas (15 hours). Each emphasis area is comprised of 15 semester credit hours.

Arkansas State University-Jonesboro offers the Associate of Applied Science in Nursing on the Arkansas State University Mountain Home Campus. ASU-J now requires students, planning to apply to the AASN, to complete Certified Nursing Assistant certification prior to enrollment. The Technical Certificate in the Health Professions emphasizing CNA gives students an opportunity to complete certification. Additionally, general education and pre-requisite science courses required for the AASN are included in this technical certificate.

ASUMH in association with the University of Arkansas Medical Sciences offers the Associate of Applied Science in Respiratory Care. The Technical Certificate in the Health Professions

emphasizing phlebotomy provides pre-requisite courses needed to prepare the student for the Respiratory Care Program. Further, the phlebotomy program is considered a good foundation for students entering into most of the health-related professions.

Students seeking other local and regional health-related degrees, such as medical laboratory technology and radiologic technology will benefit from the preparation courses required for the Technical Certificate for Health Professions emphasizing pre-professional courses. These courses will provide the foundation needed to progress to the next level of education.

The Technical Certificate for the Health Professions with three areas of emphasis is designed to give students an achievement milestone to encourage progression to the next educational step, as well as to address the regional and national demand for qualified, skilled and well-rounded graduates in the health-related professions.

NorthWest Arkansas Community College

Associate of Applied Science in Homeland Security and Emergency Management

Program Summary

The Associate of Applied Science Degree in Homeland Security/Emergency Management (HSEM) will prepare students in decision making, problem solving and to plan, implement and coordinate resources necessary for mitigation, preparedness, response and recovery from disasters. The program is designed for individuals currently in an emergency response profession seeking to update skills or for those interested in entering the field of homeland security and emergency management. Those benefiting from the program include first responders, fire fighters, corrections and criminal justice professionals, emergency managers, those in the health care professions and corporate and government workers.

The Associate of Applied Science Degree in Homeland Security/Emergency Management (HSEM) is a two year interdisciplinary degree program of 64/65 semester hours including general education courses along with technical courses in Criminal Justice, Fire Science Administration and Technology, Aviation, Environmental Regulations, Safety and Hazardous Materials, Environmental Science, Allied Health Science, Paramedics, and Emergency Medical Services. All students are required to complete new core courses of Introduction to Terrorism, Mass Disaster and Emergency Response, and Incident Command System. The degree may also be utilized as a stepping stone for those students who plan to go on to a bachelor's degree at another institution. The student program goals and objectives include understanding the fundamental principles of emergency management and an all-hazards-approach to disaster planning, the ability to understand the basis of terrorism and its effects on society as well as policies and procedures for countermeasures, and understanding both the historical and evolving concept of homeland security within the broader political and national security system of the contemporary nation-state.

Overview of Curriculum Additions or Modifications. Three new three-hour core courses will be added that will be offered to all students, including those not pursuing this major. These core courses are Introduction to Terrorism, Mass Disaster and Emergency Response, and Incident Command System. All other courses are currently being offered at NWACC.

Program Costs. Program costs will initially be kept at a minimum. The program will be administered in Criminal Justice at no additional cost. The three new core courses will require three adjunct instructors at a cost of approximately $1,800 per semester per instructor. No other costs are anticipated. Funding will be provided through normal tuition and fees.

Faculty Resources. Except for the three new core courses, all courses are currently being offered at NWACC by existing faculty. Part-time adjunct instructors will be utilized for the core courses and the

program will thereby be able to utilize specialists with relevant experience in an array of hazards management occupations who will be brought in to teach on an adjunct basis.

Library Resources. NWACC provides a well equipped, NCA approved library with ready access to bound volumes, databases, newspapers, and Internet for student use. The interdisciplinary approach to the degree and certificate program allows the utilization of existing resources already available in a wide variety of areas. There are currently extensive library resources in the areas of terrorism, homeland security, emergency management, disaster relief, emergency response, mass disaster, and weapons of mass destruction. In addition, the Emergency Management Institute of FEMA provides an extensive bibliography and resources which support the entire block of technical courses, and the Emergency Management Learning Resources Center is designed to provide support to emergency management programs. It is not anticipated that any new publications will need to be purchased and housed at the NWACC library.

Facilities and Equipment. Current facilities will be utilized and are adequate to meet the needs for the degree and certificate program. No special equipment is needed.

Purpose of the Program. The Associate of Applied Science Degree program is designed to educate students and in-service emergency management providers about the human and physical consequences of natural and man-made disasters and how to mitigate them. The program addresses competencies required of emergency management professionals, the growing demand for emergency management personnel in both the public and private sectors, and the ability to prevent, deter, respond to and recover from incidents of terrorism.

Pulaski Technical College

Associate of Applied Science in Medical Office Technology

Program Summary

This program will provide education in medical terminology, basic anatomy, disease processes, pharmacology, and legal/ethical in the medical office. This degree will consist of two options: The **Medical Transcription Option** teaches an intense application of medical records transcription so that graduates can provide quality transcription services to hospitals and clinics or through home-based businesses. The **Medical Billing and Coding Option** teaches an intense application of medical billing and coding so that graduates can provide quality billing and coding services to hospitals and clinics or through home-based businesses.

Pulaski Technical College

Technical Certificate in Motorcycle/ATV Repair

Program Summary

The Technical Certificate in Motorcycle/ATV Technology will provide students with the skills needed to repair and overhaul motorcycles, all-terrain vehicles, lawn and garden equipment, and marine equipment. Besides repairing engines, students will learn to maintain transmissions, brakes, and ignition systems. This program will replace the current Small Engine Repair program.

This technical certificate program will consist of three options: Motorcycle/ATV Technology; Lawn and Garden Technology; and Marine Technology. Each option will consist of a core of 20 credit hours of small engine courses and 10-12 credit hours of specialized courses depending on the option.

Pulaski Technical College

Transportation Training Center

Program Summary

With the rapid growth that Pulaski Tech has experienced in recent years, it has become necessary to expand our facilities to keep pace with the growth. The proposed Transportation Technology Center is planned as a full-service center providing instruction in Automotive Technology, Collision Repair Technology, Diesel Mechanics, Motorcycle/ATV Technology, general and developmental education. Also provided will be student services, library services, food services, business office, security, maintenance, computer labs, and shipping and receiving. Currently, Pulaski Tech's largest enrollment zip code is 72209 (southwest Little Rock). This fact coupled with the convenience of the Interstate 30 corridor to southwest Little Rock, makes Pulaski Tech even more accessible to potential students from the area.

University of Arkansas Community College at Hope

Associate of Applied Science in Information Systems

Program Summary

A four-semester program composed of sixty-two college credit hours designed for students who plan to seek employment in the Information Technology field upon graduation. The program prepares students to enter a job, be productive with a minimum of on-the-job training, and with additional experience advance to a position of increased responsibility. Possible employment opportunities are computer operator, data processor, technical/software support specialists, and help desk technician.

The existing degree programs that support Information Systems Administration are AAS in Business Technology; Associate in Arts (with a Business Administration option).

University of Arkansas Community College at Hope

Associate of Applied Science in Medical Office Management

Program Summary

The Medical Office Management AAS degree program includes a broad exposure to the functional areas of business and the technical courses required to develop those skills necessary for competence as a Medical Office Manager. The program includes instruction in legal concepts, health care systems and medical insurance coding and billing.

The existing degree programs that support medical office management are AAS in Business Technology; AAS in Paralegal Studies; AAS in Respiratory Care; TC in Practical Nursing.

University of Arkansas Community College at Morrilton

Associate of Applied Science in Petroleum Technology

Program Summary

The Associate of Applied Science degree in Petroleum Technology will prepare students with a general education foundation and technical competencies for employment opportunities in the emerging and expanding natural gas drilling, gathering, and field operations industry. Several energy companies and related service industries have begun field operations in the area known as the Fayetteville Shale Play, which extends over several counties in central and west central Arkansas. Recent regulatory changes, technological innovations, and increased prices for petroleum and natural gas have combined to make drilling in this geological structure feasible for the energy companies. The energy sector has been identified on the President's High Growth Job Training Initiative and listed as one of the Governor's Priorities for the Arkansas Workforce Investment Board. As a targeted industry, this sector is expected to provide substantial numbers of new jobs for this region of the state and will require workers to possess a higher level of technical skills. The Associate of Applied Science degree in Petroleum Technology is designed to provide entry-level workers with the skills needed for employment in this field. The curriculum will provide training in the following areas: introduction to the petroleum industry, health and safety, petroleum regulations, drilling operations, completion operations, well production, forklift training, hydraulics and pneumatics, and digital systems.

The proposed degree program, scheduled to begin August 2006, is consistent with the Mission of the University of Arkansas Community College at Morrilton (UACCM), which is to offer both degrees and courses that will transfer to four-year institutions and degrees and programs of study that prepare students for employment in occupational and technical fields. The proposed curriculum has been developed with input from industry representatives and from examining similar petroleum technology programs at community colleges and technical training centers in other states. The curriculum will consist of 63 credit hours: 18 hours of general education courses, 27 hours of petroleum related technical courses, 6 hours of business related courses including a computer applications course, and 12 hours of program electives.

The College has a 5,000 square foot facility to support the classroom and lab for the program and an existing computer lab to support the program. The non-petroleum courses are already offered as part of the College curriculum. The petroleum related courses have been developed. The program will require the addition of one full-time faculty member. Instructional materials and library resources will be supplemented to include materials in the petroleum field. The program will require the addition of simulators to replicate actual field experiences in the drilling industry.

The objectives of the program include:

a. To provide students with the general education foundation needed for employment in the petroleum technology field.

b. To provide students with introductory and basic skills petroleum-related courses for entry-level employment in the natural gas drilling, extraction, and field operations positions.

To provide students with additional training in related areas, such as hydraulics and pneumatics, computer applications, and supervisory management, to enhance their skills level for employment.

University of Arkansas--Fort Smith

Bachelor of Arts in Spanish

Program Summary

The proposed Bachelor of Arts Degree in Spanish contributes to the overall mission of the University of Arkansas - Fort Smith "to raise the higher education achievement level of the residents of the Western Arkansas service area to meet or exceed the national averages… with a vision to be a leader in the learning enterprise, locally, statewide, and nationally."

The philosophy of the University of Arkansas - Fort Smith is to meet the needs of the surrounding community. In this region as well as nationwide, the need exists for an increased number of educated individuals with the ability to use the Spanish language. The goals of the Spanish department within the College of Arts and Sciences are to produce high quality graduates with a comprehensive, in-depth understanding of Spanish and to make certain that those graduates obtain the skills necessary to compete for bilingual opportunities found in government service (translation, U.S. State Department, CIA, FBI, Border Patrol, Peace Corps, NSA, USIA), business, social work, airlines, banking, etc. Many majors will go on to professional schools (law, medicine, dentistry, business, etc.), where a liberal arts background is advised.

The objectives of the Bachelor of Arts in Spanish are that:

1. Candidates will develop proficiency in reading, writing, listening, and particularly in speaking Spanish.
2. Candidates will demonstrate knowledge of Spanish and Spanish American literature, culture, history, and linguistics.

University of Arkansas--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, 15 students the second, and 20 students the third.

In January 2002, Westark College became the University of Arkansas at Fort Smith, a four-year degree-granting institution. At that time, the Board of Trustees, administration, faculty, and area citizens were very clear about the type of institution they wanted to become. Specifically, the "owners" of our institution insisted that four-year status would only add to the educational opportunities offered, rather than completely change the institution. They 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 20 years.

The University of Arkansas at Fort Smith intends 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 large universities such as the University of Arkansas at Fayetteville. Rather, UA Fort Smith plans to create a unique university that focuses on those programs, limited in number, that best serve the region and this service area and our students' and clients' needs.

The five major areas in which UA Fort Smith plans to emphasize bachelor's degrees that meet regional needs are as follows:

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

UA Fort Smith has, through objective outside surveys and meetings with superintendents, identified the region's strongest educational needs. 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 7-12. 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 is a current shortage of Spanish teachers, there is a demand as expressed by area school superintendents for programs to prepare Spanish teachers for 7-12 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 is important for 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. Both deans report to the provost. The program will require 125 semester hours of coursework for completion and will include the general education requirements, coursework in the major, and coursework in professional education.

Existing Degree Programs that Support the Proposed Program: Education courses found in existing degrees with secondary teacher licensure components will be used in the proposed program.

University of Arkansas at Little Rock

Master of Science in Information Quality

Program Summary

General description of the proposed program

Information Quality, also synonymous with Data Quality, describes the quality of the information content of an information system in terms of its fitness for use in a particular application, such as, business operations, decision making, or planning. The Master of Science in Information Quality is proposed as a way to address the growing demand by government and industry for trained professionals who understand the concepts, principles, tools, and models, and techniques that are essential for information quality definition, measurement, analysis, and improvement. The proposed program will be unique in that it will be the first graduate degree in Information Quality offered by a US college or university.

The degree is proposed as a 33 credit hour program that includes 27 hours of graduate course work with an option of either a thesis or project work for the additional six hours. The program will be offered through the Department of Information Science at the University of Arkansas at

Little Rock (UALR) with curriculum development support from the Massachusetts Institute of Technology (MIT).

Information Quality as a recognized discipline has emerged over the past ten to fifteen year having evolved out of the Total Quality Management movement of the 1980's. Much of the theoretical underpinnings of the Information Quality discipline were developed at the Massachusetts Institute of Technology Sloan School of Management through their Total Data Quality Management Program in the 1990's, and continued by the Engineering School through the MIT Information Quality Program.

Because of its leadership in this area, MIT would the natural institution to offer this degree. However, under current academic policy no new degree can be added at MIT without first withdrawing an existing degree.

Other schools are beginning to explore the possibility of offering a degree in this area. The University of South Alabama, Marist College, SUNY, and The University of Albany in New York, and Northeastern University in Boston have all added Information Quality courses to their curriculum, but have not yet proposed degree programs in this area. Very likely this is because these programs have not yet overcome two barriers to entry, alignment with departmental mission and external support.

Information quality is an interdisciplinary area that is very focused on data content and data analysis that so far has not been able to reach its full potential in either traditional computer science or business computing departments. However, information quality is well aligned with emerging Information Science departments that have a more holistic view of information system design and information content management. The UALR Information Science program is one of only a handful of programs across the nation with the vision to take Information Science out of the library and multi-media setting, and place the curriculum into a modern information technology context.

A second factor is the long-term academic and research relationship between UALR and Acxiom Corporation. Acxiom has been a long standing employer of UALR graduates, and many of them now hold important technical leadership positions within the company. In 2001 Acxiom and UALR established the Acxiom Laboratory for Applied Research which in November of 2003 was designated as an Arkansas Center for Applied Technology in Information Technology by the Arkansas Science and Technology Authority (ASTA). Since 2001 the Laboratory has brought more than $1.5 million dollars of external funding to UALR and other Arkansas universities and has helped Acxiom become a leader in grid computing technology. Based on this history of collaboration, Acxiom was willing to champion the development of this degree at UALR.

These circumstances have all conspired to provide UALR and the State of Arkansas with a significant opportunity to create a program with national and international visibility - a visibility that will not only draw students to the program, but also form the nucleus for a world-class center of excellence in information quality research.

The strong industry support for this program can be seen in the attached letters of support from information quality professionals advocating the implementation of such a degree, and the attached letters of agreement to support graduate studies and research in information quality at UALR executed by Acxiom Corporation in Little Rock, Cambridge Research Group in Newton, Massachusetts, FUZZY! Informatik AG, in Ludwigsburg, Germany, and Similarity Systems in Dublin, Ireland, with other agreements currently in negotiation.

The Acxiom sponsorship includes a contribution of $253,000 for the current academic year to help underwrite the initial curriculum development for the program, and continued support for $253,000 per year for up to four additional years subject to "An assessment of the program by the UALR CyberCollege, UALR administration, and Acxiom Corporation … based on goal attainment, recruitment of students, new research grants, and related financial issues."

In addition to local students, there is a strong potential to attract students nationally and internationally. The potential to attract nontraditional students, professional working in the

Information Technology (IT) field, also appears to be very high. Major players in the IT field have expressed interest in sending their employees to the program. Based on the national and international needs, alternative modes of delivery (on-line, hybrid, weekend programs, and accelerated cohort programs delivered on-site) will need to be developed.

Curriculum Additions or Modifications

The new program will require the addition of 12 new courses to the graduate catalog. These include

- Nine new graduate courses in Information Quality, and
- Five new graduate courses in Information Science

However it should be noted that

- Two of the nine new Information Quality courses are the supervised completion options, Graduate Project (INFQ 7686) or Thesis (INFQ 7698).
- The three new Information Science courses (IFSC 5345 Information Visualization, IFSC 7310 Information Systems Analysis, and IFSC 7320 Database Systems, in addition to supporting the proposed Master of Science in Information Quality, will also support the Applied Science concentration of the PhD in Applied Science offered through the Department of Applied Science.

Program Costs

Most of the program's cost will be in faculty salaries, software licenses for commercial software tools used in the information quality industry, and the development of online course content. A more detailed break down of program costs can be found in the Section 10, NEW PROGRAM COSTS Section of this proposal.

Faculty Resources

The faculty will come from a combination of current faculty members in the Information Science Department along with faculty members currently being recruited as replacements for open faculty positions in the Information Science Department. The new program will require approximately 2 FTE of faculty effort the first year (four graduate courses per semester) and either 2.5 or 3.0 FTE for the second and third year (five or six graduate courses per semester plus thesis and project supervision) depending upon the program's rate of growth.

One new faculty member was hired by the Information Science Department in the Fall Semester of 2005 specifically to develop the curriculum and industry support for the program. That faculty member will begin teaching two courses per semester in the program for its first year of offering, comprising 1.0 of the 2.0 FTE required the first year. The additional 1.0 FTE for the first year and 1.5/2.0 for the second and third year can be provided by current faculty members from the Information Science Department including a replacement hire expected for a vacant position to be begin in the Fall Semester of 2006.

Library Resources

According to a review of the UALR Ottenheimer Library holdings conducted November 15, 2005 by Maureen James-Barnes, "Library holdings need to be strengthened to support the proposed program in information quality." (Complete report is attached to this proposal).

The plan to improve this situation is to budget funding for improving the library's holdings, and soliciting support from program sponsors and the information quality research and practice community. More details on these plans can be found in Section 9, DESCRIPTION OF RESOURCES, and Section 10, NEW PROGRAM COSTS.

Facilities and Equipment

Initially the program will utilize the existing facilities and equipment in the Department of Information Science. More detail on existing resources is provided in this proposal in Section 9, DESCRIPTON OF RESOURCES.

Most program needs in this area are for software, particularly commercial tools used to analyze and remediate data quality problem and to support the proposed course INFQ 7342 Information Quality Tools and Industry Landscape.

Two program sponsors, Similarity Systems and Cambridge Research Group, will provide the program with free licenses for their software tools. The SAS Institute is offering a complete suite of their information quality and analytic tools for a substantial discount. See Section 9, DESCRIPTION OF RESOURCES for more details on the cost and acquisition plan for SAS software.

Purpose of the Program

The purpose of the program is to address the growing demands by government and industry for trained professionals who understand the concepts, principles, tools, and models, and techniques that are essential for information quality definition, measurement, analysis, and improvement (See Letters of Support attached to this proposal). The proposed curriculum balances Information Quality theory with practical skills gained through case studies and projects addressing real-world information quality problems.

To be successful in the program, students will need to have a background in programming, databases, and a basic understanding of statistics. The emphases of the program are analysis and critical thinking as they relate to the principles and practices of information quality. In addition, students must be able to effectively communicate and advocate the results of their analyses, and assist developers, managers, and other stakeholders in the implementation of information quality sub-systems, policies and improvement plans. See Section 7, CURRICULUM OUTLINE for more details related to program objectives and learning outcomes.

Graduates from will have at least three career options. The first is to accept positions in defined information/data quality roles within government and industry. These internal roles generally fall into three categories with salaries comparable to information technology (IT) roles. These include

- **Information/Data Quality Manager** – Leads IQ Team, develops and implements IQ strategy ($60K - $140K annual salaries)
- **Information/Data Quality Analyst** – Conducts data quality assessments, defines remediation, recommends IQ controls ($50K - $90K annual salaries)
- **Information/Data Quality Process Analyst** – IQ resource for IT in problem resolution, identifies improvement opportunities, provides training ($50K - $90K annual salaries)

Another option for graduates will be to work for information quality vendors as consultants and information quality tool developers and installers. A third option would be to continue their graduate studies and enter into information quality research and instructional roles.

Background

Information Quality focuses specifically on the quality of data versus the quality of software processes, hardware configurations, or other non-data aspects of information systems. Using the Juran model of quality as fitness for use, data quality is contextual, i.e., the quality of information is a function of its intended application. For example, information about individuals that has a large percentage of deliverable postal addresses would be considered to have high quality for direct mail marketing application. However, the same information might be of much lower quality for creating an online reference directory, if for example, only household names (surnames) are present and telephone numbers are missing.

In addition to being contextual, information quality is also recognized to be multi-dimensional – information quality goes beyond simply the accuracy of the data. The most widely used dimensional model for information quality was developed by Richard Wang and Dianne Strong in their landmark paper "Beyond Accuracy: What Data Quality Means to Data Consumers," published in the *Journal of Management Information Systems (JMIS)* in 1996. Based on a number of empirical studies their dimensional classification scheme places accuracy as only one of 15 dimensions of information quality grouped into four categories. These dimensions and categories are show in the table below.

IQ Categories and Dimensions from the
Journal of Management Information Systems

IQ Category	IQ Dimensions
Intrinsic IQ	Accuracy Objectivity Believability Reputation
Contextual IQ	Relevancy Value-added Timeliness Completeness Amount of Information
Representational IQ	Interpretability Ease of Understanding Concise Representation Consistent Representation
Accessibility IQ	Access Security

The view that information is "consumed" is also foundational to the currently accepted view that information is a "product" of an information system or "factory" that has an input (information contributors) and processes carried out by information "custodians." These three "C"s of Information Quality (Contributors, Custodians, and Consumers) form the basis for Information Quality Management in which each of the dimensions can be objectively measured based upon requirements and goals set by the information consumer.

Information Quality is becoming a critical issue in industry and government. For industry, it has taken on added significance because it is now widely recognized that the success of customer relationship management (CRM) initiatives are directly dependent upon having high-quality customer information. As a result, there are now a number of information technology software and service companies, such as, Acxiom Corporation, Similarity Systems, Ascential Software Corporation, DataFlux Corporation, Informatica Corporation, and First Logic Corporation, providing a wide array of information quality tools and services. In addition, many large and well recognized information technology and analytics companies, such as, Oracle Corporation, IBM, and SAS Institute, are now establishing new lines of business around information quality solutions.

In the public sector, two federal mandates have also provided impetus for Information Quality. The Data Quality Act of 2001 (Section 515 of Public Law 106-554) requires the Office of Management and Budget to promulgate guidance to agencies ensuring the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies. Similarly, the Sarbanes-Oxley Act of 2002 places stringent auditing and reporting requirements on certain categories of information maintained by companies.

Recent assessments by industry analysts also support the position that information quality related business is growing at a rapid rate. Lou Agosta, an analyst for Forrester Research, Inc., states in his March 21, 2005 report that "The overall information quality market is on course to pass $1 billion mark in 2008, an important milestone that will validate its maturity and importance…" A more recent assessment of the market made by Peter Kaomea, CIO of

Sullivan & Cromwell, estimates the current market is already at $2 billion for IQ related services and will grow to $5 billion in 5 years (keynote address, 2005 International Conference on Information Quality, Nov. 5, 2005 at MIT).

Existing degree programs that support the proposed program

The Master of Science in Information Quality provides a graduate study option and career path for baccalaureates from a number of programs including Information Science, Computer Science, Information Technology, Systems Engineering, Management Information Systems, Information Systems, Computer Resource Management, and Statistics.

Information Quality is most closely aligned with Information Science, and for that reason, it is proposed that the proposed program be hosted in the Department of Information Science, where it would share faculty and laboratory resources. In the proposed program, 4 of the 9 required core courses are graduate courses in information science.

University of Arkansas for Medical Sciences

Doctor of Philosophy in Health Promotion and Prevention Research

Program Summary

The College of Public Health (COPH) at the University of Arkansas for Medical Sciences (UAMS) proposes to offer a Doctor of Philosophy (Ph.D.) in Health Promotion and Prevention Research. The degree will be awarded by the UAMS Graduate School in recognition of scholarly achievement evidenced by a period of successful advanced study, the satisfactory completion of prescribed examinations, and the defense of a dissertation addressing a significant issue relevant to social and behavioral sciences in public health.

UAMS is Arkansas' only institution of professional and graduate education devoted solely to the health and biological sciences. First founded as a School of Medicine in 1879, UAMS has evolved into a multidisciplinary health sciences center incorporating a rich array of resources now provided by the Colleges of Medicine, Public Health, Nursing, Pharmacy and Health Related Professions. The Graduate Program was organized as an extension of the Graduate School of the University of Arkansas at Fayetteville in 1943, and was approved for independent status by the Board of Trustees in 1995. Academic programs at UAMS integrate the liberal arts with the biological, physical, and behavioral sciences, emphasizing life-long learning for practitioners and scientists in the health professions.

The UAMS College of Public Health (COPH) was begun in July, 2001, as a result of legislation and approval of the UA Board of Trustees. The mission of the college is to "Improve health and promote well-being of individuals, families, and communities in Arkansas through education, research, and service." To realize the mission of the College, two key disciplines have been envisioned since early planning as essential: public health policy and management; and social and behavioral methods of promoting health and preventing disease. Important to realizing our mission have also been four major foci: 1) educating the public health practice workforce to foster the implementation of evidence-based strategies that currently are known to promote public health; 2) conducting demonstration and research projects designed to develop and evaluate theory-based strategies intended to address public health questions that continue to compromise the health of Arkansas residents; 3) creating community-based programs to disseminate currently established and newly developed evidence-based programs throughout the state; and 4) providing faculty and student expertise as a resource to the legislature, public health agencies and other institutions in Arkansas.

To address our first focus of educating the public health practice workforce, the COPH faculty initially developed three practice-oriented professional programs: a Post-baccalaureate Certificate in Public Health, a Master of Public Health (M.P.H.), and a Doctor of Public Health (Dr.P.H.). These programs directly enhance public health in the state of Arkansas by fostering the development of health

professionals who are well prepared to implement and disseminate existing evidence-based public health practices and methods. The MPH and DrPH programs have progressed well since their approval by ADHE. The MPH degree program has 112 students currently enrolled, and has graduated 30 students since December 2002. The DrPH program, which opened in January 2004, has admitted eleven students, nine of whom are currently enrolled and progressing successfully through the program (the other two students both are working as senior public health leaders in the state and are currently on temporary leave from the program but have expressed the intent to complete the program). Faculty in the College of Public Health may teach in the MPH program, the DrPH program, the proposed PhD program, or a combination of all three. All faculty are expected to contribute to the College through a combination of formal teaching, student advising and mentorship, research and scholarship in public health science and/or practice, and service to the University and the profession. The balance of these activities is determined through collaboration between faculty members, their Department Chairs, and the Dean, to ensure adequate fulfillment of the educational, scientific, and service missions of the College.

The practice-oriented curricula of these programs provide an introduction to research methodology that enables public health professionals to interpret and apply relevant research literature within the scope of their public health practice. This introduction to research methods is not intended to provide graduates with the expertise and experience required to function as public health scientists. Introducing a research perspective will enhance the capacity of public health practitioners to address public health challenges within a conceptual framework that facilitates collaboration with public health scientists in multi-disciplinary efforts to integrate service programs and research activities to better understand and promote public health. Practitioners who are familiar with research methods and are working from an evidence-based perspective will be well positioned to develop competitive applications to government and private agencies for funds to support state of the art service programs and demonstration projects.

Offering a PhD in Health Promotion and Prevention Research will advance the second focus of the COPH mission by establishing a cadre of public health scientists who have the research expertise and experience required to develop and evaluate theory-based strategies intended to address public health questions that continue to compromise the health of Arkansas residents.
The curriculum of this program will provide extensive training in basic and applied research methodology that will allow public health scientists to serve as Principal Investigators responsible for developing an extramurally funded program of independent research. Integrated within the multidisciplinary environment of an academic health sciences center, the proposed PhD program will be uniquely positioned to advance our understanding of interactions among biological, behavioral and cultural processes that are associated with the etiology and prevention of major chronic illnesses that constitute a significant public health challenge in Arkansas. An advanced understanding of these complex interactions will expand the current knowledge base and foster the development and evaluation of new health care strategies and public health initiatives that subsequently can be implemented to enhance the health and well-being of individuals and communities throughout the state of Arkansas. A strong emphasis on applied and community based research methods will provide graduates with a solid foundation in the design and evaluation of public health service programs. This perspective will foster collaboration with public health practitioners in the development of programmatic research that is truly responsive to the health needs of Arkansas residents and makes optimal use of public health infrastructure in the state.

Individuals awarded a PhD in Health Promotion and Prevention Research will be prepared for careers as academic research faculty in schools of public health, medicine, nursing, and other affiliated health sciences. Graduates also will be prepared to function as research scientists in public and private foundations as well as in government agencies. In these various settings graduates will be able to apply scientific methods as well as administrative skills in the development and implementation of interdisciplinary efforts intended to advance our understanding of a broad range of challenging public health problems. Scientists who have been awarded a PhD in Health Promotion and Prevention Research will demonstrate advanced skills in the following areas: applied behavioral analysis for population applications; qualitative and quantitative research methods; investigation of behavioral risk

factors for health outcomes; design, application and evaluation of multidisciplinary health behavior interventions; research methods for the promotion of health and prevention of diseases; implementation and evaluation of policy initiatives addressing health-relevant behavior in individuals, organizations, and communities. The degree program will provide extensive mentored experience with research methodology relevant to the application of a social ecological model of behavior change in primary, secondary and tertiary prevention among rural, medically underserved and multicultural populations. Research experience will focus on methods and skills relevant to community-based participatory research, outcomes research, and translational research.

In summary, the DrPH and other practice-oriented programs will prepare public health practitioners to assume primary responsibility for developing and implementing service programs to promote public health in Arkansas. A basic foundation in research methods will help public health practitioners: develop state of the art, evidence-based programs that are appropriate for the state of Arkansas; define specific public health concerns that require additional research; and identify current and needed resources that are relevant to public health service and research. The PhD in Health Promotion and Prevention Research will prepare public health scientists to assume primary responsibility for programmatic research to design and evaluate theory-based strategies to address public health concerns identified in collaboration with public health practitioners. A strong emphasis on applied behavioral science and community based research methods will help public health scientists establish a research agenda that is responsive to the health needs of Arkansas residents and well integrated within the public health infrastructure of the state. This emphasis on applied behavioral science and community based research also distinguishes the Health Promotion and Prevention Research program from the proposed PhD program in Health Systems Research in which the curriculum focuses on health systems theory, health economics, and outcomes research. Issues and methods addressed in the Health Promotion and Prevention Research program focus on individual, interpersonal, and cultural factors that influence individual health behaviors associated with public health outcomes. Issues and methods addressed in the Health Systems Research program focus on policies (local, state, national), and organizational structures and dynamics that influence the allocation of resources and implementation of services that are associated with public health outcomes.

In Fall 2006, if approved, the PhD program will begin to enroll 2-3 students per year. Students must have received an MS or equivalent degree in a health-relevant field prior to application and enrollment in the PhD program. Master's-level coursework should address core public health sciences, an overview of behavioral theories and methods relevant to public health, and a basic foundation in research design and methods. Applicants' master's theses should address a scientific question relevant to the application of behavioral and public health sciences either through secondary analysis of an existing data set or by collecting and analyzing new data. Master's-level course work and research experience will be evaluated and approved prior to admission to the PhD program. Students who have not completed basic courses in public health and behavioral sciences may conditionally be accepted into the PhD program pending completion of prerequisite coursework and/or research experience. Several master's programs in the state will be potential gateways to the proposed PhD program, including the MPH at the COPH, the Master of Science in Pharmaceutical Sciences (MSPS) offered by the UAMS College of Pharmacy, the Master of Applied Psychology (MAP) offered by UALR, the Master of Science in Health Sciences offered by UCA, and both the Master of Science in Health Sciences and the Master of Arts in Psychology at the UA-Fayetteville.

The PhD Program will require a minimum of 66 semester hours and can be completed within a three-year period of full-time study. All students (including those admitted on a conditional basis pending completion of pre-requisite coursework) must complete their full program of study within seven years after passing a doctoral candidacy exam. Students enrolled in the PhD program must complete: 18 semester hours in a health promotion and prevention research core; 3 semester hours in statistical methods; 3 semester hours in qualitative research methods and 6 semester hours in behavioral science electives. In order to develop research skills required to function as an independent investigator, students must complete 6 semester hours of mentored research experience and 18 semester hours of dissertation research. In addition to these core requirements, students will complete 12 semester hours to develop an area of specialization. Credit hours in the defined area of

specialization may include didactic coursework, independent directed study, or mentored research. A Doctoral Advisory Committee will be appointed during the first year of graduate study to assist the student in selecting a course of study that will best serve his or her professional and academic goals. Approval of the initial dissertation proposal and of the final written dissertation and oral defense will be determined by this committee. The dissertation must address a scientific question relevant to the application of behavioral and public health sciences either through secondary analysis of an existing data set or by collecting and analyzing new data. Students who complete all coursework and successfully propose and defend a dissertation are awarded a PhD in Health Promotion and Prevention Research.

University of Arkansas for Medical Sciences

Doctor of Philosophy in Health Systems Research

Program Summary

The mission of the Fay W. Boozman College of Public Health (COPH) at the University of Arkansas for Medical Sciences (UAMS) is to "Improve health and promote well-being of individuals, families, and communities in Arkansas through education, research, and service." Community-based public health education is the COPH's foremost tool in securing its long-term vision, "optimal health for all Arkansans." To that end, the COPH currently offers three academic programs: a post-baccalaureate Certificate in Public Health (Certificate) program; a Master of Public Health (MPH) program; and a professional Doctor of Public Health (DrPH) program that focuses on the theory and practice of leadership in improving the public's health. The MPH and DrPH programs have progressed well since their approval by ADHE. The MPH degree program has 112 students currently enrolled, and has graduated 30 students since December 2002. The DrPH program, which opened in January 2004, has admitted eleven students, nine of whom are currently enrolled and progressing successfully through the program (the other two students both are working as senior public health leaders in the state and are currently on temporary leave from the program but have expressed the intent to complete the program). Faculty in the College of Public Health may teach in the MPH program, the DrPH program, the proposed PhD program, or a combination of all three. All faculty are expected to contribute to the College through a combination of formal teaching, student advising and mentorship, research and scholarship in public health science and/or practice, and service to the University and the profession. The balance of these activities is determined through collaboration between faculty members, their Department Chairs, and the Dean, to ensure adequate fulfillment of the educational, scientific, and service missions of the College.

To complement these existing programs, the COPH proposes to offer a Ph.D. in Health Systems Research that will allow Arkansas to benefit from advanced scholarship on how best to organize, finance, and deliver health services and interventions that will improve health and reduce the burden of disease and injury for populations across the state. The proposed Ph.D. in Health Systems Research program will provide students with the theoretical and methodological foundations necessary to conduct creative and independent research on health systems, with the ultimate goal of identifying pathways to improved health system performance through evidence-based policy and management. The program's focus on health systems comes as a direct response to the urgent need within Arkansas to address large and persistent gaps in the quality, efficiency, and accessibility of health services and public health interventions for populations across the state. Closing these gaps will require new approaches for organizing, financing, and delivering health services that can only be identified through timely and insightful research applied within Arkansas' health care and public health delivery systems.

The proposed Ph.D. program is modeled after several existing training programs in health services research and health policy located at other universities across the country. We chose to structure the program around "health systems research" rather than the narrower field of "health services research" in order to allow for scientific inquiry that goes beyond the study of health care service delivery to encompass the many other activities, organizations, and processes that influence health—including

the public health system, the health insurance system, education and social service systems, labor markets and economic systems, and health-related activities in other spheres of human endeavor. Health services research has been defined by the National Academy of Sciences' Institute of Medicine as:

> *a multidisciplinary field of inquiry, both basic and applied, that examines the accessibility, use, costs, quality, delivery, organization, financing, and outcomes of health care services to produce new knowledge about the structure, processes, and effects of health services for individuals and populations.*[i]

By comparison, the field health systems research encompasses a somewhat broader scope of activity and outcomes:

> *a field of inquiry examining the organization, financing, performance, and impact of health systems—defined as the constellation of governmental and non-governmental actors that influence population health, including health care providers, insurers, purchasers, public health agencies, community-based organizations, and entities that operate outside the traditional sphere of health.*[ii]

This broader, population-focused field of study provides a close fit with the COPH's mission in community-based public health and promotes recognition that many health problems and policy issues are the product of "system-level" interactions that lie outside the control of any single institution, agency, or professional. Solutions to these problems, therefore, require an understanding of the motivations, interdependencies and interactions of multiple actors and their environments. [iii,iv]

The proposed Ph.D. degree program will allow students to specialize in one of two disciplinary areas of research, including health economics and quality and health outcomes research. Five core areas of coursework will be required during the first two years of the program: (1) nine credit hours of coursework in health system theory and applications; (2) 13 credit hours of course work in health system research methods; (3) 15 credit hours of course work in a disciplinary concentration (health economics, or quality and health outcomes research) (4) six credit hours of course work scholarship skills (grantsmanship and peer review, and instructional methods); and (5) nine credit hours of directed research conducted in conjunction with faculty in the Ph.D. program. Upon completion of this coursework students will be required to pass a doctoral candidate examination demonstrating mastery of all five core areas before progressing to dissertation work.

Doctoral candidates will be required to complete 18 hours of dissertation research in conjunction with a Doctoral Advisory Committee of faculty. As part of the dissertation research process, candidates must first successfully develop and defend a proposal of their dissertation, and subsequently develop and defend the dissertation research itself. The dissertation must represent valid, independent research conducted by the candidate that makes a significant contribution to health policy, health system management and practice, and/or health system research methodology.

The proposed program will require a minimum of 70 credit hours of study. Initially we expect to admit two students into the program each academic year. Students must have received an M.P.H. or related master's or doctoral degree prior to entry into the program. Several existing degree programs within the University of Arkansas system may serve as gateways to the proposed Ph.D. program, including the MPH and DrPH programs offered by the COPH; the Masters in Health Services Administration (MHSA) program offered by the University of Arkansas at Little Rock (which transferred this program to the COPH effective 7/1/05); the Master of Science in Pharmaceutical Sciences (MSPS) program offered by the UAMS College of Pharmacy and its new specialty track in Pharmaceutical Evaluation and Policy (PEP), the new Masters in Public Service (MPS) program offered by the University of Arkansas Clinton School of Public Service, and graduate training programs in medicine, nursing, pharmacy, law, business, social work, public administration, public policy, and other health and social service professions. Individuals with significant professional experience in the health professions (e.g. M.D., M.S.N., Pharm.D., M.H.S.A, M.S.W.) may be particularly well suited for the program because of

their in-depth knowledge of health system institutions and operations that may be improved through targeted research and application.

At the discretion of the Ph.D. admissions committee, students who are found to have deficiencies in their academic preparation and qualifications for the program may be admitted to the program contingent on their successful completion of remediation activities. Such activities will be defined by the admissions committee and may include completion of graduate coursework for the M.P.H. degree program.

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[i]. Institute of Medicine. *Health Services Research: Opportunities for an Expanding Field of Inquiry - An Interim Statement*. Washington, DC: National Academies Press; 1994.

[ii]. Mays GP, Halverson PK, Scutchfield DF. 2003. "Behind the Curve? What We Know and Need to Learn from Public Health Systems Research." *Journal of Public Health Management and Practice*, 9(3):179-182.

[iii]. Von Bertalanffy L. *General Systems Theory: Foundations, Development, and Theory*. New York: George Braziller, 1976.

iv. World Health Organization (WHO). Health systems: improving performance. *World Health Report 2000*. Geneva: WHO; 2000.

University of Central Arkansas

Master of Science in Applied Mathematics

Program Summary

The University of Central Arkansas (UCA) proposes a new Master of Science program in Applied Mathematics. This proposal responds to the demonstrated need for a technically trained workforce with applied mathematics skills and builds on the success of UCA's undergraduate program in applied mathematics.

The proposed program will serve three primary constituencies:

- UCA undergraduates with an active undergraduate research agenda who want to continue working on research projects with a faculty member
- Students who intend to pursue a PhD program in an applied area after completing an applied mathematics master's degree at UCA
- Students with undergraduate degrees in the sciences who seek to further their career opportunities by more advanced study in applied mathematics

To ensure the strongest interactions between the Department of Mathematics and members of other scientific and technological communities, the purpose of a master's degree in applied mathematics is to advance the department's impact on the applications of mathematics and computational science in engineering, industry, other sciences, and society. The main goals for accomplishing this purpose include the following:

- Promote research that will lead to new effective mathematical and computational methods and techniques for science, engineering, industry, and society
- Provide an arena for the exchange of information and ideas among mathematicians, engineers, and scientists

- Provide advanced training in applied mathematics to employees working in technical fields (To this end, the department will actively recruit candidates for the MS degree who are employees in technical fields.)

The proposed program will have both a thesis option and a non-thesis option. The thesis option requires at least 30 semester credit hours of graduate work, of which at least six hours but not more than nine hours, must be thesis research. At least 18 of the 30 hours must be at the 6000 level. The non-thesis option requires at least 33 semester credit hours of graduate work, of which 21 hours must be at the 6000 level, and successful completion of an oral examination.

Graduates of the proposed MS degree program will demonstrate knowledge of current methods and techniques in applied mathematics, participate in information exchange through presentations and technical reports, demonstrate problem-solving skills using modern computer technology, and be employable in technical fields such as engineering, industry, or science.

The department has proposed converting an existing visiting faculty appointment to a tenure-track appointment in support of the proposed program, and relatively minor expenditures for computer hardware and software will need to be made. These expenses will be offset by revenue from general registration fees and other college resources.

Institutional Certification Advisory Committee (ICAC)

The Institutional Certification Advisory Committee will review applications for certification at the April 11, 2006, quarterly meeting.

The Arkansas Culinary School of Apprenticeship, Little Rock, Arkansas

The Arkansas Culinary School of Apprenticeship submitted an application for initial certification of the following degree programs: Associate of Applied Science in Culinary Arts and Bachelor of Applied Science in Culinary Arts.

Capella University, Minneapolis, Minnesota

Capella University submitted an application for initial certification of an accounting specialization in the Bachelor of Science in Business.

Ecclesia College, Springdale, Arkansas

Ecclesia College submitted an application for initial certification of the following programs: Associate of General Studies and Bachelor of Science in Business Administration and Religious Education.

Remington College, Little Rock, Arkansas

Remington College submitted an application for recertification of the Associate of Applied Science of Computer Networking Technology and the Associate of Applied Science in Criminal Justice. These programs were initially certified in 2004.

Saint Joseph's College, Standish, Maine

Saint Joseph's College submitted an application for recertification of the following distance delivery programs: Associate of Science in Management, Bachelor of Arts in Liberal Studies, Bachelor of Science in Health Care Administration, Bachelor of Science in Professional Arts, Bachelor of Science in Radiologic Science, Bachelor of Science in Nursing, Master of Science in Nursing, Master in Health Services Administration. The programs were initially certified in 1990.

University of Phoenix-Online, Phoenix, Arizona

The University of Phoenix submitted an application for recertification of the following online programs: Bachelor of Science in Nursing; Master of Nursing, Doctor of Management in Organizational Leadership, Doctor of Business Administration, Doctor of Education in Educational Leadership, and Doctor of Health Administration. The programs were initially certified in 2003.

An application was also submitted for the initial certification of the following online programs: Bachelor of Science in Organizational Security and Management; Master of Science in Nursing with option in MBA and Health Care Management; Master of Science in Nursing with option in Master of Health Administration; Master of Health Administration; Doctor of Education in Curriculum and Instruction; and Doctor of Management in Information Systems Technology.