

## University Course and Programs Committee

August 27, 2004

### MEMBERS PRESENT:

**Voting:** Charles Adams, Rhonda Adams, Robert Beitle, Bill Curington, Judy Ganson, Donna Graham, Patricia Koski, Terry Martin, John Norwood, Stephen Langsner for Betsy Orr, Charles Riggs, Deborah Thomas, George Wardlow

**Non-Voting:** Jean Mitchell

### MEMBERS ABSENT:

**Voting:** Ethel Goodstein, Louise Montgomery, Gary Ritter, Dale Thompson

**Non-Voting:** Gary McHenry

**GUESTS:** Nancy Jack, Paula Lasner, David Miller, Will Miller, Robert Wideman

The meeting was called to order at 2:30 p.m. by John Norwood, Chair.

1. The minutes for the UCPC meeting on April 23, 2004 were approved.
2. The consent agenda was approved without modification ([Tables A-C](#)).
3. Program changes were approved for the Bumpers College of Agricultural, Food and Life Sciences, Undergraduate Programs ([Table D](#), [Attachments D1-D9](#)).
4. Program changes were approved for the College of Education and Health Professions, Undergraduate Programs ([Table E](#), [Attachments E1-E2](#)).
5. Program changes were approved for the College of Engineering, Undergraduate Programs ([Table F](#), [Attachment F1](#)).
6. Professor Will Miller presented proposals for a new [Master of Public Service and a Certificate of Public Service](#), to be offered at the Clinton School in conjunction with the University of Arkansas at Little Rock and the University of Arkansas for Medical Sciences. After discussion, the proposal was approved. There are two notes of interest: The prefix for these proposed programs will be UACS, not the PSER indicated in the agenda; and the courses for the programs will be proposed at a later date.

No further business being presented, the committee adjourned at 3:20 p.m.

**TABLE A****UCPC****Undergraduate Courses**

August 27, 2004

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
AFLS	School of Human Environmental Sciences	HESC	HESC	2633	Introduction to Hotel Operations	U	ANC	3	Fall 2004
AFLS	School of Human Environmental Sciences	HESC	HESC	4063	Advanced Apparel Production	U to D	CEUDC	3	Fall 2004
AFLS	School of Human Environmental Sciences	HESC	HESC	4613	Food Service Purchasing	U to D	CEUDC	3	Fall 2004
AFLS	School of Human Environmental Sciences	HESC	HESC	4623	Selection and Layout of Food Service Equipment	U to D	CEUDC	3	Fall 2004
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VAED	1011	Career Exploration and Decision	U	ANC	3	Fall 2004

**ACTION**

ANC= ADD NEW COURSE  
 ELC= ELIMINATE COURSE  
 CT= CHANGE TITLE  
 CD= CHANGE DESCRIPTION  
 CHN= CHANGE COURSE NUMBER FROM \_\_\_TO\_\_\_  
 CCH= CHANGE CREDIT HOURS FROM \_\_\_TO\_\_\_  
 CL= CROSS LISTED  
 CEUDC= CHANGE EXISTING UNDERGRADUATE COURSE TO DUAL CREDIT  
 CEUGC= CHANGE EXISTING UNDERGRADUATE COURSE TO GRADUATE CREDIT  
 CEGUC= CHANGE EXISTING DUAL/GRADUATE COURSE TO UNDERGRADUATE CREDIT  
 OTH= OTHER  
 RA= REACTIVATE

**TABLE B****UCPC****Graduate Courses**

August 27, 2004

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
AFLS	Agricultural & Extension Education	AEED	AGME	5010L	Experiment Station Operations Laboratory	G	ELC	0	Fall 2004
AFLS	Agricultural & Extension Education	AEED	AGME	5014	Experiment Station Operations I	G	ELC	4	Fall 2004

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**ACTION**

ANC= ADD NEW COURSE

ELC= ELIMINATE COURSE

CT= CHANGE TITLE

CD= CHANGE DESCRIPTION

CHN= CHANGE COURSE NUMBER FROM \_\_\_ TO \_\_\_

CCH= CHANGE CREDIT HOURS FROM \_\_\_ TO \_\_\_

CAC= CHANGE ALPHA CODE FROM \_\_\_ TO \_\_\_

CL= CROSS LISTED

CEUDC= CHANGE EXISTING UNDERGRADUATE COURSE TO DUAL CREDIT

CEUGC= CHANGE EXISTING UNDERGRADUATE COURSE TO GRADUATE CREDIT

CEGUC= CHANGE EXISTING DUAL/GRADUATE COURSE TO UNDERGRADUATE CREDIT

OTH= OTHER

RA= REACTIVATE

**TABLE C****UCPC****Dual Courses**

August 27, 2004

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
AFLS	Agricultural & Extension Education	AEED	AGME	4960L	Soil & Water Conservation Technology Laboratory	D	ELC	0	Fall 2004
AFLS	Agricultural & Extension Education	AEED	AGME	4963	Soil & Water Conservation Technology	D	ELC	3	Fall 2004
AFLS	Agricultural & Extension Education	AEED	AGME	4983	Agricultural Meteorology	D	ELC	3	Fall 2004
AFLS	School of Human Environmental Sciences	HESC	HESC	4063	Advanced Apparel Production	U to D	CEUDC	3	Fall 2004
AFLS	School of Human Environmental Sciences	HESC	HESC	4613	Food Service Purchasing	U to D	CEUDC	3	Fall 2004
AFLS	School of Human Environmental Sciences	HESC	HESC	4623	Selection and Layout of Food Service Equipment	U to D	CEUDC	3	Fall 2004
AFLS	Horticulture	HORT	HORT	4921	Golf Course Operations	D	ANC	1	Fall 2004

**ACTION**

ANC= ADD NEW COURSE

ELC= ELIMINATE COURSE

CT= CHANGE TITLE

CD= CHANGE DESCRIPTION

CHN= CHANGE COURSE NUMBER FROM \_\_\_ TO \_\_\_

CCH= CHANGE CREDIT HOURS FROM \_\_\_ TO \_\_\_

CL= CROSS LISTED

CEUDC= CHANGE EXISTING UNDERGRADUATE COURSE TO DUAL CREDIT

CEUGC= CHANGE EXISTING UNDERGRADUATE COURSE TO GRADUATE CREDIT

CEGUC= CHANGE EXISTING DUAL/GRADUATE COURSE TO UNDERGRADUATE CREDIT

OTH= OTHER

RA= REACTIVATE

## **University Course and Programs Committee**

27-Aug-04

### **TABLE D**

Bumpers College of Agricultural, Food and Life Sciences

#### Department of Agricultural and Extension Education

Presented by Professor Donna Graham

AECTBS - Attachment D1

Course requirements for the ACOM, ASTM, and EXIE areas of concentration were changed as shown on the Attachment.

#### Department of Animal Science

Presented by Professor Donna Graham and Professor Nancy Jack

EQSC-M - Attachments D2, D3

Create a minor in Equine Science.

#### Department of Crop, Soil and Environmental Sciences

Presented by Professor Donna Graham and Professor David Miller

WLHA-M - Attachments D4, D5

Create a minor in Wildlife Habitat

#### Department of Poultry Science

Presented by Professor Donna Graham and Professor Robert Wideman

FMGRCT - Attachments D6, D7

Create an undergraduate Food Safety Manager Certificate of Proficiency

HCCPCT - Attachments D8, D9

Create an undergraduate Hazard Analysis Critical Control Point Coordinator Certificate of Proficiency

### **TABLE E**

College of Education and Health Professions

Presented by Professor Stephen Langsner and Professor Charles Riggs

#### College of Education and Health Professions

COEHP Honors Program - Attachment E1

Proposal to modify the existing honors program in the College of Education and Health Professions: Previous program differentiated only by honors, high honors and highest honors. Proposed program will have different distinctions as shown on the Attachment.

#### Department of Curriculum and Instruction

SPEDBS - Attachment E2

Delete program.

### **TABLE F**

College of Engineering

Presented by Professor Bob Beitle

#### Department of Biological Engineering

BENGBS - Attachment F1

Changes to courses; addition of one hour to two courses; elimination of GNEG 1122 as a requirement; change in program requirements as a result of changes in courses.

**TABLE G**

Graduate Programs

Presented by Professor Will Miller

Graduate School

PSERMS - Attachments G1, G3

Create a Master of Public Service degree, in collaboration with the Clinton School of Public Service

PSERCT - Attachments G2, G3

Create a graduate certificate in Public Service, in collaboration with the Clinton School of Public Service

## ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

### SECTION I: Approvals

<hr/> Department / Program Chair	<hr/> Date Submitted	<hr/> Faculty Senate Chair	<hr/> Date
<hr/> College Dean	<hr/> Date	<hr/> Provost	<hr/> Date
<hr/> Undergraduate Program Committee Chair	<hr/> Date	<hr/> Board of Trustees Approval Date	
<hr/> Graduate Council Chair	<hr/> Date	<hr/> Arkansas Higher Education Coordinating Board Approval Date	

### SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit:     Major/Field of Study     Minor     Other Unit \_\_\_\_\_

Level:             Undergraduate     Graduate     Law    Effective Catalog Year 2004-2005

Current Name        **Agricultural and Extension Education**

College, School, Division **AFLS**                      Department Code **6040**

Current Code (6 digit Alpha) **BSAECT**                      Proposed Code (6 digit Alpha) **6040**  
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program                      CIP Code **13.1301**  
Prior assignment from Office of Institutional Research is required.

Proposed Name \_\_\_\_\_  
When a program name is changed, enrollment of current students reflects the new name.

### SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <<http://www.adhe.arknet.edu.aadept.html>>.

### SECTION IV: Eliminate an Existing Program/Unit

Code/Name \_\_\_\_\_ Effective Catalog Year \_\_\_\_\_

No new students admitted to program after Term: \_\_\_\_ Year: \_\_\_\_\_

Allow students in program to complete under this program until Term: \_\_\_\_ Year: \_\_\_\_\_

### SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: Course requirements for the ACOM, ASTM, and EXIE areas of concentration were changed as follows:  
AGED 3133/3130L or EXED 4173 were deleted under required Agriculture courses.  
Course options to AGED 3153 (AGED 3012 and EXED 3023) were deleted so that students are now required to complete AGED 3153.  
Three courses, JOUR 2013, AGED 3942, and AGED 4243 were changed from optional to required courses, and elective hours in ACOM concentration were changed from 5 to 3-6.  
Three courses, AGECE 2303, AGECE 3403, and AGECE 4313 were added as required courses in the ASTM concentration. With these changes, the number of hours required in the ASTM concentration increased from 14-21 to 23-30. In the EXIE concentration, AGED 3133/3103L or EXED 4173 was added as a required course and elective hours were changed from 5 to 6 hours to 5 to 12 hours.

**Add CSES 355V (1 hour), Soil Profile Description, as an option for the CESES 2201L- Soil Science Laboratory. Add AGED 475V (3-6 hours) -Internship in Agricultural Education in AGED concentration as an option with EXED 475V -Internship in Extension. Two additional AGME courses were added as choices: AGME 3153 and AGME 4973/4970L. Under the education courses (28 hrs) AGED 4632 - Teaching Diverse Populations was added.**

**Free electives in each area of concentration will be as follows:**

**ACOM, 16 - 19 hrs**

**ASTM, 9 - 16 hrs**

**EXIE, 18 - 25 hrs**

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

### **SECTION VI: Justification**

*Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)*

**Changes in departmental requirements are needed to accommodate the adjustments being made in the different areas of concentrations. Changes to the AGED area of concentration are designed to give students greater flexibility in choosing AGME courses based upon their strengths and weaknesses. The course AGED 4632, "Teaching Diverse Populations," is needed to meet teacher licensure requirements. Changes to the ACOM concentration strengthen students' journalistic writing skills with the requirement of JOUR 2013 (News Reporting) and establish a more defined core of departmental courses. The changes to the ASTM concentration are necessary to comply with American Society of Agricultural Engineers' program recognition requirements for Ag Technology Management programs. These changes will not significantly affect other academic programs.**

### **SECTION VII: Catalog Text and Format**

*Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).*

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

### **Previous Catalog Text:**

### **Departmental Requirements - 83 hours**

1622.20A p/vcaa 10/1/00  
AECTBS1.doc

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(includes concentration and elective hours):

CHEM 2613/2611L Organic Physiological Chemistry/Lab

MBIO 2013/2011L General Microbiology/Lab or

PHYS 1044 Physics for Architects (or higher level)

Bioscience elective (3 - 4 hrs.)

AGED 1001 Orientation to Agricultural & Extension Education

AFLS 1011 Freshman Orientation

AGED 3133/3130L Methods in Agricultural Education/Lab or

EXED 4173 Principles of Extension Teaching

(see concentration for course selection)

AGED 4012 Program Development or

AGED 3153 Leadership Development in Agriculture or

EXED 3023 Introduction to the Cooperative Extension Service (see concentration for course selection)

AGED 4003 Issues in Agriculture

AGME 1613/1611L Fundamentals of Ag Systems Tech/Lab

AGME 2903 Application of Microcomputers

AGME 4011 Senior Seminar

ANSC 1032 Introductory Animal Science

ANSC 1051 Introduction to the Livestock Industry

CSES 2203/2201L Soil Science/Lab

CSES/HORT 1203 Intro to Plant Sciences

CSES 2013 Pest Management

EXED 475V (3 hrs.) Internship in Extension

Electives 10-17 hours selected in conjunction with adviser

Concentration A (AGED) for teacher certification

Agricultural electives 13 hours selected in conjunction with adviser plus the following courses:

AGED 1122 Agri Youth Organizations

AGED 3133 Methods in Ag Ed

AGED 4012 Program Development

AGED 4843 Methods in Ag Labs

AGME 2123 Metals and Welding

AGME 3102/3101L Small Power Units/Turf Equipment/Lab or

AGME 3173/3170L Electricity in Agriculture or

AGME 4203 Mechanized Systems Mgmt.

AGME two hours JR/SR elective

CIED 1002/1011 Introduction to Education or

AGED 1031 Introduction to Early Field Experience

CIED 3023 Survey of Exceptionalities

CIED 3033 Classroom Learning Theory

ETEC 2001/2002L Educational Technology/Lab or

AGME 2903 Applications of Microcomputers

HLSC 3633 First Responder/First Aid

HORT 3 elective hours

Concentrations B: Extension and Industry Education (EXIE)

(14–21 hrs).

BIOL, BOTY, MBIO, ZOOL or MATH (above MATH 1203)

Elective – 3 hours

EXED 4173 – Prin of Extension Teaching

(from departmental core)

AGED 3153 – Leadership Development in Agriculture

EXED 3023 – Intro to Coop Extension Service

(from departmental core)

EXED 4183 – Management of Volunteer Programs

5–6 hours from the following:

COMM 3303 – Small Group Communication

RSOC 4623 – Intro Community Dev or

RSOC 2603 – Rural Sociology

AGED 1122 – Agri Youth Organizations

VAED 3113 – Skills/Strategies in HRD  
VAED 4113–Theory and Principles of Adult Education  
MGMT 3563 – Mgmt Concepts and Organizational Behavior  
MGMT 3643 – Team Management

Concentration C: Agricultural Systems Technology Management  
(ASTM) (14 to 21 hours).

Select from:

AGME 2123 – Metals and Welding  
AGME 3153 – Surveying in Agriculture and Forestry  
AGME 3102/3101L – Small Power Units/Turf Equipment/Lab  
AGME 3173 – Electricity in Ag  
AGME 4203 – Mechanized Systems Management  
AGME 4963 – Soil and Water Conservation Technology  
AGME 4973 – Irrigation  
PHYS 220V – Intro Electronics I  
PHYS 320V – Intro Electronics II  
GEOG 4523 – Computer Mapping  
GEOG 4543 – Geographic Info Sys  
GEOG 4593 – Introduction to Global Positioning Systems

Concentration D: Agricultural Communications (ACOM)  
(14–21 hours)

COMM 2303 – Public Speaking  
JOUR 1033 – Fundamentals of Journalism  
JOUR 1023 – Media and Society

Select 5 hours from the following:

AGED 4143 –Electronic Communications in Agriculture  
AGED 401V (3 hours) – Special Topics: Publication Production  
AGED 401V (3 hours) – Special Topics: Contemporary Practices  
COMM 3703 – Organizational Communication  
COMM 3303 – Small Group Communication  
JOUR 2013 – News Reporting I  
JOUR 3023 – News Reporting II  
JOUR 2032/2031L – Broadcast News Reporting I  
JOUR 3072/3071L – Broadcast News Reporting II  
JOUR 2332/2331L – Photojournalism I  
JOUR 3743 – Public Relations Principles

Proposed catalog text:

Departmental Requirements - 83 hours

(includes concentration and elective hours):

CHEM 2613/2611L Organic Physiological Chemistry/Lab

MBIO 2013/2011L General Microbiology/Lab or

PHYS 1044 Physics for Architects (or higher level)

Bioscience elective (3 - 4 hrs.)

AGED 1001 Orientation to Agricultural & Extension Education

AFLS 1011 Freshman Orientation

(see concentration for course selection)

AGED 3153 Leadership Development in Agriculture (For EXIE, ASTM, ACOM areas of concentration)

AGED 4003 Issues in Agriculture

AGME 1613/1611L Fundamentals of Ag Systems Tech/Lab

AGME 2903 Application of Microcomputers

AGME 4011 Senior Seminar

ANSC 1032 Introductory Animal Science

ANSC 1051 Introduction to the Livestock Industry

CSES 2203 Soil Science

CSES 2201L Soil Science/Lab or CSES 355 Soil Profile Description

CSES/HORT 1203 Intro to Plant Sciences

CSES 2013 Pest Management

EXED 475V (3 hrs.) Internship in Extension or AGED 475 (3-6 hrs) Internship in Agricultural Education

Electives 6-25 hours selected in conjunction with adviser

Concentration A (AGED) for teacher certification

Agricultural electives 6-9 hours selected in conjunction with adviser plus the following courses:

AGED 1122 Agri Youth Organizations

AGED 3133 Methods in Ag Ed

AGED 4012 Program Development

AGED 4632 Teaching Diverse Populations

AGED 4843 Methods in Ag Labs

CIED 1002 Introduction to Education/

AGED 1031 Introduction to Early Field Experience

CIED 3023 Survey of Exceptionalities

CIED 3033 Classroom Learning Theory

AGME 2903 Applications of Microcomputers or

ETEC 2001/2002L Educational Technology/Lab

HLSC 3633 First Responder/First Aid

HORT 3 elective hours

Choose 8 hours from the following AGME courses:

AGME 2123 Metals and Welding

AGME 3042 Agricultural Structures

AGME 3102/3101L Small Power Units/Turf Equipment

AGME 3153 Surveying in Agriculture and Forestry

AGME 3173/3170L Electricity in Agriculture

AGME 4203/4200L Mechanized Systems Management

AGME 4973/4970L Irrigation

Concentration B: Extension & Industry Education (EXIE) (14-21 hrs)

EXED 4173 Principles of Extension Teaching OR AGED 3133/3130L, Methods in Ag Educ

EXED 3023 -- An Introduction to the Cooperative Extension Service

EXED 4183 -- Management of Volunteer Programs

Select a minimum of 5 to 12 hours from the following:

COMM 3303 -- Small Group Communication

RSOC 4623 -- Intro Community Dev or

RSOC 2603 -- Rural Sociology

VAED 3213 -- Introduction to Human Resource Development

VAED 4113 -- Theory and Principles of Adult Education

MGMT ELECTIVE

VAED 3113 -- Communication in Human Resource Development

AGED 1122 -- Agri Youth Organizations

AGED 4243 -- Publication Production in Agriculture

Concentration C: Agricultural Systems Technology Management (ASTM) (23-30 hrs)

AGEC 2303 -- Intro to Agribusiness

AGEC 3403 -- Farm Business Mgmt.

AGEC 4313 -- Agri Business Management

Select 14-21 hours from the following:

AGME 2123/2120L -- Metals and Welding

AGME 3102/3101L -- Small Power Units and Turf Equip.

AGME 3153 -- Surveying in Agriculture and Forestry

AGME 3173/3170L -- Electricity in Agriculture

AGME 4203/4200L Mechanized Systems Management

AGME 420V -- Special Topics in Agricultural Mechanization

AGME 4973/4970L -- Irrigation

ENSC 3263/3260L Environmental Soil and Water Conservation

GEOG 4523 -- Computer Mapping

GEOG 4543 -- Geographic Information Systems  
GEOG 4593 -- Introduction to Global Positioning Systems  
PHYS 220V -- Introduction to Electronics I  
PHYS 320V -- Introduction to Electronics II

Concentration D: Agricultural Communications (ACOM)  
(20–23 hours)

COMM 2303 – Public Speaking  
JOUR 1033 – Fundamentals of Journalism  
JOUR 1023 – Media and Society  
JOUR 2013 -- News Reporting I  
AGED 3942 -- Professional Development in Agricultural Communications  
AGED 4243 -- Publication Production in Agriculture

Select 3-6 hours from the following:

AGED 4143 –Electronic Communications in Agriculture  
COMM 3703 – Organizational Communication  
COMM 3303 – Small Group Communication  
JOUR 3023 – News Reporting II  
JOUR 2032/2031L – Broadcast News Reporting I  
JOUR 3072/3071L – Broadcast News Reporting II  
JOUR 2332/2331L – Photojournalism I  
JOUR 3743 – Public Relations Principles

### **SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_

DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
Initials \_\_\_\_\_ Date \_\_\_\_\_

### **Distribution**

Notification to:

(1) College (2) Department (3) Admissions (4) Institutional Research (5) Continuing Education (6) Graduate School  
(7) Treasurer (8) Undergraduate Program Committee Initials \_\_\_\_\_ Date \_\_\_\_\_

## ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

### SECTION I: Approvals

Department / Program Chair	Date Submitted	Faculty Senate Chair	Date
College Dean	Date	Provost	Date
Undergraduate Program Committee Chair	Date	Board of Trustees Approval Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval Date	

### SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit:     Major/Field of Study     Minor     Other Unit \_\_\_\_\_

Level:             Undergraduate     Graduate     Law    Effective Catalog Year 2005

Current Name        \_\_\_\_\_

College, School, Division AFLS                      Department Code ANSC

Current Code (6 digit Alpha) \_\_\_\_\_                      Proposed Code (6 digit Alpha) EQSC-M  
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program                      CIP Code 01.0307  
Prior assignment from Office of Institutional Research is required.

Proposed Name Equine Science Minor  
When a program name is changed, enrollment of current students reflects the new name.

### SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <<http://www.adhe.arknet.edu.aadept.html>>.

### SECTION IV: Eliminate an Existing Program/Unit

Code/Name \_\_\_\_\_ Effective Catalog Year \_\_\_\_\_

No new students admitted to program after Term: \_\_\_\_ Year: \_\_\_\_\_

Allow students in program to complete under this program until Term: \_\_\_\_ Year: \_\_\_\_\_

### SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: Add new minor in Equine Science

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

## SECTION VI: Justification

Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)

**(1). Request from students from other colleges who enroll in equine courses to have a minor in equine science. (2). Help recruit students into Animal Science and college. \*Advertise minor in equine science. (3). Available to both Animal Science majors and non-majors, both can have minor in equine science. (4). Recognition of students for their participation in equine program. (5). More equine courses available to them compared to the Animal Science minor.**

## SECTION VII: Catalog Text and Format

Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

**New Catalog Text (p. 82). Minor in Equine Science (EQSC). Requirements for a minor in Equine Science (EQSC).**

**A selected series of classes designed to prepare students for jobs in the equine industry. 20 hours to include ANSC 1032, ANSC 1041, ANSC 2003, ANSC 3723, ANSC 3822, ANSC 3433, ANSC 4283, (corequisite: 4280L, prerequisites: ANSC 1032, ANSC 3433), and 3 hours from any of the following courses: ANSC 401, ANSC 3143, (prerequisites: CHEM 1074 and CHEM 1071L) ANSC 3133 (prerequisite: ANSC 1032), ANSC 3333 (corequisite: ANSC 3330L, prerequisites: ANSC 3032, ANSC 3042, MBIO 2013, MBIO 2011L), ANSC 3003 (corequisites: ANSC 300L, prerequisite: ANSC 1032), ANSC 2213**

**This minor is available to all students.**

## SECTION VIII: Action Recorded by Registrar's Office

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_

DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
Initials \_\_\_\_\_ Date \_\_\_\_\_

Distribution

Notification to:

(1) College (2) Department (3) Admissions (4) Institutional Research (5) Continuing Education (6) Graduate School  
(7) Treasurer (8) Undergraduate Program Committee Initials \_\_\_\_\_ Date \_\_\_\_\_

1622.20A p/vcaa 10/1/00  
Sciences Minor.doc

C:\program files\qualcomm\eudora\attach\AttachD2.ucpc.082704.min Equine

## ATTACHMENT D3

### FORM P-2 PROPOSAL FOR A NEW PROGRAM OPTION

**1. Proposed Program Title**

Equine Sciences minor

**2. CIP Code Requested**

01.0307

**3. Contact Person**

Dr. Gregory Weidemann, Dean, Bumpers College

Dr. Keith Lusby, Professor and Head, Department of Animal Science

**4. Proposed Starting Date**

2004/2005 academic year

**5. Option Summary**

In response to intense interest in equine sciences from present and prospective students, the Department of Animal Science hired a faculty member in 2000, constructed facilities (with private funding), added four new courses and revised the one existing Horse Production course. With this nucleus of equine science courses, facilities and the strong supporting course offerings in related disciplines, the Department of Animal Science can now offer a quality minor in Equine studies. Formal recognition of college training in Equine studies is deemed valuable by many students not only in the Bumpers Colleges, but in other Colleges. The proposed Equine science minor will allow students taking advantage of the equine offerings to have that accomplishment reflected in their degrees as a minor. The minor is designed around the enhanced equine course offerings and appropriate supporting courses, and requires no curriculum modifications, no additional staffing and no investment in additional facilities or resources to initiate the program.

**6. Need for the Program Option**

- Intense interest from present and prospective students from other colleges who enroll in equine courses to have formal recognition of an equine minor.
- Aid in recruiting students to the University of Arkansas, Fayetteville.
- Enhance career opportunities to students interested in working directly in the horse industry, in working with the numerous companies that provide sales, services and other supporting enterprises, and those who view horses as a valuable social activity for their professional development.

**7. Curriculum Outline**

Core class for Equine minor: (17 hours must be taken to complete requirements)

_____ <b>ANSC 1032</b>	Intro Animal Science
_____ <b>ANSC 1041</b>	Intro Companion Animal Industry
_____ <b>ANSC 2003</b>	Introduction to the Equine Industry
_____ <b>ANSC 3723</b>	Horse and Livestock Merchandising
_____ <b>ANSC 3822</b>	Equine Law
_____ <b>ANSC 3433</b>	Fundamentals of Reproductive Physiology
_____ <b>ANSC 4283</b>	Horse Production
_____ <b>ANSC 4280L</b>	Horse Production Lab

Electives for Equine minor (3 hours must be taken to complete requirements)

_____ <b>ANSC 401(3)</b>	Internship (fall or spring)
_____ <b>ANSC 3143</b>	Principles of Animal Nutrition
_____ <b>ANSC 3133</b>	Animal Breeding/Genetics
_____ <b>ANSC 3333</b>	Diseases of Livestock
_____ <b>ANSC 3003</b>	Applied Animal Parasitology
_____ <b>ANSC 2213</b>	Behavior of Domestic Animals

This minor is available to all students. No new courses will be required.

## 8. Faculty

Dr. Nancy Jack, Assistant Professor of Animal Science  
 Dr. Charles Rosenkrans, Professor of Animal Science  
 Dr. Tom Yazwinski, University Professor of Animal Science  
 Dr. A.H. Brown, Professor of Animal Science  
 Dr. Rick Rorie, Professor of Animal Science  
 Dr. Jeremy Powell, DVM, Assistant Professor of Animal Science  
 Prof. Robert Laurence, Robert A. Leflar Distinguished Professor of Law

## 9. Description of Resources

Physical facilities include the The Pauline Whitaker Animal Science Center, the Dorothy E. King Equine Pavilion, surrounding pastures and a resident herd of breeding horses. Two endowments support scholarships for equine students and substantial annual donations support equine activities. The Department of Animal Science has significant supporting faculty in the disciplines of veterinary medicine, nutrition, physiology, parasitology and genetics. Additionally, a network for internships has been developed. These combined resources provide an effective mass of human and physical resources to provide a quality minor. This minor will require no additional library resources or other facilities.



## **10. New Program Cost**

We project 20 students to be enrolled in this minor within two years and 36 by the fifth year. While some students would have enrolled in equine courses anyway, we project that at least half the students in this minor will be new to the program. Hence there will be increased demands for instructor time in classroom courses and especially in laboratory sections of some equine classes. Few of these students would have enrolled in supporting Animal Science courses that are required for the minor.

The most limiting factor to managing increased enrollment in the equine minor will be the lack of full-time barn staff to assist with laboratories, animal care, facility maintenance and supervision of student workers and interns. We also project that students who will enter the program because of the new minor will have interests in taking ANSC 2304 Equine Behavior and Training. This course currently gives priority to Animal Science majors because of limitations in barn staff and instructor time to properly supervise additional students. Increased tuition and fee revenue should make possible the additions in barn staffing and other operational expenses needed to accommodate the growth in equine courses.

## **11. Sources of Funding**

Faculty in the Department of Animal Science and the College of Law involved in teaching equine and supporting courses are full-time employees of the University of Arkansas, Fayetteville. Currently, barn staff and most operational costs for the equine program are paid from private funds raised by the faculty member in charge of the equine program. Annual donations have averaged \$50,000. Additionally about \$45,000 has been raised annually from events sponsored by the equine program. These events have included the annual Horse Festival, the Ozark Charity Horse Show, the Lipizzaner White Stallion Productions Show, the Razorback Roundup (annual horse sale), and other events.

Assuming 10 new students will be enrolling each year in the minor for the first two years and 36 by the fifth year, and that they take one fourth of the required 20 hours each year of their 4-year matriculation, we project an additional 50 SSCH for each of the first two years and 90 additional SSCH by the fifth year.

## **12. Organizational Chart Reflecting New Program Option**

Dr. Gregory J. Weidemann, Dean, Bumpers College  
Dr. Donna Graham, Associate Dean, Bumpers College  
Dr. Keith Lusby, Professor and Head, Department of Animal Science  
Dr. Nancy E. Jack, Assistant Professor of Animal Science

## **13. Specialized Requirements**

Substantial facilities are needed to provide the necessary coursework and experiences for an Equine Sciences Minor. As stated under item 9, above, The Bumpers College and The Department have added key facilities and resources over the past six years to ensure a successful initiation of this minor. These combined resources provide an effective mass of human and physical resources to provide a quality minor.

However, anticipated increased enrollment as a result of this new minor will necessitate additional support staff, particularly barn staff and teaching assistants, and some additional teaching time.

#### **14. Board of Trustees Approval**

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#### **15. Similar Program Options in Arkansas and in Adjoining States**

This would be the only equine minor available to students in Arkansas. In adjoining states, Mississippi State, Oklahoma State University, Kansas State University, and Texas A&M University offer courses in equine sciences through their Departments of Animal Science. Kansas State will begin offering a Certificate in Equine Study shortly, Oklahoma State offers equine courses along with courses in other species, and Texas A&M permits undergraduates to “specialize” in Equine Science. Mississippi State offers an emphasis in Equine Sciences. Missouri has no similar program.

#### **16. Desegregation**

Currently, African American students comprise roughly 16 percent of the entire population in the state of Arkansas; however, the student body at the University of Arkansas is only six percent African American. In animal sciences, there is a 60 percent female population and one percent African American student body. The department is following a plan to increase under represented groups in the college and participates in events organized to target such populations. At the University of Arkansas and nationwide, the preponderance of students taking Equine courses are female.

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#### **APPENDIX 1: Mullins Library Holdings**

- Horse Nutrition And Feeding / Sarah Pillner
- Nutrient Requirements Of Horses / Subcommittee On Horse Nutrition, Committee On Animal Nutrition, Bo
- Nutrient Requirements Of Horses / Subcommittee On Horse Nutrition, Committee On Animal Nutrition
- Horse Breeding / Peter Rossdale

- Horse Breeding And Management / Edited By J. Warren Evans
- The Horse / J. Warren Evans [Et Al.]; With Chapters By Jay R. Georgi [Et Al.]
- Horse Breeding And Stud Management
- Productive Horse Husbandry, By Carl W. Gay
- The Horse Book; A Practical Treatise On The American Horse Breeding Industry As Allied To The Farm
- Equine Behavior: Principles And Practice / D.S. Mills And K.J. Nankervis
- Equine Nutrition And Feeding / David Frape
- Veterinary Medicine: An Illustrated History / Robert H. Dunlop, David J. Williams
- An Index Of Equine Research
- Horse Behavior / By George H. Waring
- Genetics And The Behavior Of Domestic Animals / Edited By Temple Grandin
- Veterinary Manual For The Performance Horse / Nancy S. Loving
- Horse Training Basics: An Indispensable Guide For Beginning Trainers / Deborah M. Britt
- Training Thoroughbred Horses / By Preston M. Burch With The Assistance Of Alex Bower
- Monte Foreman's Horse-Training Science / Monte Foreman, With Patrick Wyse
- Atlas Of Diagnostic Radiology Of The Horse: Diseases Of The Front And Hind Limbs / Kees J. Dik, Ilo
- The Horse: Diseases & Clinical Management / Edited By Calvin N. Kobluk, Trevor R. Ames, Raymond J.
- A-Z Of Horse Diseases & Health Problems: Signs, Diagnoses, Causes, Treatment / Tim Hawcroft

ATTACHMENT D4

ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

SECTION I: Approvals

Department / Program Chair Date Submitted Faculty Senate Chair Date
College Dean Date Provost Date
Undergraduate Program Committee Chair Date Board of Trustees Approval Date
Graduate Council Chair Date Arkansas Higher Education Coordinating Board Approval Date

SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit: [ ] Major/Field of Study X Minor [ ] Other Unit \_\_\_
Level: [ ] Undergraduate [ ] Graduate [ ] Law Effective Catalog Year 2005
Current Name Wildlife Habitat Minor
College, School, Division DBCAFLS Department Code CSES
Current Code (6 digit Alpha) \_\_\_ Proposed Code (6 digit Alpha) WLHA-M
Prior approval from the Office of the Registrar is required.
[ ] Interdisciplinary Program CIP Code 03.0601
Prior assignment from Office of Institutional Research is required.
Proposed Name Wildlife Habitat Minor
When a program name is changed, enrollment of current students reflects the new name.

SECTION III: Add a New Program/Unit

X For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <http://www.adhe.arknet.edu.aadept.html>.

SECTION IV: Eliminate an Existing Program/Unit

Code/Name \_\_\_ Effective Catalog Year 2005
No new students admitted to program after Term: Year: \_\_\_
Allow students in program to complete under this program until Term: \_ Year: \_\_\_

SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: Add a minor of study in wildlife habitat.

Check all the boxes that apply and complete the required sections of the form:

- [ ] Change of Name and Code (Complete only sections I, II, V and VII.)
[ ] Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

## **SECTION VI: Justification**

*Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)*

**Environmental programs of study continue to increase in popularity and by demand of student target populations. There should be no effect on other degree programs other than the administering department but there is potential impact on supporting courses A letter of support from U.S. Geological Survey, Arkansas Cooperative Fish and Wildlife Research Unit, Department of Biological Sciences has been obtained in support of the minor.**

## **SECTION VII: Catalog Text and Format**

*Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).*

### **Requirements for a minor in Wildlife Habitat :**

**Students will complete 20 hours of course credits selected from three sections\*\*.**

#### **Section A (12 hours)**

**CSES 1203 Plant Science (or CSES 2103, Crop Science, or BOTY 1613/1611L)  
CSES 2203 Soil Science  
ENSC 3103 Plants and Environmental Restoration  
BIOL 4933 Special Problems in Zoology (Wildlife Management Techniques)**

**Select the remaining 8 hours from the following groups (at least 1 course from each group).**

#### **Section B**

**ENSC 1003 Environmental Science  
ENSC 3003 Introduction to Water Science  
ENSC 3223 Ecosystems Assessment  
ENSC 3603 GIS/GPS for Environmental Science  
BIOL 3863 General Ecology  
BIOL 3861 General Ecology Lab  
CSES 462V Internship (Suggested internship with the Arkansas Game and Fish Commission or NRCS)**

#### **Section C**

**AGEC 3413 Principles of Environmental Economics  
BIOL 4723 Fish Biology  
BIOL 4763 Ornithology  
BIOL 4833 Animal Behavior  
BIOL 5743 Herpetology  
BIOL 5783 Mammalogy  
CSES 2201 Soil Science Lab  
CSES 355V Soil Profile Descriptions  
CSES 4133 Weed ID, Morphology and Ecology  
CSES 4253 Soil Classification  
ENTO 3013 Introduction to Entomology  
GEOG 3003 Conservation of Natural Resources  
GEOG 3343 Natural Regions of North America  
GEOG 4093 Geography of Arkansas  
RECR 1023 Recreation and Natural Resources**

**\*A student planning to minor in Wildlife Habitat must notify the Crops, Soils and Environmental Sciences Department and meet with the program adviser for consultation and more detailed information.**

**\*\*A maximum of 9 hours of CSES or ENSC courses will be allowed to fulfill the requirements for both a major and minor in the Department of Crop, Soil, and Environmental Sciences.**

**SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_ SUBJ \_\_\_ CIP \_\_\_ CRTS \_\_\_

DGRE \_\_\_ PGCT \_\_\_ OFFC&CRTY VALID \_\_\_

REPORTING CODES

PROG. DEF. \_\_\_ REQ. DEF. Initials \_\_\_ Date \_\_\_

**Distribution**

Notification to:

- (1) College
  - (2) Department
  - (3) Admissions
  - (4) Institutional Research
  - (5) Continuing Education
  - (6) Graduate School
  - (7) Treasurer
  - (8) Undergraduate Program Committee
- Initials \_\_\_ Date \_\_\_

## ATTACHMENT D5

### Proposal for the creation of a minor in Wildlife Habitat within the Department of Crops, Soils and Environmental Sciences.

1. **Proposal Program Title:** Wildlife Habitat
2. CIP Code: 03.0106 Wildlife and Wildlands Science and Management
3. **Contact Persons:**

Dr. James Barrentine, Head  
Department of Crops, Soils and Environmental Sciences  
Plant Science 115  
University of Arkansas  
Fayetteville, AR 72701  
jbarren@uark.edu  
(479) 575-2354

Dr. David Longer, Program Coordinator  
Department of Crops, Soils and Environmental Sciences  
Plant Science 115  
University of Arkansas  
Fayetteville, AR 72701  
dlonger@uark.edu  
(479) 575-5731

4. **Proposed Starting Date:** Fall, 2004
5. **Program Summary:**

*General Description:* The concentration minor in Wildlife Habitat is a new offering designed to meet the needs of a large number of male and female students in Arkansas. This program will focus on the habitat used by Arkansas wildlife for food, shelter and reproduction. Course work in plant science, soil science, water science and environmental science will be arranged in a manner that will allow students to learn about wildlife habitat in its proper role as part of a larger and more diverse ecosystem. There will be one new course created for this minor. The CSES Department will provide an administrative umbrella from which to coordinate the course work into a cohesive and meaningful educational experience.

*Curriculum Modifications:* As mentioned in the General Description (above), the majority of course work required for the minor is already being offered. BIOL 4933, Wildlife Management Techniques will be prepared and taught by Dr. David Kremetz of the USGS Wildlife Unit at the U of A.

*Faculty Resources:* Currently there are 23 Crops, Soils and Environmental Sciences Faculty members on the U of A Campus who can make a direct or indirect contribution to the Wildlife Habitat Minor. Other faculty resources are with the Arkansas Game and Fish Division in Little Rock and the USGS Wildlife Unit at UAF.

*Library Resources:* Journals, text and electronic holdings abound for the Wildlife Habitat Minor on the UAF Campus, Arkansas Game and Fish Department in Little Rock and the USGS in Washington, D.C.

*Facilities and Equipment:* This program deals specifically with an undergraduate minor and as such most of the activity will be in the classroom. The AFLS College is blessed with excellent classroom, teaching lab and greenhouse facilities. Shared access to the facilities of the on-campus USGS Wildlife Unit will greatly expand our effectiveness. Outdoor, on-site learning can be accomplished by field trips to existing Arkansas Game and Fish work areas in Northwest Arkansas.

*Purpose of the Program:* This program will provide course work and learning experiences to address the needs and growing interest of Arkansas outdoor oriented students.

- 6. Need for the Program:** Arkansas is properly known as the “Natural State” because of extensive acreage of forested land, mountains, wildlife management wild areas, wetlands, rivers, streams and lakes. Popular outdoor activities include hunting and fishing, hiking, boating, floating, rock climbing, adventure racing, bird watching and camping.

Revenues from hunting, fishing and related tourism, equipment manufacture plus climbing and hiking activities amount to hundreds of millions of dollars per year which makes this a big business. These activities are expanding at a rapid rate throughout Arkansas and are projected to continue. Employment opportunities should increase throughout this sector and well trained UAF graduates should be in demand.

- 7. Curriculum Outline:** The Wildlife Habitat curriculum will consist of at least 20 hours of course work; with a maximum of 9 hours of common course work allowed to count towards the student’s major as well as the minor. Section A will represent the core of the minor and will consist of 12 credit hours. The remaining 8 hours will be selected from Sections B and C with at least 1 course coming from each group.

- 8. Faculty:** These CSES faculty members currently teach on the UAF Campus:

**James L. Barrentine** (Ph.D., Purdue, Weed Science). **Dept. Head** - Fayetteville, AR. Conducted research in developing and evaluating new rice and soybean herbicides throughout the Southern United States, and currently conducts research in cotton weed management.

**Robert K. Bacon** (Ph.D., Purdue, Plant Genetics and Breeding) Fayetteville, AR. Conducts research in breeding and production of small grain crops such as wheat. Varietal development and testing are an important part of his research.



**Kristofor R. Brye** (Ph.D., U. of WI, Soil Physics) Fayetteville, AR. Research will focus on the effects of land application of poultry litter on in-situ nutrient leaching and the effects of land use and management practices on soil physical, chemical, and biological properties related to soil quality and sustainability.

**Nilda Burgos** (Ph.D., U. of AR, Weed Science) Fayetteville, AR. Conducts research in weed physiology with emphasis on herbicide resistance.

**Pengyin Chen** (Ph.D., VA Pol. Inst., Plant Breeding/Genetics) Fayetteville, AR. Develop conventional, Roundup Ready, and specialty soybean varieties adapted to various production systems and environments in Arkansas. Develop and implement a practical and feasible marker-assisted breeding program that accelerates and enhances soybean variety/germplasm development.

**Tommy Daniel** (Ph.D., U. WI, Soil Science and Water Chemistry) Fayetteville, AR. Is responsible for evaluating impacts of agricultural practices on surface and ground water and, where found, devising management techniques that minimize degradation in water quality.

**Martha Davis** (Ph.D., U. of AR, Scientific Communications) Fayetteville, AR.

**David E. Longer** (Ph.D., Purdue, Agronomy-Crop Production) Fayetteville, AR. Conducts studies in the area of sustainable crop production systems that include extensive use of cover crops and inter cropping to satisfy nitrogen needs in corn and grain sorghum. Wildlife Habitat Coordinator.

**J.D. Mattice** (Ph.D., U of AR) Fayetteville, AR. Conducts studies in the area of Pesticide Residues.

**David M. Miller** (Ph.D., U. GA, Soil Chemistry) Fayetteville, AR. Specializes in the application of physical chemistry to soils. His interests include surface chemistry, reclamation of soils with poultry litter and phosphorus chemistry.

**Richard J. Norman** (Ph.D., U. of IL, Rice Culture and Nitrogen Fertility) Fayetteville, AR. Investigates different cultural practices used in Arkansas rice production and how they influence the nitrogen fertilizer requirement and nitrogen balance in rice soils.

**Lawrence R. Oliver** (Ph.D., Purdue, Weed Science) Fayetteville, AR. Is primarily concerned with weed interference and control in soybean production. He has made special efforts in identifying and surveying weed problems in Arkansas.

**Derrick M. Oosterhuis** (Ph.D., UT State, Crop Physiology) Fayetteville, AR. Studies photosynthesis, carbon and nitrogen assimilation, growth regulation and plant-water relations of cotton and other crops and their responses to environmental stress.

**Larry C. Purcell** (Ph.D., U. of FL, Soybean Physiology) Fayetteville, AR. Studies physiological and biochemical responses of soybean and other seed legumes to environmental stresses and is particularly interested in the effect of drought on nitrogen fixation and nitrogen metabolism.

**E. Moye Rutledge** (Ph.D., OH State, Pedology) Fayetteville, AR. Works in surveying and classifying soils, suitability of soils for various uses, especially effluent renovation through septic tank filter fields.

**Mary Savin** (Ph.D., U. of RI, Kingston, Biological Sciences), Fayetteville, AR. Combines traditional and innovative molecular techniques to study the structure and function of microbial communities in natural and managed ecosystems to understand the roles of microorganisms in nutrient cycling, ecological interactions, and contaminant degradation.

**Guangyao Sheng** (Ph.D., MI St. U, Soil Chemistry) Fayetteville, AR. Conducts research in the area of assessment and remediation of ground and surface waters contaminated with organic chemicals and the impact of organics on aquatic and soil biological communities.

**Nathan A. Slaton** (Ph.D., U. of AR, Soil Fertility) Fayetteville, AR. Research will focus on crop nutrient requirements, soil-test correlation and calibration, nutrient related environmental concerns and development of improved analytical methods for use by the Soil Test Diagnostic Lab in Fayetteville and the Eastern Arkansas Soil Test Laboratory in Marianna.

**Vibha Srivastava** (Ph.D., J.N. University, New Delhi, India, Life Sciences) Fayetteville, AR. Works on developing molecular tools for gene transfer in crop plants and developing gene tagging systems for rice.

**J. McD. Stewart** (Ph.D., OK State, Cotton Biotechnology) Fayetteville, AR. Researches gene expression and genetic engineering in cotton. His work includes introgression of exotic wild germplasm into cultivated cotton and molecular transformation of cotton with selected genes.

**Ronald E. Talbert** (Ph.D., U. of MO, Weed Science) Fayetteville, AR. Provides special emphasis on weed management in horticultural crops as well as a number of field crops. His interests include herbicide behavior in soils.

**Charles P. West** (Ph.D., IA State, Forage Physiology) Fayetteville, AR. Works in forage physiology, nutrition and quality to improve pastures and forage species in Arkansas with particular emphasis on endophytic fungus in fescue.

**Duane C. Wolf** (Ph.D., U. of CA, Riverside, Soil Microbiology) Fayetteville, AR. Studies soil microbiology in relation to such processes as degradation of herbicides, symbiotic nitrogen fixation and adsorption of metals by microorganisms.

**9. New Program Costs:** No new funding is anticipated to establish the minor in Wildlife Habitat

**10. Sources of Funding:** College of Agricultural, Food and Life Sciences; Dept. of Crops, Soils and Environmental Sciences.

**11. Organizational Chart:**

**Provost**

**Dean, College of Agricultural, Food and Life Sciences**

**Head, Dept. of Crops, Soils and Environmental Sciences.**

**12. Specialized Requirements:** None

## ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

### SECTION I: Approvals

Department / Program Chair	Date Submitted	Faculty Senate Chair	Date
College Dean	Date	Provost	Date
Undergraduate Program Committee Chair	Date	Board of Trustees Approval Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval Date	

### SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit:     Major/Field of Study     Minor     Other Unit Undergraduate Certificate

Level:             Undergraduate     Graduate     Law    Effective Catalog Year 2005-2006

Current Name        Poultry Science

College, School, Division AFLS                      Department Code POSC

Current Code (6 digit Alpha) \_\_\_\_\_                      Proposed Code (6 digit Alpha) FMGRCT  
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program                      CIP Code 01.0907  
Prior assignment from Office of Institutional Research is required.

Proposed Name Food Safety Manager Certificate of Proficiency  
When a program name is changed, enrollment of current students reflects the new name.

### SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <<http://www.adhe.arknet.edu.aadept.html>>.

### SECTION IV: Eliminate an Existing Program/Unit

Code/Name \_\_\_\_\_                      Effective Catalog Year \_\_\_\_\_

No new students admitted to program after Term: \_\_\_\_ Year: \_\_\_\_\_

Allow students in program to complete under this program until Term: \_\_\_\_ Year: \_\_\_\_\_

### SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: \_\_\_\_\_

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

## **SECTION VI: Justification**

*Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)*

## **SECTION VII: Catalog Text and Format**

*Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).*

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

### **Degree Conferred: Undergraduate Certificate of Proficiency**

**Consult the Program Coordinator before enrolling in this certificate program**

**Robert Wideman**

**program Coordinator**

**O-402 Poultry Science Center**

**479-575-4397**

**General Description: The Food Safety Manager Certificate of Proficiency recognizes students who take a concentrated core of web-based courses focused on the application of scientifically-based food safety systems through the application of Hazard Analysis and Critical Control Point (HACCP) systems. Students who earn this certificate will have a working knowledge of advanced food microbiology, food process engineering, human diseases, and quality management as applied in food processing industries.**

**Prerequisites for Acceptance to the Program: Applicants to the Food Safety Manager Certificate of Proficiency Program must have completed a B.S. degree or have at least 7 years relevant experience in the food industry, in addition to completing the HACCP Coordinator Certificate of Proficiency Program.**

**Certificate Requirements: Fifteen semester hours from the list of web-based courses for a certificate.**

### **University of Arkansas Courses:**

**FDSC 3753 Introduction to Food Engineering Principles**

**HLSC 5613 Principles of Epidemiology**

**FDSC 4823 Principles of Food Microbiology**

**HLSC 4623 Human Diseases**

**INEG 4323 Quality Engineering and Management**

**SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_  
DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
Initials \_\_\_\_\_ Date \_\_\_\_\_

Distribution

Notification to:

- (1) College (2) Department (3) Admissions (4) Institutional Research (5) Continuing Education (6) Graduate School  
(7) Treasurer (8) Undergraduate Program Committee Initials \_\_\_\_\_ Date \_\_\_\_\_

## ATTACHMENT D7

### CRITICAL ELEMENTS OF PROPOSAL FOR NEW ACADEMIC PROGRAM

1. PROPOSED PROGRAM TITLE

Food Safety Manager Certificate of Proficiency (FMGR-CT)

2. CIP CODE REQUESTED

01.0907 – Poultry Science

3. CONTACT PERSON

G. J. Weidemann  
Dean, Dale Bumpers College of Agricultural, Food and Life Sciences  
University of Arkansas, Fayetteville  
AFLS E-108  
Fayetteville, AR 72701  
[gweidema@uark.edu](mailto:gweidema@uark.edu)  
(479) 575-2034

4. PROPOSED STARTING DATE

Spring 2005

5. PROGRAM SUMMARY

*Provide a general description of the proposed program. Include overview of any curriculum additions or modifications; program costs; faculty resources, library resources, facilities and equipment; purpose of the program; and any information that will serve as introduction to the program.*

*General Description:* The Food Safety Manager Certificate of Proficiency recognizes students who take a concentrated core of web-based courses focused on the application of scientifically-based food safety management systems through the application of Hazard Analysis Critical Control Point (HACCP) systems. Students who earn this certificate will have a working knowledge of advanced food microbiology, epidemiology, food process engineering, human diseases and quality management as it applies in food processing industries. The Food Safety Manager Certificate program, consisting of 15 credit hours of coursework, is the second in a sequence of two certificates for the web-based Food Safety and Quality (FS&Q) Program. Students enrolling in the Food Safety Manager certification program must have completed the HACCP Coordinator Certificate program, consisting of 16 credit hours of coursework, currently being proposed as the first certificate in the sequence. The certificate program is governed under the University

of Arkansas Board of Trustees and the Arkansas Department of Higher Education (ADHE), and conforms to the ADHE Certificate of Proficiency category (e.g., <http://www.arkansashighered.com/Booklet-App.html>).

*Curriculum Addition or Modifications:* The Food Safety Manager Certificate program includes five web-based courses, four of which are currently either in existence with content material for the remaining course (FDSC 4823) under development. These courses are new web-based additions to the University of Arkansas curriculum. The courses are in the departments of Food Science (2), Health Science (2) and Industrial Engineering (1).

*Program Costs:* Because no new faculty/staff positions or equipment are required, and because the majority of the material for the new courses has already been developed at the expense of the Dale Bumpers College of Agricultural, Food and Life Sciences, program development cost is minimal. The primary expenses associated with the program will be those of the Program Coordinator, Dr. R. F. Wideman (15% time), Instructional Design and Program Maintenance, Educational Research and Program Manager (100% time) and secretarial support (5%).

*Faculty Resources:* The full time Food Safety and Quality Program-Food Safety Manager faculty consists of a food microbiologist (Johnson-FDSC), HACCP authority (Marcy-POSC), epidemiologist/human disease authority (Jones-HLSC), food process engineer (Howell-FDSC) and quality management engineer (Johnson-INEG).

*Library Resources:* Mullins Library on the Fayetteville campus houses the majority of required reference volumes and relevant journals in the field of food safety and quality. It also has access through electronic means and interlibrary loan to many more research libraries and databases. The departments of Poultry Science, Food Science, Industrial Engineering and Health Sciences maintain additional references and journals relevant to the program.

*Facilities and Equipment:* Classrooms in the Poultry Center and Bumpers College have access to the Internet and computer/VCR projection. The FSQ Program for the Food Safety Manager Certificate is web-based.

*Purpose of the Certificate:* With the increased emphasis on science-based inspection for the food industries from the federal and state regulatory agencies, many personnel in these industries require advanced knowledge of the process engineering, microbiological, epidemiological, human disease and quality management issues pertaining to food safety. Because many of these essential personnel are already employed in crucial positions within their companies, the majority of the educational program must be accessible to them via asynchronous distance education utilizing the Internet. Participants in this certificate program will gain skills that are critical to assuring their companies remain compliant in regulatory matters and internationally competitive.

## 6. NEED FOR THE PROGRAM

*Provide survey data on student interest, job availability, corporate demands and employment projections. Focus mostly on state needs and less on regional and national needs, unless applicable to the program.*

*Justification of Need:* In 1996 USDA-FSIS (Food Safety Inspection Service) published the Final Rule Pathogen Reduction and Hazard Analysis and Critical Control Point (HACCP) Systems. The requirements were applicable to all meat and poultry plants as part of the modernization of USDA's meat and poultry inspection system and initiated the transition to a more science-based inspection system. These changes underscore the growing and intense government and consumer interests in maintaining a safe and wholesome food supply. Moreover, because these changes resulted in such a dramatic shift in the oversight and regulatory aspects of meat and poultry processing, there has been a critical need for intense and ongoing training of professionals working in the area of food safety and quality (which is specific to the role of Food Safety Manager in a food company).

This program was, therefore, developed in response to needs identified by professionals working in the poultry industry, and is a follow-up to the other certificate program that has been proposed: HACCP Coordinator Certificate. Management and technical personnel with Tyson Foods and other Arkansas industry personnel requested this type of web-based education program specifically to meet the needs of their personnel located in places of employment in the state of Arkansas and in 23 other states. The need for this program is further evidenced by the dedication of industry resources that have already been allocated to the program during the developmental stages. Web-based instruction was chosen as a means of providing food industry professionals with an asynchronous and flexible program that can be accessed from anywhere within Arkansas or worldwide. This feature is necessary to attract potential candidates because in addition to being full-time employees, the nature of their work (and expertise) is such that taking leave from their positions to enroll in traditional on-campus courses would be extremely detrimental to their employer, and is therefore virtually impossible.

It is expected that there will be an ongoing need for this program. First, it is relevant for literally thousands of food industry employees, and the nature of the food industry is such that turnover routinely occurs as trained professionals advance and are replaced by new employees in need of training. Second, Tyson Foods Inc. requested that the University of Arkansas provide these web-based certificates to accommodate an estimated 50 students per semester.

Because of its resources, collaborative arrangements and partnerships, the University of Arkansas Dale Bumpers College of Agricultural, Food and Life Sciences is in a unique position to meet the need for this program.

*Limited Availability of Similar Programs:* No web-based certification program in this



area is available or has been developed at any post-secondary institution within Arkansas, the U.S., or the world. However, numerous food companies in Arkansas and the U.S. have expressed the need for this program for both current personnel and new employees. The program is consistent with the Chancellor's research and scholarly mission and would be a valuable asset to the Bumpers College in its quest to continue to expand and improve its academic reputation.

The following groups and institutions offer traditional or CIV-based courses or training opportunities that may appear similar in title to some aspects of this certificate program, but with considerable differences in content delivery methods, and scope:

Wayne State University, Kansas State University, North Carolina State University, University of Connecticut, University of Minnesota, California State University (Dominguez Hills), the Center for Disease Control, and the USDA-Food Safety Inspection Service.

The limitations of these programs include limited number of courses and topics delivered in a web-based format, many are delivered in traditional formats such as CIV and continuing education on-campus, while others are limited in the number of courses and the majority are not web-based, asynchronous delivery of educational materials. In addition, Michigan State University offers a partially web-based food safety program broader in scope (not meat specific) and containing fewer courses.

*Current Faculty Members:* The current UAF faculty in the Food Safety and Quality Program area (FDSC, POSC, HLSC, INEG) represent strong elements of the DBCAFLS, College of Health Education, and College of Engineering. Each of the full-time faculty members have received their degrees or been tenured faculty members at institutions which have been recognized as being in the Top Five Universities serving the meat and poultry industries by Meat and Poultry Magazine for three consecutive years (2002-2003). This team of faculty provides the core of excellence for the successful training and teaching of students via distance education delivery systems. They also possess the record of scholarly accomplishment to build and maintain a certificate program in Food Safety and Quality.

*Scholarly Productivity and Activities:* Students who complete the Food Safety Manager Certificate of Proficiency will become a valuable resource for their company or agency of employment. Those who complete this program will be eligible to pursue a web-based Masters Degree in Food Safety and Quality, which is targeted for future development. Recipients of the HACCP Coordinator Certificate will be expected to be future leaders in complying with and formulating food safety and quality policies and regulations for the food industry in Arkansas and the U.S.

## 7. CURRICULUM OUTLINE

*Admission Requirements:*

Applicants to the Food Safety Manager Certificate Program must have completed any B.S. degree or have at least 7 years relevant experience in the food industry, in addition to completing the HACCP Coordinator Certificate Program. Applicants will consult with the Program Coordinator before enrolling in this certificate program, and then will enroll through the University of Arkansas Office of Admissions.

*Application process:*

Interested students may apply for the Food Safety Manager Certificate Program by contacting the FS&Q Program Coordinator, Dr. R. F. Wideman, at [rwideman@uark.edu](mailto:rwideman@uark.edu). Students may complete course enrollment by contacting the FS&Q Program Visitors Center on the web page at:

<http://www.uark.edu/campus-resources/anscmatr/foodsandq/index.html>.

The student will pay tuition and fees on-line and will receive a student ID and Password to access the course materials. Individual student tracking, course advising and mentoring, for specific courses, will be provided by the instructor of record through e-mail and phone contact. Individual student tracking, course advising and mentoring, for the Certificate Program, will be provided by the Program Coordinator through e-mail and phone contact.

*Certificate Requirements:*

The student is required to complete 15 semester hours from the defined list of courses.

*Program of Study:*

NOTE: a list of course descriptions is available in Appendix 1.

Courses to be taken for 15 credit hours:

FDSC 3753 (3 credits): Introduction to Food Engineering Principles (Dr. Terry Howell, UAF)

HLSC 5613 (3 credits): Principles of Epidemiology (Dr. Chester Jones, UA)

FDSC 4823 (3 credits): Principles of Food Microbiology (Dr. Mike Johnson, UAF: Under Development, due Spring 2005)

HLSC 4623 (3 credits): Human Diseases (Dr. Chester Jones, UA)

INEG 4323 (3 credits): Quality Engineering and Management (Dr. Steven Johnson, UAF)

The following courses are under consideration for future development:

BENG 4113 (3 credits): Risk Analysis for Biological Systems

Special Topics 410V (3 credits): Negotiation and Crisis Management

*New Courses:*

FDSC 3753 and FDSC 4823 have been approved as new courses.

8. FACULTY

Adjunct Professor of Food Science-Terry Howell, Ph.D. from Texas A&M University  
Associate Professor of Health Sciences-Chester Jones, Ph.D. from U. of Alabama at  
Birmingham

Professor of Food Science-Michael Johnson, Ph.D. from University of California-Davis  
Professor of Industrial Engineering-Steven Johnson, Ph.D. from State University of New  
York at Buffalo

Associate Professor of Poultry Science-John Marcy, Ph. D. from University of Tennessee  
Professor of Poultry Science Robert Wideman, Ph.D. from University of Connecticut  
(Coordinator FSQ)

9. DESCRIPTION OF RESOURCES

Present library resources including relevant holdings: See Appendix 2.

*Classrooms:* There are three classrooms, three teaching labs and an auditorium in the Poultry Center, including one distance education classroom with CV and satellite capabilities. All of the classrooms and the auditorium include computers/VCR projection units as well as overhead projectors and TV/VCR units. The department of POSC also has a mobile TV/VCR cart with projection.

*Computer Laboratory:* The Poultry Center has a computer laboratory with 24 computers networked with a master computer for use by the faculty member involved in instruction. The Food Safety and Quality Program courses currently reside on the University of Arkansas server.

*Faculty:* All faculty have offices either in the Poultry Center or the departments of Food Science, Health Sciences, and Industrial Engineering and work together routinely in teaching, research or outreach activities. This includes advising graduate students and conducting workshops for industry clientele.

Faculty members identified above have agreed to participate.

10. NEW PROGRAM COSTS

*New administrative costs:*

None

*Number of new faculty (full-time and part-time) and costs:*

Existing faculty (currently assigned time), including the Program Coordinator (15% time) and the Instructional Designer and Program Manager (100% time) are the primary costs associated with the Certificate Program.

*New library resources and costs:*

None

*New/renovated facilities and costs:*

The Distance Education Classroom in the John W. Tyson Building is available for use in meeting the Food Safety and Quality Program development needs. The University of Arkansas server has provided the space for this emerging program during the development stage. It is anticipated that future server needs will also be met in this manner.

*New instructional equipment and costs:*

It is anticipated that additional computer and software needs will be required every 3-5 years to evaluate emerging teaching technologies and for maintenance and modernization of the current courses in the Food Safety and Quality Program. Estimated costs are \$5,000.00 every 3-5 years.

*Distance delivery costs (if applicable):*

None anticipated at this time with the exception of \$8-10 per student for CD with reference material.

11. SOURCES OF FUNDING

*Tuition and fees:* Dependent upon enrollment.

*Other:* None

12. ORGANIZATIONAL CHART REFLECTING NEW PROGRAM - Appendix 3

The Food Safety and Quality Program does not exist as a certificate program and involves faculty from multiple departments and colleges of the University of Arkansas. The certificate will be offered through the DBCAFLS.

13. SPECIALIZED REQUIREMENTS

Specialized accreditation requirements for program-NONE

Licensure/certification requirements for student entry into field- Applicants to the Food Safety Manager Certificate Program must have completed any B.S. degree or have at least 7 years relevant experience in the food industry.

14. BOARD OF TRUSTEES APPROVAL

Board approval previously provided for University of Arkansas to create certificate programs, and the granting or non-granting of the requests to create certificate programs was within the university administration's discretion.

15. SIMILAR PROGRAMS IN ARKANSAS AND IN ADJOINING STATES

*Arkansas*

No Arkansas university offers certificate or degree programs in food safety and quality or

in any field providing a comparable educational experience.

*Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, Texas*

No web-based Food Safety Manager certificate program is offered in these states.

Several of these states have Master's and Doctoral degree programs in food science and poultry science, but these programs do not offer the appropriate courses for a Food Safety Manager certificate or degree, and are not offered in a web-based format.

## 16. DESEGREGATION

The new program will participate in the University's efforts to increase enrollment of under-represented groups.

Currently, African Americans comprise roughly 16 percent of the entire population in the state of Arkansas; however, the student body at the University of Arkansas is only 6 percent African American. Within the DBCAFLS, minority enrollment is approximately 14.4%, and 2.3% of students are African American. We project that the percentage in this program will equal that of the entire college. We will focus on several talented students who have done well in their careers and expressed interest in this program.

## **APPENDIX 1: Individual Course Descriptions**

### **1. FDSC 3753 Introduction to Food Engineering Principles**

Basic mechanics of refrigeration, temperature controls, materials handling and mechanical problems as applied to foods and food processing.

### **2. HLSC 5613 Principles of Epidemiology**

Distribution and patterns of disease or physiological conditions within populations; an examination of the nature of epidemiological research.

### **3. FDSC 4823 Principles of Food Microbiology**

Microbiology, contamination, preservation, and spoilage of different kinds of foods, food poisoning, sanitation, control, and inspection; microbiology of water; and standard methods for official food and public health laboratories.

### **4. HLSC 4623 Human Diseases**

An examination of the variety, behavior, distribution, and management of both infectious and noninfectious diseases in human populations.

### **5. INEG 4323 Quality Engineering and Management**

Provides the student with complete coverage of the functional area of "Quality Assurance" ranging from the need for such a function, how it works, techniques utilized, and managerial approaches for insuring its effectiveness.

## **APPENDIX 2: Mullins Library Holdings Educational Research Methods and Policy Studies**

Mullins Library has a comprehensive collection of materials (books, encyclopedias, journals, databases) to support the teaching and research needs of this program. This program will draw heavily on library resources already available to support teaching and research in food science, animal science, poultry science and biological sciences.

Access to the primary resources is provided through retrospective web-based databases such as *Food Science and Technology Abstracts*, *AGRICOLA*, *CAB Abstract*, *Biological Abstracts*, *AGRIS International*, *EBSCO Search Premier full-text*, *Digital Dissertation Abstracts*. Current information is provided through *Ingenta*, *Article1st*, and many databases through their current awareness feature.

The library also provides an efficient interlibrary loan service to provide fast and efficient access to the resources that are not available in the university libraries' holdings at no cost to our students, faculty and staff.

The following services are available for currently enrolled students in an off-campus course or program administered by the Fayetteville campus:

1. Remote access to library databases and electronic collections
2. Direct delivery of books and article copies:
  - Books from UA collections mailed to your home or office
  - Copies of articles or chapters delivered electronically
  - Interlibrary Loan services to borrow books or articles from other libraries (some fees may apply)
3. Reference and research assistance
  - Help in identifying and using appropriate databases
  - Help in locating articles and books on your topic

### **Selected Journals of Mullins Library - Educational Research Methods and Policy Studies**

Journal of Food Protection  
Journal of Food Chemistry & Toxicology  
Trends in Food Science Technology  
Journal of Food Safety  
International Journal of Food Science Technology  
Journal of Agricultural Food Chemistry  
Journal of Agricultural Engineering Research  
Journal of Agricultural & Food Information  
Journal of Food Process Engineering  
Journal of Food Processing And Preservation  
Journal of Agricultural Ecosystems and the Environment  
Journal of Science Food Agriculture

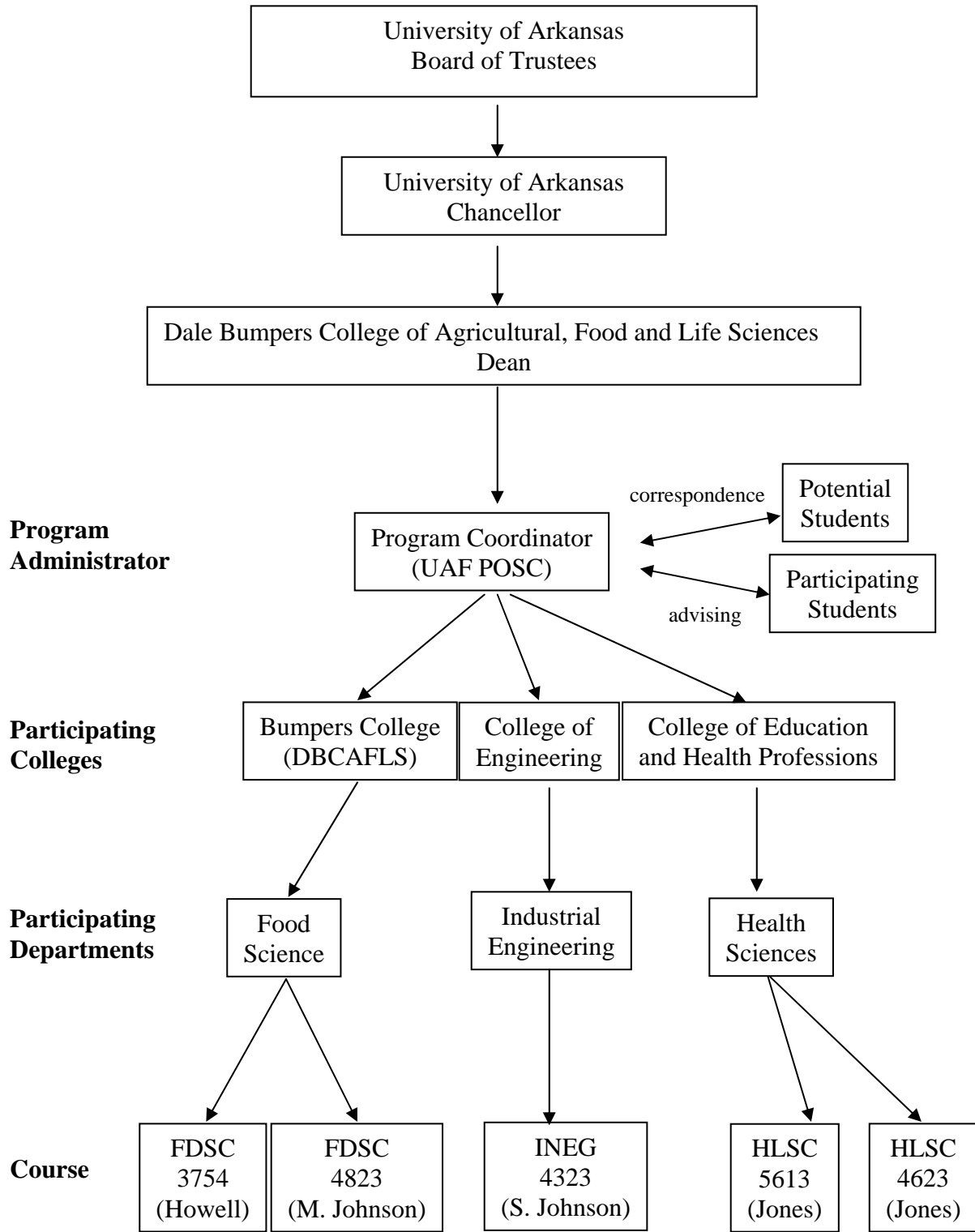
International Journal of Microbiology  
Journal of Food Process Engineering  
Journal of Food Chemistry  
Journal of Food Quality Processing and Preservation  
Journal of Production and Innovative Management  
Safety Science  
Reliability Engineering  
Quality  
Quality Control and Applied Statistics  
Quality & Reliability Engineering International Journal

**Journals Available in Electronic Form**

Critical Reviews in Food Science and Nutrition  
Journal Of Food Engineering  
Journal of Food Science  
International Journal of Food Sciences and Nutrition  
Journal Of Food Engineering  
Meat Science  
Poultry Science  
Journal of Quality Technology  
International Journal of Epidemiology  
Journal of Infectious Diseases  
American Journal of Public Health  
International Journal of Quality and Reliability Management  
Journal of the American Statistical Association  
Quality Management Journal  
Quality Progress  
Technometrics



### APPENDIX 3: Organizational Chart



## ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

### SECTION I: Approvals

Department / Program Chair	Date Submitted	Faculty Senate Chair	Date
College Dean	Date	Provost	Date
Undergraduate Program Committee Chair	Date	Board of Trustees Approval Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval Date	

### SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit:     Major/Field of Study     Minor     Other Unit Undergraduate Certificate

Level:             Undergraduate     Graduate     Law    Effective Catalog Year 2005-2006

Current Name        Poultry Science

College, School, Division AFLS                      Department Code POSC

Current Code (6 digit Alpha) \_\_\_\_\_                      Proposed Code (6 digit Alpha) HCCPCT  
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program                      CIP Code 01.0907  
Prior assignment from Office of Institutional Research is required.

Proposed Name Undergraduate Hazard Analysis Critical Control Point Coordinator Certificate of Proficiency  
When a program name is changed, enrollment of current students reflects the new name.

### SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <<http://www.adhe.arknet.edu.aadept.html>>.

### SECTION IV: Eliminate an Existing Program/Unit

Code/Name \_\_\_\_\_ Effective Catalog Year \_\_\_\_\_

No new students admitted to program after Term: \_\_\_\_ Year: \_\_\_\_\_

Allow students in program to complete under this program until Term: \_\_\_\_ Year: \_\_\_\_\_

### SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: \_\_\_\_\_

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

## **SECTION VI: Justification**

*Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)*

## **SECTION VII: Catalog Text and Format**

*Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).*

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

### **Degree Conferred: Undergraduate Certificate of Proficiency**

**Consult the Program Coordinator before enrolling in this certificate program**

**Robert Wideman**

**Program Coordinator**

**O-402 Poultry Science Center**

**479-575-4397**

**General Description: The Hazard Analysis and Critical Control Point (HACCP) Coordinator Certificate of Proficiency recognizes students who take a concentrated core of web-based courses focused on the application of scientifically-based food safety systems through the application of HACCP systems. Students who earn this certificate will have a working knowledge of fundamental food microbiology, food sanitation, applicable law, statistical process control, and advanced HACCP applications in food processing industries.**

**Prerequisites for Acceptance to the Program: Applicants to the HACCP Coordinator Certificate of Proficiency Program must have completed a B.S. degree or have at least 7 years relevant experience in the food industry.**

**Certificate Requirements: Sixteen semester hours from the list of web-based courses for a certificate. Ten semester hours are taken through the University of Arkansas; Six semester hours are taken from North Carolina State University, which has agreed to provide these courses as part of this certificate program.**

### **University of Arkansas Courses:**

**POSC 2003 Fundamentals of Food Microbiology**

**POSC 4034 Statistical Process Control in the Food Industry**

**POSC 4023 Advanced Topics in Food Safety Management**

### **North Carolina State University and Auburn University Courses:**

**FS 453 Food Laws and Regulations**

**SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_  
DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
Initials \_\_\_\_\_ Date \_\_\_\_\_

**Distribution**

Notification to:  
(1) College (2) Department (3) Admissions (4) Institutional Research (5) Continuing Education (6) Graduate School  
(7) Treasurer (8) Undergraduate Program Committee Initials \_\_\_\_\_ Date \_\_\_\_\_

## ATTACHMENT D9

### CRITICAL ELEMENTS OF PROPOSAL FOR NEW ACADEMIC PROGRAM

1. PROPOSED PROGRAM TITLE

Hazard Analysis Critical Control Point (HACCP) Coordinator Certificate of Proficiency (HCCP-CT)

2. CIP CODE REQUESTED

01.0907 – Poultry Science

3. CONTACT PERSON

G. J. Weidemann  
Dean, Dale Bumpers College of Agricultural, Food and Life Sciences  
University of Arkansas, Fayetteville  
AFLS E-108  
Fayetteville, AR 72701  
[gweidema@uark.edu](mailto:gweidema@uark.edu)  
(479) 575-2034

4. PROPOSED STARTING DATE

Spring 2005

5. PROGRAM SUMMARY

← - - - Formatted: Bullets and Numbering

*Provide a general description of the proposed program. Include overview of any curriculum additions or modifications; program costs; faculty resources, library resources, facilities and equipment; purpose of the program; and any information that will serve as introduction to the program.*

*General Description:* The HACCP (Hazard Analysis and Critical Control Point) Coordinator Certificate of Proficiency recognizes students who take a concentrated core of web-based courses focused on the application of scientifically based food safety systems through the application of HACCP systems. Students who earn this certificate will have a working knowledge of fundamental food microbiology, food sanitation, applicable law, principles of food processing, statistical process control and advanced HACCP applications in food processing industries. The HACCP Coordinator Certificate program, consisting of 16 credit hours of coursework, is the first in a sequence of two certificates for the web-based Food Safety and Quality (FS&Q) Program. Students who earn this certificate will be eligible to pursue a Food Safety Manager Certificate of Proficiency, currently being proposed as the second certificate, consisting of 15 credit

hours of coursework, in the sequence for the FS&Q program. The certificate program is governed under the University of Arkansas Board of Trustees and the Arkansas Department of Higher Education (ADHE), and conforms to the ADHE Certificate of Proficiency category (e.g., <http://www.arkansashighered.com/Booklet-App.html>).

*Curriculum Addition or Modifications:* The HACCP Coordinator Certificate program includes four web-based courses, all of which are currently in existence, and one intensive on-campus course requiring demonstration of the student's mastery of knowledge of the web-based courses. These courses are new web-based additions to the University of Arkansas POSC and/or FDSC programs and/or Auburn University and North Carolina State University. The intensive on-campus course is the capstone course for the student and the quality assurance mechanism for the program administrator. Agreements among participating institutions have been made and are available upon request. Course credit toward the HACCP Coordinator Certificate obtained from Auburn University and North Carolina State University will be accomplished through formal transfer of credit to the University of Arkansas.

*Program Costs:* Because no new faculty/staff positions or equipment are required, and because the majority of the material for the new courses has already been developed at the expense of the Dale Bumpers College of Agricultural, Food and Life Sciences, program development cost is minimal. The primary expenses associated with the program will be those of the Program Coordinator Dr. R. F. Wideman (15% time), Instructional Design and Program Maintenance, Educational Research and Program Manager (100% time) and secretarial support (5%).

*Faculty Resources:* The full time Food Safety and Quality Program-HACCP Coordinator faculty consists of a food microbiologist and HACCP authority (Marcy-POSC), statistician (Zelenka-POSC adjunct), food law authority (Curtis-Auburn University/North Carolina State University) and food sanitation authority (Keener-North Carolina State University).

*Library Resources:* Mullins Library on the Fayetteville campus houses the majority of required reference volumes and relevant journals in the field of food safety and quality. It also has access through electronic means and interlibrary loan to many more research libraries and databases. The departments of Poultry Science, Food Science and our partners, North Carolina State University and Auburn University, maintain additional references and journals relevant to the program.

*Facilities and Equipment:* Classrooms in the Poultry Center and Bumpers College have access to the Internet and computer/VCR projection. The FSQ Program is web-based with the exception of a Summer Institute utilized for Advanced HACCP applications (POSC 4023 Advanced Topics in Food Safety Management).

*Purpose of the Certificate:* With the increased emphasis on science-based inspection for the food industries from the federal and state regulatory agencies, many personnel in

these industries require advanced knowledge of the processing, microbiological, statistical and legal issues pertaining to food safety. Because many of these essential personnel are already employed in crucial roles with their companies, the educational program must be accessible to them via distance education through the Internet. Participants in this certificate program will gain skills that are critical to assuring their companies remain compliant and competitive.

## 6. NEED FOR THE PROGRAM

*Provide survey data on student interest, job availability, corporate demands and employment projections. Focus mostly on state needs and less on regional and national needs, unless applicable to the program.*

*Justification of Need:* In 1996 USDA-FSIS (Food Safety Inspection Service) published the Final Rule Pathogen Reduction and Hazard Analysis and Critical Control Point (HACCP) Systems. The requirements were applicable to all meat and poultry plants as part of the modernization of USDA's meat and poultry inspection system and initiated the transition to a more science-based inspection system. These changes underscore the growing and intense government and consumer interests in maintaining a safe and wholesome food supply. Moreover, because these changes resulted in such a dramatic shift in the oversight and regulatory aspects of meat and poultry processing, there has been a critical need for intense and ongoing training of professionals working in the area of food safety and quality.

This program was, therefore, developed in response to needs identified by professionals working in the poultry industry. Management and technical personnel with Tyson Foods and other Arkansas industry personnel requested this type of web-based education program specifically to meet the needs of their personnel located in places of employment in the state of Arkansas and in 23 other states. The need for this program is further evidenced by the dedication of industry resources that have already been allocated to the program during the developmental stages. Web-based instruction was chosen as a means of providing food industry professionals with an asynchronous and flexible program that can be accessed from anywhere within Arkansas or worldwide. This feature is necessary to attract potential candidates because in addition to being full-time employees, the nature of their work (and expertise) is such that taking leave from their positions to enroll in traditional on-campus courses would be extremely detrimental to their employer, and is therefore virtually impossible.

It is expected that there will be an ongoing need for this program. First, it is relevant for literally thousands of food industry employees, and the nature of the food industry is such that turnover routinely occurs as trained professionals advance and are replaced by new employees in need of training. Second, Tyson Foods Inc. requested that the University of Arkansas provide these web-based certificates to accommodate an estimated 50 students per semester.

Because of its resources, collaborative arrangements and partnerships, the University of Arkansas Dale Bumpers College of Agricultural, Food and Life Sciences is in a unique position to meet the need for this program.

*Limited Availability of Similar Programs:* No web-based certification program in this area is available or has been developed at any post-secondary institution within Arkansas, the U.S., or the world. However, numerous food companies in Arkansas and the U.S. have expressed the need for this program for both current personnel and new employees. The program is consistent with the Chancellor's research and scholarly mission and would be a valuable asset to the Bumpers College in its quest to continue to expand and improve its academic reputation.

The following groups and institutions offer limited traditional or CIV-based courses or training opportunities that may appear similar in title to some aspects of this certificate program, but with considerable differences in content delivery methods, and scope:

Wayne State University, Kansas State University, North Carolina State University, University of Connecticut, University of Minnesota, California State University (Dominguez Hills), the Center for Disease Control, and the USDA-Food Safety Inspection Service.

The limitations of these programs include limited number of courses and topics delivered in a web-based format, many are delivered in traditional formats such as CIV and continuing education on-campus, while others are limited in the number of courses and the majority are not web-based, asynchronous delivery of educational materials. In addition, Michigan State University offers a partially web-based food safety program broader in scope (not meat specific) and containing fewer courses.

*Current Faculty Members:* The current UAF faculty in the Food Safety and Quality Program area (FDSC, POSC, HLSC, INEG) represent a strong element of the DBCAFLS, College of Health Education, and College of Engineering. Each of the full-time faculty members have received their degrees or been tenured faculty members at institutions which have been recognized as being in the Top Five Universities serving the meat and poultry industries by Meat and Poultry Magazine for three consecutive years (2002-2004). This team of faculty provides the core of excellence for the successful training and teaching of students via distance education delivery systems. They also possess the record of scholarly accomplishment to build and maintain this certificate program.

*Scholarly Productivity and Activities:* Students who complete the HACCP Coordinator Certificate of Proficiency will become a valuable resource for their company or agency of employment. Students will be required to take five courses, the first four of which may be taken in any sequence. The final course, Advanced Topics in Food Safety Management, will be a capstone course in which a student's overall proficiency will be assessed. This course will therefore be an assessment tool to ensure the academic



integrity of the certificate program.

Those who complete this program will be eligible to continue in the Food Safety Manager Certificate, the second certificate in sequence of the Food Safety and Quality Program. Those who desire to pursue such may also be eligible to pursue a web-based Masters Degree in Food Safety and Quality, which is targeted for future development.

## 7. CURRICULUM OUTLINE

### *Admission Requirements:*

Applicants to the HACCP Coordinator Certificate Program must have completed any B.S. degree or have at least 7 years relevant experience in the food industry. Applicants will consult with the Program Coordinator before enrolling in this certificate program, and then will enroll through the University of Arkansas Office of Admissions.

### *Application Process:*

Interested students may apply for the HACCP Coordinator Certificate Program by contacting the FS&Q Program Coordinator, Dr. R. F. Wideman, at [rwideman@uark.edu](mailto:rwideman@uark.edu). Students may complete course enrollment by contacting the FS&Q Program Visitors Center on the web page at: <http://www.uark.edu/campus-resources/anscmatr/foodsandq/index.html>. The student will pay the tuition and fees on-line and will receive a student ID and Password to access the course materials. Individual student tracking, course advising and mentoring, for specific courses will be provided by the instructor of record through e-mail and phone contact. Individual student tracking, course advising and mentoring, for the Certificate Program will be provided by the Program Coordinator through e-mail and phone contact.

### *Certificate Requirements:*

The student is required to complete 16 semester hours from the defined list of courses.

### *Program of Study:*

NOTE: a list of course descriptions is available in Appendix 1.

Courses to be taken for 16 credit hours:

FS 453 (3 credits): Food Laws and Regulations (Dr. Patricia Curtis, Auburn U)

FS 495K (3 credits): Food Sanitation (Dr. Kevin Keener, NCSU)

POSC 2003 (3 credits): Fundamentals of Food Microbiology (Dr. John Marcy, UAF)

POSC 4034 (4 credits): Statistical Process Control in the Food Industry (Dr. Dan Zelenka, UAF)

POSC 4023 (3 credits): Advanced Topics in Food Safety Management (Dr. John Marcy, UAF; intensive on-campus capstone course)

The following courses are under consideration for future development:  
FDSC 3303 (3 credits): Principles of Food Processing (Dr. Phil Crandall, UAF)  
Special Topics 410V (3 credits): Sanitation Standard Operating Procedures (UAF)  
Special Topics 410V (3 credits): Good Manufacturing Practices and Standard Operating Procedures (UAF)

*New Courses:*

POSC 2003, POSC 4034, and POSC 4023 were approved as new courses in April 2004.

8. FACULTY

University of Arkansas

Professor of Food Science Philip Crandall, Ph.D. from Purdue University  
Associate Professor of Poultry Science John Marcy, Ph.D. from University of Tennessee  
Adjunct Professor of Poultry Science Daniel Zelenka from Virginia Tech & State University  
Professor of Poultry Science Robert Wideman, Ph.D. from University of Connecticut (Coordinator FSQ)

Auburn University

Professor of Poultry Science Patricia Curtis, Texas A&M University (submitted for adjunct Professor status)

North Carolina State University

Associate Professor of Food Science Kevin Keener, Ph.D. from North Carolina State University (submitted for adjunct Professor status)

9. DESCRIPTION OF RESOURCES

Present library resources including relevant holdings: See Appendix 2.

*Classrooms:* There are three classrooms, three teaching labs and an auditorium in the Poultry Center, including one distance education classroom with CV and satellite capabilities. All of the classrooms and the auditorium include computers/VCR projection units as well as overhead projectors and TV/VCR units. The Department of POSC also has a mobile TV/VCR cart with projection.

*Computer Laboratory:* The Poultry Center has a computer laboratory with 24 computers networked with a master computer for use by the faculty member involved in instruction. The Food Safety and Quality Program courses currently reside on the University of Arkansas server.

*Faculty:* UAF faculty have offices either in the Poultry Center or the Department of Food Science and work together routinely in teaching, research or outreach activities. This

includes advising graduate students and conducting workshops for industry clientele. Auburn University and North Carolina State University faculty work closely with the HACCP Certificate Program Coordinator (Dr. James Denton, UAF).

Faculty members identified above have agreed to participate. Moreover, an agreement is in place with NCSU (available upon request) and an agreement with Auburn University is forthcoming.

10. NEW PROGRAM COSTS

*New administrative costs:*

None required.

*Number of new faculty (full-time and part-time) and costs:*

Existing faculty (currently assigned time), including the Program Coordinator (15% time) and the Instructional Designer and Program Manager (100% time) are the primary costs associated with the Certificate Program.

*New library resources and costs:*

None required.

*New/renovated facilities and costs:*

The Distance Education Classroom in the John W. Tyson Building is available for use in meeting the Food Safety and Quality Program development needs. The University of Arkansas server has provided the space for this emerging program during the development stage. It is anticipated that future server needs will also be met in this manner. Estimated costs are \$1,000.00 every year.

*New instructional equipment and costs:*

It is anticipated that additional computer and software needs will be required every 3-5 years to evaluate emerging teaching technologies and maintain and modernize the current courses in the Food Safety and Quality Program. Estimated costs are \$5,000.00 every 3-5 years.

*Distance delivery costs (if applicable):*

None anticipated at this time with the exception of \$8-10 per student for CD with reference material.

11. SOURCES OF FUNDING

*Tuition and fees:* Dependent upon enrollment.

*Other:* None

12. ORGANIZATIONAL CHART REFLECTING NEW PROGRAM - Appendix 3

The Food Safety and Quality Program does not exist as a certificate program and involves faculty from multiple departments and colleges of the University and faculty from Auburn University and North Carolina State University. The certificate will be offered through the DBCAFLS. Support letters from participants and agreements with

participating institutions are available upon request.

13. SPECIALIZED REQUIREMENTS

Specialized accreditation requirements for program-NONE

Licensure/certification requirements for student entry into field- Applicants to the HACCP Coordinator Certificate Program must have completed any B.S. degree or have at least 7 years relevant experience in the food industry.

14. BOARD OF TRUSTEES APPROVAL

Board approval previously provided for University of Arkansas to create certificate programs, and the granting or non-granting of the requests to create certificate programs was within the university administration's discretion.

15. SIMILAR PROGRAMS IN ARKANSAS AND IN ADJOINING STATES

*Arkansas*

No Arkansas University offers certificate or degree programs in food safety and quality (HACCP Coordinator) or in any field providing a comparable educational experience.

*Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, Texas*

No web-based HACCP Coordinator certificate program is offered in these states. Several of these states have Master's and Doctoral degree programs in food science and poultry science, but these programs do not offer the appropriate courses for a HACCP Coordinator certificate or degree, and are not offered in a web-based format.

16. DESEGREGATION

The new program will participate in the University's efforts to increase enrollment of under-represented groups.

Currently, African Americans comprise roughly 16 percent of the entire population in the state of Arkansas; however, the student body at the University of Arkansas is only 6 percent African American. Within the DBCAFLS, minority enrollment is approximately 14.4%, and 2.3% of students are African American. We project that the percentage in this program will equal that of the entire college. We will focus on several talented students who have done well in their careers and expressed interest in this program.

## **APPENDIX 1: Individual Course Descriptions**

### **1. FS 453 Food Law (currently offered by North Carolina State University, but taught by Dr. Patricia Curtis of Auburn University)**

Federal and state laws and regulations, and case law history affecting food production, processing, packaging, marketing, and distribution of food and food products. History of food law, enactment of laws and regulations, legal research, and regulatory agencies.

### **2. FS 495K Food Sanitation**

The course presents a discussion of hygienic practices, requirements for sanitation programs, and modern sanitation practices in food processing facilities. At the end of the course, the student will have the necessary information to set-up and maintain a sanitation program. The training of employees in sanitation principles ensures clean and defect free, safe foods.

### **3. POSC 2003 Fundamentals of Food Microbiology (University of Arkansas, approved as a new course)**

The impact of intrinsic (dependent on the food product formulation) or extrinsic (dependent on the process that the food and microorganisms are exposed to) factors on bacteria will be examined. Course information will address the basis of the Hurdle Theory or creating multiple barriers to growth, and will also set the stage for understanding predictive microbiology. Factors discussed include redox potential, water activity, pH, time and temperature.

### **4. POSC 4034 Statistical Process Control in the Food Industry (University of Arkansas, approved as a new course)**

Analysis of processing data related to food safety, quality, governmental critical limits and customer specifications. Emphasizes statistical process control chart development, including understanding data and chart selection, calculating statistical limits, and interpreting process performance. Covers quality topics appropriate for students following careers in food safety, quality, or manufacturing.

### **5. POSC 4023 Advanced Topics in Food Safety Management (University of Arkansas, approved as a new course)**

This capstone experience for students in the HACCP Coordinator Certificate program requires completion of selected reading materials prior to spending one week in an on-campus institute at UAF. Activities include group projects, case studies, on-line library resource acquisition and industry/regulatory HACCP Round Table discussions.

## **APPENDIX 2: Mullins Library Holdings Educational Research Methods and Policy Studies**

Mullins Library has a comprehensive collection of materials (books, encyclopedias, journals, databases) to support the teaching and research needs of this program. This program will draw heavily on library resources already available to support teaching and research in food science, animal science, poultry science and biological sciences.

Access to the primary resources is provided through retrospective web-based databases such as *Food Science and Technology Abstracts*, *AGRICOLA*, *CAB Abstract*, *Biological Abstracts*, *AGRIS International*, *EBSCO Search Premier full-text*, *Digital Dissertation Abstracts*. Current information is provided through *Ingenta*, *Article1st*, and many databases through their *current awareness feature*.

The library also provides an efficient interlibrary loan service to provide fast and efficient access to the resources that are not available in the university libraries' holdings at no cost to our students, faculty and staff.

The following services are available for currently enrolled students in an off-campus course or program administered by the Fayetteville campus:

1. Remote access to library databases and electronic collections
2. Direct delivery of books and article copies:
  - Books from UA collections mailed to your home or office
  - Copies of articles or chapters delivered electronically
  - Interlibrary Loan services to borrow books or articles from other libraries (some fees may apply)
3. Reference and research assistance
  - Help in identifying and using appropriate databases
  - Help in locating articles and books on your topic

### **Selected Journals of Mullins Library - Educational Research Methods and Policy Studies**

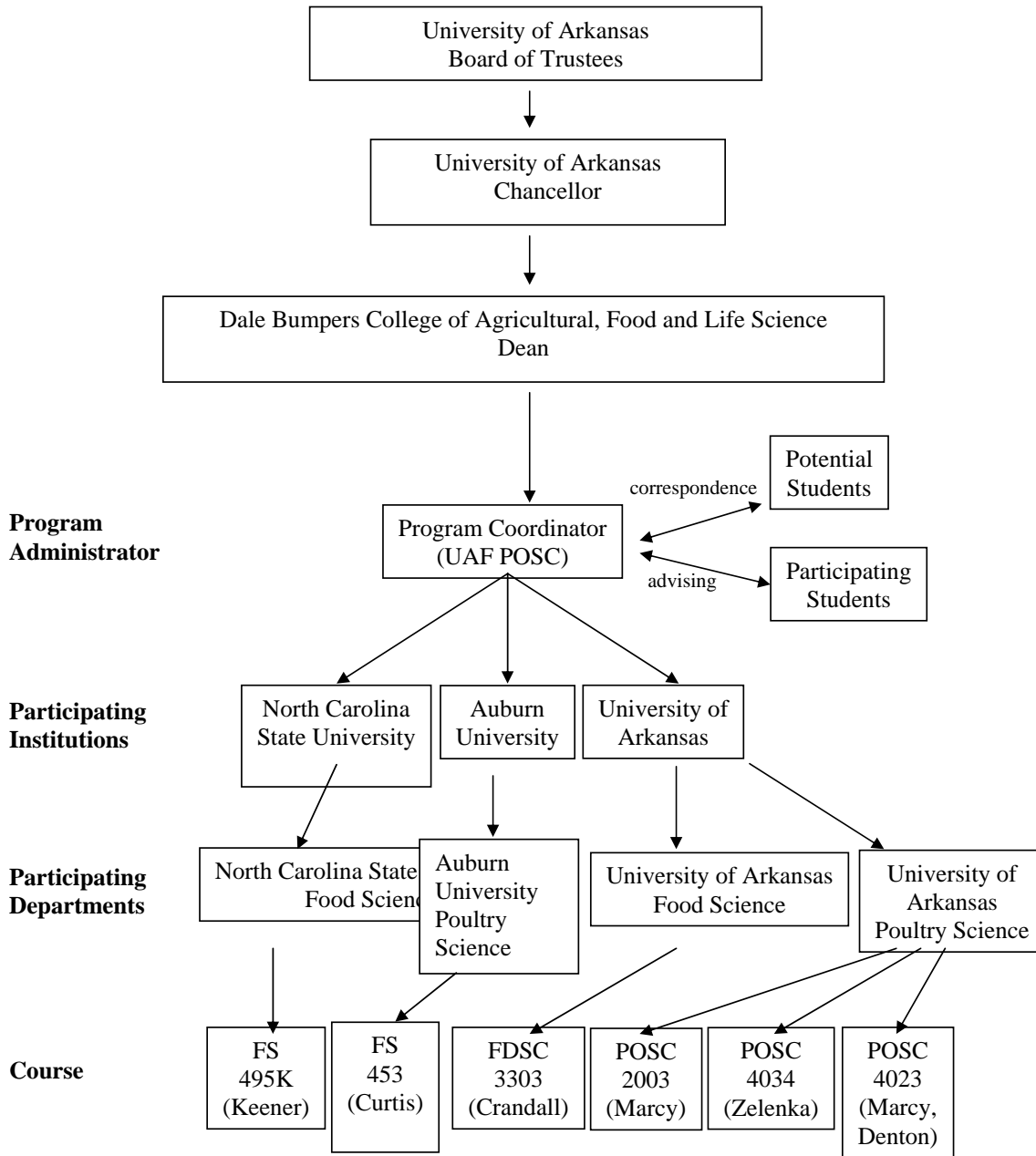
Journal of Food Protection  
Journal of Food Chemistry & Toxicology  
Trends in Food Science Technology  
Journal of Food Safety  
International Journal of Food Science Technology  
Journal of Agricultural Food Chemistry  
Journal of Agricultural Engineering Research  
Journal of Agricultural & Food Information  
Journal of Food Process Engineering  
Journal of Food Processing And Preservation  
Journal of Agricultural Ecosystems and the Environment  
Journal of Science Food Agriculture

International Journal of Microbiology  
Journal of Food Process Engineering  
Journal of Food Chemistry  
Journal of Food Quality Processing and Preservation  
Journal of Production and Innovative Management  
Safety Science  
Reliability Engineering  
Quality  
Quality Control and Applied Statistics  
Quality & Reliability Engineering International Journal

**Journals Available in Electronic Form**

Critical Reviews in Food Science and Nutrition  
Journal Of Food Engineering  
Journal of Food Science  
International Journal of Food Sciences and Nutrition  
Journal Of Food Engineering  
Meat Science  
Poultry Science  
Journal of Quality Technology  
International Journal of Epidemiology  
Journal of Infectious Diseases  
American Journal of Public Health  
International Journal of Quality and Reliability Management  
Journal of the American Statistical Association  
Quality Management Journal  
Quality Progress  
Technometrics

### APPENDIX 3: Organizational Chart





## **University Course and Programs Committee**

27-Aug-04

### **TABLE D**

Bumpers College of Agricultural, Food and Life Sciences

#### Department of Agricultural and Extension Education

Presented by Professor Donna Graham

AECTBS - Attachment D1

Course requirements for the ACOM, ASTM, and EXIE areas of concentration were changed as shown on the Attachment.

#### Department of Animal Science

Presented by Professor Donna Graham and Professor Nancy Jack

EQSC-M - Attachments D2, D3

Create a minor in Equine Science.

#### Department of Crop, Soil and Environmental Sciences

Presented by Professor Donna Graham and Professor David Miller

WLHA-M - Attachments D4, D5

Create a minor in Wildlife Habitat

#### Department of Poultry Science

Presented by Professor Donna Graham and Professor Robert Wideman

FMGRCT - Attachments D6, D7

Create an undergraduate Food Safety Manager Certificate of Proficiency

HCCPCT - Attachments D8, D9

Create an undergraduate Hazard Analysis Critical Control Point Coordinator Certificate of Proficiency

### **TABLE E**

College of Education and Health Professions

Presented by Professor Stephen Langsner and Professor Charles Riggs

#### College of Education and Health Professions

COEHP Honors Program - Attachment E1

Proposal to modify the existing honors program in the College of Education and Health Professions: Previous program differentiated only by honors, high honors and highest honors. Proposed program will have different distinctions as shown on the Attachment.

#### Department of Curriculum and Instruction

SPEDBS - Attachment E2

Delete program.

### **TABLE F**

College of Engineering

Presented by Professor Bob Beitle

#### Department of Biological Engineering

BENGBS - Attachment F1

Changes to courses; addition of one hour to two courses; elimination of GNEG 1122 as a requirement; change in program requirements as a result of changes in courses.

**TABLE G**

Graduate Programs

Presented by Professor Will Miller

Graduate School

PSERMS - Attachments G1, G3

Create a Master of Public Service degree, in collaboration with the Clinton School of Public Service

PSERCT - Attachments G2, G3

Create a graduate certificate in Public Service, in collaboration with the Clinton School of Public Service

## ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

### SECTION I: Approvals

Department / Program Chair _____	Date Submitted _____	Faculty Senate Chair _____	Date _____
College Dean _____	Date _____	Provost _____	Date _____
Undergraduate Program Committee Chair _____	Date _____	Board of Trustees Approval Date _____	
Graduate Council Chair _____	Date _____	Arkansas Higher Education Coordinating Board Approval Date _____	

### SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit:  Major/Field of Study  Minor  Other Unit **EDUC**

Level:  Undergraduate  Graduate  Law Effective Catalog Year **2005 - 2006**

Current Name \_\_\_\_\_

College, School, Division **EDUC** Department Code \_\_\_\_\_

Current Code (6 digit Alpha) \_\_\_\_\_ Proposed Code (6 digit Alpha) \_\_\_\_\_  
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program CIP Code \_\_\_\_\_  
Prior assignment from Office of Institutional Research is required.

Proposed Name \_\_\_\_\_  
When a program name is changed, enrollment of current students reflects the new name.

### SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <<http://www.adhe.arknet.edu.aadept.html>>.

### SECTION IV: Eliminate an Existing Program/Unit

Code/Name \_\_\_\_\_ Effective Catalog Year \_\_\_\_\_

No new students admitted to program after Term: \_\_\_ Year: \_\_\_\_\_

Allow students in program to complete under this program until Term: \_\_\_ Year: \_\_\_\_\_

### SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: The previous Honors designation for the College of Education and Health Professions differentiated only by highest honors, high honors, and honors. The College is proposing this modification: A graduating student who has successfully completed the COEHP Honors Program shall receive a baccalaureate degree as a College of Education and Health Professions Scholar designated as Summa Cum Laude (GPA > 3.9), Magna Cum Laude (GPA > 3.7), or Cum Laude (GPA > 3.5). A graduating student who has not participated in the COEHP honors program and has earned at least 50 percent of his or her college credits at the University of Arkansas and has maintained a grade-point average of 4.0 through the semester preceding graduation shall earn the designation of Highest Distinction. Students whose cumulative grade-point average places them in the top 10 percent of their graduating class and have a GPA of > 3.5, but who have not completed the Honors Program are eligible for the designation With Distinction.

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

## **SECTION VI: Justification**

*Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)*

**The justification of the change in procedure for recognition of academic achievement of both students participating in the College Honors Program and students who are not, but maintain high grade point averages, is to more definitively delineate scholarship efforts of students and appropriately recognize them for their endeavors. no program or program components will be eliminated.**

## **SECTION VII: Catalog Text and Format**

*Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).*

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

### **Current Catalog Text:**

### **COLLEGE HONORS PROGRAM**

**The College of Education and Health Professions honors program is designed to enable undergraduate students in the college who have demonstrated potential for outstanding scholastic achievement an opportunity to broaden and deepen their liberal and professional education. Honors program students are also eligible to take honors courses in other colleges.**

**The experience in the honors program includes, but is not limited to, enrollment in honors courses, an honors seminar, and a required undergraduate thesis/project.**

**Incoming freshmen who meet one of the following three requirements will be invited to participate in the honors program; however, each student must file a formal application to be enrolled.**

**1. An ACT composite score of 28 or higher 2. An SAT score of 1150 3. Rank in the top 5% of their high school graduating class. Eligibility for continued enrollment in the honors program will be based on the following cumulative minimum grade-point averages.**

**1. At the end of freshman year (30 hours) – 3.25 GPA**

2. At the end of sophomore year (59 hours) – 3.37 GPA

3. At the end of the junior year (93 hours) – 3.50 GPA

4. At graduation – 3.50 GPA

It is desirable and strongly advised that students enter the honors program as freshmen. However, other students may make application to participate if they meet requirements for admission and for continued enrollment eligibility. They must still meet all program requirements before graduation.

Transfer students may enter the honors program based on the admission and eligibility requirements above and their cumulative grade-point average from the previous college.

At the end of each semester, the director of the College of Education and Health Professions honors program will review the academic records of all enrolled honors students to determine whether each one has the cumulative grade-point average to continue in the program. If a student has become ineligible, he or she will be requested to drop all honors courses for which he or she is registered the following semester. The ineligible student's file will be flagged "probationary status." An honors student may stay on probationary status for only one semester without being dropped from the honors program. At the end of the probationary semester, the student's cumulative grade-point average will be reviewed. The student will be re-instated to good standing in the honors program or dropped permanently from the program.

The course and grade requirements for completion of the College of Education and Health Professions honors program are as follows:

1. Completion of 12 hours of honors credit, only six of which may be taken outside the College of Education and Health Professions. The following courses are required:

6 hours of Honors sections of core classes taken from Arts and Sciences

HNEB 3001H Honors Education Thesis Tutorial

HNEB 4003H Honors Education Thesis/Project

2. Graduation with a minimum GPA of 3.50.

NOTE: Successful completion of the College Honors program is different from graduation with honors. Please refer to the section below on graduating with honors. Contact the Boyer Center for Student Services, 200 Graduate Education Building, for more information.

SEE PAGE 289 FOR COLLEGE OF EDUCATION AND HEALTH PROFESSIONS HONORS PROGRAM (HNEB) COURSES

### GRADUATION WITH HONORS

Graduation with Honors will be conferred to College of Education and Health Professions students based upon their University of Arkansas cumulative grade-point average at the time of graduation. To earn this distinction, a student must have completed at least one-half of the course work required for his or her degree at the University of Arkansas, Fayetteville. The honors designation will be assigned as follows:

1. For Highest Honors, the student must have a minimum cumulative grade point average of 3.95 and rank in the top 10 percent of the graduating class.

2. For High Honors, the student must have a minimum cumulative grade point average of 3.75 and rank in the top 10 percent of the graduating class.

3. For Honors, the student must have a minimum cumulative grade point average of 3.50 and rank in the top 10 percent of the graduating class.

Proposed Catalog Text:

### COLLEGE HONORS PROGRAM

The College of Education and Health Professions honors program is designed to enable undergraduate students in the college who have demonstrated potential for outstanding scholastic achievement an opportunity to broaden and deepen their liberal and professional education. Honors program students are also eligible to take honors courses in other colleges.

The experience in the honors program includes, but is not limited to, enrollment in honors courses, an honors seminar, and a required undergraduate thesis/project.

Incoming freshmen who meet one of the following three requirements will be invited to participate in the honors program; however, each student must file a formal application to be enrolled.

1. An ACT composite score of 28 or higher 2. An SAT score of 1150 3. Rank in the top 5% of their high school graduating class. Eligibility for continued enrollment in the honors program will be based on the following cumulative minimum grade-point averages.

1. At the end of freshman year (30 hours) – 3.25 GPA
2. At the end of sophomore year (59 hours) – 3.37 GPA
3. At the end of the junior year (93 hours) – 3.50 GPA
4. At graduation – 3.50 GPA

It is desirable and strongly advised that students enter the honors program as freshmen. However, other students may make application to participate if they meet requirements for admission and for continued enrollment eligibility. They must still meet all program requirements before graduation.

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The course and grade requirements for completion of the College of Education and Health Professions honors program are as follows:

1. Completion of 12 hours of honors credit, only six of which may be taken outside the College of Education and Health Professions. The following courses are required:

6 hours of Honors sections of core classes taken from Arts and Sciences

HNE3001H Honors Education Thesis Tutorial

HNE4003H Honors Education Thesis/Project

2. Graduation with a minimum GPA of 3.50.

NOTE: A graduating student who has successfully completed the COEHP Honors Program shall receive a baccalaureate degree as a College of Education and Health Professions Scholar designated as Summa Cum Laude (GPA > 3.9), Magna Cum Laude (GPA > 3.7), or Cum Laude (GPA > 3.5).

A graduating student who has not participated in the COEHP honors program and has earned at least 50 percent of his or her college credits at the University of Arkansas and has maintained a grade-point average of 4.0 through the semester preceding graduation shall earn the designation of Highest Distinction. Students whose cumulative grade-point average places them in the top 10 percent of their graduating class and have a GPA of > 3.5, but who have not completed the Honors Program are eligible for the designation With Distinction.

SEE PAGE 289 FOR COLLEGE OF EDUCATION AND HEALTH PROFESSIONS HONORS PROGRAM (HNE) COURSES

### GRADUATION WITH HONORS

A graduating student who has successfully completed the COEHP Honors Program shall receive a baccalaureate degree as a College of Education and Health Professions Scholar designated as Summa Cum Laude (GPA > 3.9), Magna Cum Laude (GPA > 3.7), or Cum Laude (GPA > 3.5).

A graduating student who has not participated in the COEHP honors program and has earned at least 50 percent of his or her college credits at the University of Arkansas and has maintained a grade-point average of 4.0 through the semester preceding graduation shall earn the designation of Highest Distinction. Students whose cumulative grade-point average places them in

**the top 10 percent of their graduating class and have a GPA of > 3.5, but who have not completed the Honors Program are eligible for the designation With Distinction.**

**SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_

DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
Initials \_\_\_\_\_ Date \_\_\_\_\_

**Distribution**

Notification to:

(1) College (2) Department (3) Admissions (4) Institutional Research (5) Continuing Education (6) Graduate School  
(7) Treasurer (8) Undergraduate Program Committee Initials \_\_\_\_\_ Date \_\_\_\_\_

## ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

### SECTION I: Approvals

Department / Program Chair	Date Submitted	Faculty Senate Chair	Date
College Dean	Date	Provost	Date
Undergraduate Program Committee Chair	Date	Board of Trustees Approval Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval Date	

### SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit:       Major/Field of Study     Minor       Other Unit \_\_\_\_\_

Level:                       Undergraduate       Graduate       Law      Effective Catalog Year 2005-2006

Current Name              SPED BSE

College, School, Division EDUC                      Department Code CIED

Current Code (6 digit Alpha) SPEDBS                      Proposed Code (6 digit Alpha) \_\_\_\_\_  
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program                      CIP Code \_\_\_\_\_  
Prior assignment from Office of Institutional Research is required.

Proposed Name \_\_\_\_\_  
When a program name is changed, enrollment of current students reflects the new name.

### SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <<http://www.adhe.arknet.edu.aadept.html>>.

### SECTION IV: Eliminate an Existing Program/Unit

Code/Name BSE SPED    Effective Catalog Year 2005

No new students admitted to program after Term: \_\_\_ Year: \_\_\_\_\_

Allow students in program to complete under this program until Term: \_\_\_ Year: \_\_\_\_\_

### SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: \_\_\_\_\_

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)



**SECTION VI: Justification**

Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)

**With the changes to Arkansas teacher licensure, the bachelor degree in special education accepted no new students after 2000. Each subsequent year the undergraduate classes were eliminated as the students completed the course work. The last group of undergraduates was graduated in 2000. The catalog text has been modified and no longer mentions the undergraduate special education program. Now the special education faculty is requesting the bachelor's degree in special education be officially eliminated.**

**SECTION VII: Catalog Text and Format**

Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
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- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

**SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_

DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
Initials \_\_\_\_\_ Date \_\_\_\_\_

Distribution

Notification to:

- |               |                                     |                |                            |                          |                     |
|---------------|-------------------------------------|----------------|----------------------------|--------------------------|---------------------|
| (1) College   | (2) Department                      | (3) Admissions | (4) Institutional Research | (5) Continuing Education | (6) Graduate School |
| (7) Treasurer | (8) Undergraduate Program Committee |                |                            | Initials _____           | Date _____          |

## **University Course and Programs Committee**

27-Aug-04

### **TABLE D**

Bumpers College of Agricultural, Food and Life Sciences

#### Department of Agricultural and Extension Education

Presented by Professor Donna Graham

AECTBS - Attachment D1

Course requirements for the ACOM, ASTM, and EXIE areas of concentration were changed as shown on the Attachment.

#### Department of Animal Science

Presented by Professor Donna Graham and Professor Nancy Jack

EQSC-M - Attachments D2, D3

Create a minor in Equine Science.

#### Department of Crop, Soil and Environmental Sciences

Presented by Professor Donna Graham and Professor David Miller

WLHA-M - Attachments D4, D5

Create a minor in Wildlife Habitat

#### Department of Poultry Science

Presented by Professor Donna Graham and Professor Robert Wideman

FMGRCT - Attachments D6, D7

Create an undergraduate Food Safety Manager Certificate of Proficiency

HCCPCT - Attachments D8, D9

Create an undergraduate Hazard Analysis Critical Control Point Coordinator Certificate of Proficiency

### **TABLE E**

College of Education and Health Professions

Presented by Professor Stephen Langsner and Professor Charles Riggs

#### College of Education and Health Professions

COEHP Honors Program - Attachment E1

Proposal to modify the existing honors program in the College of Education and Health Professions: Previous program differentiated only by honors, high honors and highest honors. Proposed program will have different distinctions as shown on the Attachment.

#### Department of Curriculum and Instruction

SPEDBS - Attachment E2

Delete program.

### **TABLE F**

College of Engineering

Presented by Professor Bob Beitle

#### Department of Biological Engineering

BENGBS - Attachment F1

Changes to courses; addition of one hour to two courses; elimination of GNEG 1122 as a requirement; change in program requirements as a result of changes in courses.

**TABLE G**

Graduate Programs

Presented by Professor Will Miller

Graduate School

PSERMS - Attachments G1, G3

Create a Master of Public Service degree, in collaboration with the Clinton School of Public Service

PSERCT - Attachments G2, G3

Create a graduate certificate in Public Service, in collaboration with the Clinton School of Public Service

## ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

### SECTION I: Approvals

<hr/> Department / Program Chair	<hr/> Date Submitted	<hr/> Faculty Senate Chair	<hr/> Date
<hr/> College Dean	<hr/> Date	<hr/> Provost	<hr/> Date
<hr/> Undergraduate Program Committee Chair	<hr/> Date	<hr/> Board of Trustees Approval Date	
<hr/> Graduate Council Chair	<hr/> Date	<hr/> Arkansas Higher Education Coordinating Board Approval Date	

### SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit:       Major/Field of Study       Minor       Other Unit \_\_\_\_\_

Level:                       Undergraduate       Graduate       Law      Effective Catalog Year 2004-05

Current Name              **B. S in Biological Engineering**

College, School, Division **ENGR**                      Department Code **BAEG**

Current Code (6 digit Alpha) **BSBENG**                      Proposed Code (6 digit Alpha) \_\_\_\_\_  
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program                      CIP Code \_\_\_\_\_  
Prior assignment from Office of Institutional Research is required.

Proposed Name \_\_\_\_\_  
When a program name is changed, enrollment of current students reflects the new name.

### SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <<http://www.adhe.arknet.edu.aadept.html>>.

### SECTION IV: Eliminate an Existing Program/Unit

Code/Name \_\_\_\_\_      Effective Catalog Year \_\_\_\_\_

No new students admitted to program after Term: \_\_\_\_ Year: \_\_\_\_\_

Allow students in program to complete under this program until Term: \_\_\_\_ Year: \_\_\_\_\_

### SECTION V: Proposed Changes to an Existing Program

**Insert here a statement of the exact changes to be made: Changes to courses: BENG 1012, 1022, 2612 and 2622. Addition of 1 hour (and major content change) to courses BENG 3722 and 3732. Elimination of GNEG 1122 as a requirement.**

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

## **SECTION VI: Justification**

*Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)*

**This change strengthens the BSBENG program by providing a formal integration of the Design Studio approach into the educational process and by providing additional biological engineering course time required (2 credit hours) at the junior level, concentrating on unit operations and transport processes. Changes were designed by faculty after observing students' engineering competencies at the senior level and by listening to BENG Advisory Board. To keep the total program credit hours constant, the course GNEG 1122 was deleted as a requirement. BENG 1012 and BENG 1022 were modified to introduce a CAD package to freshman and faculty have committed to using the software in design projects throughout the curriculum.**

**To implement these changes, the following BENG course changes have been proposed:**

- 1) BENG 1012, slight change in the title, description, content**
- 2) BENG 1022, change in title (to include 'Design Studio'), description and content (to include graphics)**
- 3) BENG 2612/2622, change in title, description and content (to include Design Studio)**
- 4) BENG 3722, add 1 hour (now BENG 3723), change title, description and content (to focus on unit operations)**
- 5) BENG 3732, add 1 hour (now BENG 3733), change title, description and content (to focus on transport phenomena).**

**To better allow for students to obtain needed prerequisites, BENG 3712, 3723, 3733 will now be offered in a sequence delayed one semester (relative to current plan), with recommendations to students to take these in Fall of junior year, spring of junior year, and Fall of senior year, respectively.**

**The requirement for GNEG 1122 (engineering graphics) was eliminated. Graphics software was added to BENG 1022.**

**These proposed changes do not increase the number of hours required for the degree. It is proposed that the new courses be offered immediately (Fall, 2004) with changes easliy adopted by current students by substituting new courses for old requirements as suggested by adviser-supplied guidelines. The changes will not affect any other program.**

## **SECTION VII: Catalog Text and Format**

*Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).*

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

(

Current Catalog Copy:

Departments, Degree Programs  
and Courses

BIOLOGICAL AND AGRICULTURAL ENGINEERING (BENG)

Lalit Verma

Head of the Department

203 Engineering Hall

575-2351

- Professors Griffis, Li, Loewer, Verma , Vories
- Associate Professors Carrier, Costello,
- Assistant Professors Bajwa, Chaubey , Kavdia, Kim, Matlock, Osborn
- Research Professor Gardisser
- Research Associate Professors Huitink, Tacker, VanDevender
- Research Assistant Professor Murphy
- Adjunct Professor Clausen
- Adjunct Associate Professors Beitle, Deaton
- Adjunct Assistant Professors Haggard, Howell, Ward, Wimberly, Yang

Biological Engineers improve people's lives today and help assure a sustainable quality of life on Earth for tomorrow. They create solutions to problems by coupling living systems (human, environmental, food, and microbial) with the tools of engineering and biotechnology. Biological engineers: improve human health through biomedical engineering; ensure a safe, nutritious food supply and create critical, new medicines through food and bioprocess engineering; secure a healthy and safe environment through ecological engineering; and create tools to manage agriculture, the environment, and the products of biotechnology through bioresource engineering.

Biological Engineering is an ABET accredited program leading to the B.S. degree. M.S. and Ph.D. degrees are also offered. The curriculum is under the joint supervision of the dean of the College of Engineering and the dean of the Dale Bumpers College of Agricultural, Food and Life Sciences. The Bachelor of Science in Biological Engineering degree is conferred by the College of Engineering and is granted after the successful completion of 128 hours of approved course work.

The educational objectives of the Biological Engineering program are to produce graduates who 1.) effectively apply engineering to biological systems and phenomena (plants, animals, humans, microbes, and the environment) with demonstrated proficiency in basic professional and personal skills, and 2.) are well prepared for future challenges in biological engineering, life-long learning, and professional and ethical contributions to society through sustained accomplishments.

Areas of Concentration

The four areas of concentration in biological engineering are as follows:

Biomedical Engineering – an overview of instrumentation, physiological modeling, biomechanics, biomaterial replacement in the body, rehabilitation engineering, and assistive technology for the disabled. This area is excellent preparation for medical, veterinary, or dental school as well as for graduate programs in biomedical engineering.

Bioresource Engineering – remote sensing, application of computer and satellite technology for managing agriculture, designing machines to interface with living systems.

Ecological Engineering – removing and preventing pollution of the environment, improving and maintaining high water quality, balancing competing interests for natural resources, stream restoration, and managing ecological services.

Food and Bioprocess Engineering – food processing, food safety, developing new products from biomaterials, biotechnology, bioinformatics, Proteomics, using bacteria to produce products, extracting nutrients and drugs from natural products.

Each student is required to complete 12 semester hours of approved electives in his or her area of concentration. Six of these hours must be from the biological engineering design elective courses. The remaining 6 hours are classified as technical electives and consist mainly of upper-division courses in engineering, mathematics, and the sciences as approved by the student's advisor. The department maintains a list of approved electives.

The areas of technical concentration and the recommended elective courses for each are listed here. Note that additional Biological Engineering Design Elective courses (beyond the 6 hours required) may be taken to satisfy Technical Elective requirements.

Biomedical Engineering

NOTE: Pre-Medical students must take CHEM 3603/3601L, Organic Chemistry I and CHEM 3613/3611L, Organic Chemistry II instead of CHEM 2613/2611L, Organic Physiological Chemistry. This requires special scheduling of courses beginning in the first sophomore semester. See your faculty adviser for this schedule plan.

Design Electives:

BENG 4113, Risk Analysis for Biological Systems

BENG 4123, Biosensors and Bioinstrumentation  
BENG 4203, Introduction to Biomedical Engineering  
BENG 4213, Applications of Biomedical Engineering  
BENG 4623, Biological Reactor Systems Design  
BENG 4403, Control Env Struct

Technical Electives:

CHEM 3613, Organic Chemistry II  
CHEM 3611L, Organic Chemistry II Lab  
ZOOL 2404, Comparative Vertebrate Morphology or  
ZOOL 2443/2441L, Human Anatomy  
BIOL 4234, Comparative Physiology or  
ZOOL 2213/2211L, Human Physiology  
BIOL 2533/2531L, Cell Biology  
MBIO 4233, Microbial Genetics  
KINS 3353, Mechanics of Human Movement  
ELEG 2903, Digital Systems  
HESC 3204, Nutrition  
MEEG 3103, Mechanisms

Bioresource Engineering

Design Electives:

BENG 4113, Risk Analysis for Biological Systems  
BENG 4123, Biosensors and Bioinstrumentation  
BENG 4703, Food and Bioprocess Engineering

Technical Electives:

BENG 4803, Precision Agriculture  
MEEG 3103, Mechanisms  
MEEG 3113, Machine Dynamics and Control  
MEEG 3123, Design Stress Analysis  
MEEG 4123, Finite Element Methods in Mechanical Engineering  
INEG 4533, Application of Machine Vision

Ecological Engineering

Design Electives:

BENG 4113, Risk Analysis  
BENG 4403, Controlled-Environment Structures for Biological Systems  
BENG 4623, Biological Reactor Systems Design  
BENG 4903, Natural Resources Engineering  
BENG 4913, Bio-environmental Engineering  
BENG 4923, Nonpoint Source Pollution Engineering

Technical Electives:

CVEG 3243, Environmental Engineering  
CVEG 4243, Environmental Engineering Design  
CSES 2203, Soil Science  
CSES 4043, Environmental Impact and Fate of Pesticides  
BENG 4803, Precision Agriculture  
GEOG 4543, Geographic Information Systems  
ENSC 4033, Water Quality Analysis

Food and Bioprocess Engineering

Design Electives:

BENG 4113, Risk Analysis for Biological Systems  
BENG 4123, Biosensors and Bioinstrumentation  
BENG 4623, Biological Reactor Systems Design  
BENG 4703, Food and Bioprocess Engineering

Technical Electives:

FDSC 4304/4300L, Food Chemistry  
FDSC 4124/4120L, Food Microbiology  
FDSC 3103, Principles of Food Proc.  
CHEM 3453/3451L, Elements of Physical Chemistry

MEEG 4413, Heat Transfer  
CHEG 4423, Auto. Process Control

The following section contains the list of courses required for the Bachelor of Science in Biological Engineering degree and a suggested sequence. Some courses are not offered every semester so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites.

### BIOLOGICAL ENGINEERING PROGRAM

#### Freshman Year - First Semester

2 BENG 1012, Biological Engineering Design Fundamentals I

2 GNEG 1122, Introduction CAD

3 ENGL 1013, Composition I

3 CHEM 1103, University Chemistry I

4 MATH 2554, Calculus I

3 Humanities/Social Studies elective

17 semester hours

#### Second Semester

2 BENG 1022, Biological Engineering Design Fundamentals II

3 ENGL 1023, Technical Composition II

3 CHEM 1123, University Chemistry II

1 CHEM 1121L, University Chemistry II Lab

4 MATH 2564, Calculus II

3 BIOL 1543, Principles of Biology

1 BIOL 1541L, Principles of Biology Lab

17 semester hours

#### Sophomore Year - First Semester

2 BENG 2612, Quantitative Biological Engineering I

4 PHYS 2054, University Physics I

4 MATH 2574, Calculus III

3 MBIO 2013, General Microbiology\*

1 MBIO 2011L, General Microbiology Lab

3 Humanities/Social Studies Elective

17 semester hours

#### Second Semester

2 BENG 2622, Quantitative Biological Engineering II

2 BENG 3712, Engr Properties of Biol Materials

4 PHYS 2074, University Physics II

3 MEEG 2003, Statics

3 MEEG 2403, Thermodynamics

3 CHEM 2613, Organic Physiological Chemistry\*\*

1 CHEM 2611L, Organic Physiological Chemistry Lab

18 semester hours

#### Junior Year - First Semester

2 BENG 3722, Biological Process Eng I

3 ELEG 2103, Electronic Circuits

1 ELEG 2101L, Electronic Circuits Lab

3 MEEG 2013, Dynamics

3 CHEM 3813, Intro to Biochemistry

4 MATH 3404, Differential Equations

16 semester hours

#### Second Semester

2 BENG 3732, Biological Process Eng II

3 BENG 3803, Mechanical Design in Biol Engr

3 BENG 4103, Instrumentation in Biological Engr

3 MEEG 3013, Mechanics of Materials



3 CVEG 3213, Hydraulics or MEEG 3503, Mechanics of Fluids  
14 semester hours

Senior Year - First Semester

3 BENG 4813, Senior Biological Engineering Design I

3 BENG Design elective

3 Technical elective

6 Humanities/social studies elective

15 semester hours

Second Semester

2 BENG 4822, Senior Biological Eng Design II

3 BENG Design elective

6 Humanities/social studies elective

3 Technical elective

14 semester hours

128 Total hours required

\*Students in the Pre-Medical focus area must see faculty adviser for alternate scheduling and elective course requirements.

\*\*See note under Focus Area description for Pre-Medical.

SEE PAGE 259 FOR BIOLOGICAL ENGINEERING (BENG) COURSES

Proposed Catalog Copy:

Departments, Degree Programs  
and Courses

BIOLOGICAL AND AGRICULTURAL ENGINEERING (BENG)

Lalit Verma

Head of the Department

203 Engineering Hall

575-2351

- Professors Griffis, Li, Loewer, Verma , Vories
- Associate Professors Carrier, Costello,
- Assistant Professors Bajwa, Chaubey , Kavdia, Kim, Matlock, Osborn
- Research Professor Gardisser
- Research Associate Professors Huitink, Tacker, VanDevender
- Research Assistant Professor Murphy
- Adjunct Professor Clausen
- Adjunct Associate Professors Beitle, Deaton
- Adjunct Assistant Professors Haggard, Howell, Ward, Wimberly, Yang

Biological Engineers improve people's lives today and help assure a sustainable quality of life on Earth for tomorrow. They create solutions to problems by coupling living systems (human, environmental, food, and microbial) with the tools of engineering and biotechnology. Biological engineers: improve human health through biomedical engineering; ensure a safe, nutritious food supply and create critical, new medicines through food and bioprocess engineering; secure a healthy and safe environment through ecological engineering; and create tools to manage agriculture, the environment, and the products of biotechnology through bioresource engineering.

Biological Engineering is an ABET accredited program leading to the B.S. degree. M.S. and Ph.D. degrees are also offered. The curriculum is under the joint supervision of the dean of the College of Engineering and the dean of the Dale Bumpers College of Agricultural, Food and Life Sciences. The Bachelor of Science in Biological Engineering degree is conferred by the College of Engineering and is granted after the successful completion of 128 hours of approved course work. The educational objectives of the Biological Engineering program are to produce graduates who 1.) effectively apply engineering to biological systems and phenomena (plants, animals, humans, microbes, and the environment) with demonstrated proficiency in basic professional and personal skills, and 2.) are well prepared for future challenges in biological engineering, life-long learning, and professional and ethical contributions to society through sustained accomplishments.

Areas of Concentration

The four areas of concentration in biological engineering are as follows:

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Bioresource Engineering – remote sensing, application of computer and satellite technology for managing agriculture, designing machines to interface with living systems.

Ecological Engineering – removing and preventing pollution of the environment, improving and maintaining high water quality, balancing competing interests for natural resources, stream restoration, and managing ecological services.

Food and Bioprocess Engineering – food processing, food safety, developing new products from biomaterials, biotechnology, bioinformatics, Proteomics, using bacteria to produce products, extracting nutrients and drugs from natural products.

Each student is required to complete 12 semester hours of approved electives in his or her area of concentration. Six of these hours must be from the biological engineering design elective courses. The remaining 6 hours are classified as technical electives and consist mainly of upper-division courses in engineering, mathematics, and the sciences as approved by the student's advisor. The department maintains a list of approved electives.

The areas of technical concentration and the recommended elective courses for each are listed here. Note that additional Biological Engineering Design Elective courses (beyond the 6 hours required) may be taken to satisfy Technical Elective requirements.

### Biomedical Engineering

NOTE: Pre-Medical students must take CHEM 3603/3601L, Organic Chemistry I and CHEM 3613/3611L, Organic Chemistry II instead of CHEM 2613/2611L, Organic Physiological Chemistry. This requires special scheduling of courses beginning in the first sophomore semester. See your faculty adviser for this schedule plan.

#### Design Electives:

BENG 4113, Risk Analysis for Biological Systems

BENG 4123, Biosensors and Bioinstrumentation

BENG 4203, Introduction to Biomedical Engineering

BENG 4213, Applications of Biomedical Engineering

BENG 4623, Biological Reactor Systems Design

BENG 4403, Design of Enclosed Ecosystems

#### Technical Electives:

CHEM 3613, Organic Chemistry II

CHEM 3611L, Organic Chemistry II Lab

ZOOL 2404, Comparative Vertebrate Morphology or

ZOOL 2443/2441L, Human Anatomy

BIOL 4234, Comparative Physiology or

ZOOL 2213/2211L, Human Physiology

BIOL 2533/2531L, Cell Biology

MBIO 4233, Microbial Genetics

KINS 3353, Mechanics of Human Movement

ELEG 2903, Digital Systems

HESC 3204, Nutrition

MEEG 3103, Mechanisms

### Bioresource Engineering

#### Design Electives:

BENG 4113, Risk Analysis for Biological Systems

BENG 4123, Biosensors and Bioinstrumentation

BENG 4703, Food and Bioprocess Engineering

#### Technical Electives:

BENG 4803, Precision Agriculture

MEEG 3103, Mechanisms

MEEG 3113, Machine Dynamics and Control

MEEG 3123, Design Stress Analysis

MEEG 4123, Finite Element Methods in Mechanical Engineering

INEG 4533, Application of Machine Vision

### Ecological Engineering

#### Design Electives:

BENG 4113, Risk Analysis

BENG 4403, Design of Enclosed Ecosystems

BENG 4623, Biological Reactor Systems Design

BENG 4903, Natural Resources Engineering  
BENG 4913, Design of Animal Waste Management Systems  
BENG 4923, Nonpoint Source Pollution Engineering

**Technical Electives:**

CVEG 3243, Environmental Engineering  
CVEG 4243, Environmental Engineering Design  
CSES 2203, Soil Science  
CSES 4043, Environmental Impact and Fate of Pesticides  
BENG 4803, Precision Agriculture  
GEOG 4543, Geographic Information Systems  
ENSC 4033, Water Quality Analysis

**Food and Bioprocess Engineering**

**Design Electives:**

BENG 4113, Risk Analysis for Biological Systems  
BENG 4123, Biosensors and Bioinstrumentation  
BENG 4623, Biological Reactor Systems Design  
BENG 4703, Food and Bioprocess Engineering

**Technical Electives:**

FDSC 4304/4300L, Food Chemistry  
FDSC 4124/4120L, Food Microbiology  
FDSC 3103, Principles of Food Proc.  
CHEM 3453/3451L, Elements of Physical Chemistry  
MEEG 4413, Heat Transfer  
CHEG 4423, Auto. Process Control

**The following section contains the list of courses required for the Bachelor of Science in Biological Engineering degree and a suggested sequence. Some courses are not offered every semester so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites.**

**BIOLOGICAL ENGINEERING PROGRAM**

**Freshman Year - First Semester**

2 BENG 1012, Biological Engineering Design Fundamentals  
3 ENGL 1013, Composition I  
3 CHEM 1103, University Chemistry I  
4 MATH 2554, Calculus I  
3 Humanities/Social Studies elective  
15 semester hours

**Second Semester**

2 BENG 1022, Biological Engineering Design Studio I  
3 ENGL 1023, Technical Composition II  
3 CHEM 1123, University Chemistry II  
1 CHEM 1121L, University Chemistry II Lab  
4 MATH 2564, Calculus II  
3 BIOL 1543, Principles of Biology  
1 BIOL 1541L, Principles of Biology Lab  
17 semester hours

**Sophomore Year - First Semester**

2 BENG 2612, Biological Engineering Design Studio II  
4 PHYS 2054, University Physics I  
4 MATH 2574, Calculus III  
3 MBIO 2013, General Microbiology\*  
1 MBIO 2011L, General Microbiology Lab  
3 Humanities/Social Studies Elective  
17 semester hours

**Second Semester**

2 BENG 2622, Biological Engineering Design Studio III

4 PHYS 2074, University Physics II  
3 MEEG 2003, Statics  
3 MEEG 2403, Thermodynamics (or CHEG 2313)  
3 CHEM 2613, Organic Physiological Chemistry\*\*  
1 CHEM 2611L, Organic Physiological Chemistry Lab  
16 semester hours

Junior Year - First Semester  
2 BENG 3712, Engr Properties of Biol Materials  
3 ELEG 2103, Electronic Circuits  
1 ELEG 2101L, Electronic Circuits Lab  
3 MEEG 2013, Dynamics  
3 CHEM 3813, Intro to Biochemistry  
4 MATH 3404, Differential Equations  
16 semester hours

Second Semester  
3 BENG 3723, Unit Operations in Biological Eng  
3 BENG 3803, Mechanical Design in Biol Engr  
3 BENG 4103, Instrumentation in Biological Engr  
3 MEEG 3013, Mechanics of Materials  
3 CVEG 3213, Hydraulics (or MEEG 3503 or CHEG 2133)  
15 semester hours

Senior Year - First Semester  
3 BENG 4813, Senior Biological Engineering Design I  
3 BENG 3733, Transport Phenomena in Biological Systems  
3 Technical elective  
6 Humanities/social studies elective  
15 semester hours

Second Semester  
2 BENG 4822, Senior Biological Eng Design II  
3 BENG Design elective  
3 BENG Design elective  
6 Humanities/social studies elective  
3 Technical elective  
17 semester hours

128 Total hours required

\*Students in the Pre-Medical focus area must see faculty adviser for alternate scheduling and elective course requirements.

\*\*See note under Focus Area description for Pre-Medical.

SEE PAGE 259 FOR BIOLOGICAL ENGINEERING (BENG) COURSES

)

## **SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_

DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
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(1) College  
(7) Treasurer

(2) Department  
(8) Undergraduate Program Committee

(3) Admissions

(4) Institutional Research

(5) Continuing Education  
Initials \_\_\_\_\_ Date \_\_\_\_\_

(6) Graduate School

## ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

### SECTION I: Approvals

Department / Program Chair _____	Date Submitted _____	Faculty Senate Chair _____	Date _____
College Dean _____	Date _____	Provost _____	Date _____
Undergraduate Program Committee Chair _____	Date _____	Board of Trustees Approval Date _____	
Graduate Council Chair _____	Date _____	Arkansas Higher Education Coordinating Board Approval Date _____	

### SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit:      Major/Field of Study    Minor        Other Unit \_\_\_\_\_

Level:              Undergraduate        Graduate      Law         Effective Catalog Year **Fall 2005**

Current Name       \_\_\_\_\_

College, School, Division **GRAD**                             Department Code **GRDS**

Current Code (6 digit Alpha) \_\_\_\_\_                     Proposed Code (6 digit Alpha) **UAC SMP**  
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program                             CIP Code \_\_\_\_\_  
Prior assignment from Office of Institutional Research is required.

Proposed Name **Master of Public Service**  
When a program name is changed, enrollment of current students reflects the new name.

### SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <<http://www.adhe.arknet.edu.aadept.html>>.

### SECTION IV: Eliminate an Existing Program/Unit

Code/Name \_\_\_\_\_       Effective Catalog Year \_\_\_\_\_

No new students admitted to program after Term: \_\_\_\_ Year: \_\_\_\_\_

Allow students in program to complete under this program until Term: \_\_\_\_ Year: \_\_\_\_\_

### SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: \_\_\_\_\_

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

## SECTION VI: Justification

Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)

## SECTION VII: Catalog Text and Format

Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

For minors, state requirements in terms of hours, required courses, electives, etc.

For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.

For Law School program/units, prepare text consistent with current catalog style.

For centers, prepare text consistent with current catalog style.

**The mission of the Masters of Public Service in the Clinton School of the University of Arkansas is to prepare individuals for service that advances the common good in Arkansas communities and beyond. The primary purpose of the Clinton School is to harness the University's overarching commitment in teaching, research, and service to the preparation of today's current and emerging leaders. As such, the Clinton School will be a learning destination for people who are motivated to serve others and seek practical professional knowledge and experience about domestic and global career options. It is anticipated that many who are accepted into the master's degree program will be individuals with substantive prior involvement in the service sector. The master's degree program is designed to prepare graduates for interdisciplinary leadership positions in elected office, advocacy groups, nonprofit organizations, community-based organizations, public agencies, private foundations, and policy research centers. The degree is offered in collaboration with the University of Arkansas, Fayetteville (UAF); the University of Arkansas at Little Rock (UALR); and the University of Arkansas for Medical Sciences (UAMS).**

**The Master of Public Service (MPS) degree program requires 31 semester credit hours for students with in-depth experience in public service or 36 semester hours for those without this prior experience. Of the 31 semester hours, 13 hours are in core courses. In addition, each MPS student will be required to participate in 6 semester hours of a capstone project and 12 semester hours from a selective and elective professional development cluster, a group of courses designed to (a) strengthen a student's particular skills, (b) prepare the student for the capstone experience, or (c) work toward an applied interest field such as rural development, conflict transformation, or nonprofit organizational management. A five-hour practicum is required of all students who do not have significant public service prior to entry.**

**The following curriculum of core, elective, and capstone courses is required for completion of a Master of Public Service from the Clinton School. Students without extensive prior experience in public service will be required to take an additional five credit hour practicum not described below.**

### **Required Core**

<b><u>Problem and Asset Analysis</u></b>	<b><u>3 hours</u></b>
<b><u>Leadership in Public Service</u></b>	<b><u>3 hours</u></b>
<b><u>Communication Processes and Conflict Transformation</u></b>	<b><u>3 hours</u></b>
<b><u>Dynamics of Social Change</u></b>	<b><u>3 hours</u></b>

Ethical, Normative and Legal Dimensions of Leadership 1 hour Electives/Selectives (Professional cluster)  
12 hours  
 • May include up to three hours of seminar series or enrollment  
in public service clinic program  
Practicum (required for students without extensive public service experience) 5 hours  
Capstone Sequence 6 hours  
Program Total (student with extensive public service) 31 hours  
Program Total (regular students) 36 hours

**SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_  
 DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

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Notification to:  
 (1) College (2) Department (3) Admissions (4) Institutional Research (5) Continuing Education (6) Graduate School  
 (7) Treasurer (8) Undergraduate Program Committee Initials \_\_\_\_\_ Date \_\_\_\_\_





## SECTION VI: Justification

Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)

## SECTION VII: Catalog Text and Format

Insert the current catalog text and the proposed catalog text. Be sure that the proposed text includes all the elements listed below in order. Do not include university requirements or college requirements. Do not substitute a sample schedule for an explicit statement of requirements. Use standard terms and vocabulary (see Academic Policy 1621.10).

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

For minors, state requirements in terms of hours, required courses, electives, etc.

For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.

For Law School program/units, prepare text consistent with current catalog style.

For centers, prepare text consistent with current catalog style.

**The mission of the Clinton School of the University of Arkansas is to prepare individuals for service that advances the common good in Arkansas communities and beyond. The primary purpose of the Clinton School is to harness the University's overarching commitment in teaching, research, and service to the preparation of today's current and emerging leaders. As such, the Clinton School will be a learning destination for people who are motivated to serve others and seek practical professional knowledge and experience about domestic and global career options. The certificate is offered in collaboration with the University of Arkansas, Fayetteville (UAF); the University of Arkansas at Little Rock (UALR); and the University of Arkansas for Medical Sciences (UAMS).**

**The Certificate of Public Service program requires 13 semester credit hours:**

<u>Problem and Asset Analysis</u>	<u>3 hours</u>
<u>Leadership in Public Service</u>	<u>3 hours</u>
<u>Communication Processes and Conflict Transformation</u>	<u>3 hours</u>
<u>Dynamics of Social Change</u>	<u>3 hours</u>
<u>Ethical, Normative, and Legal Dimensions of Leadership</u>	<u>1 hour</u>
<u>Total</u>	<u>13 hours</u>

## SECTION VIII: Action Recorded by Registrar's Office

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_

DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

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**Distribution**

Notification to:

(1) College  
(7) Treasurer

(2) Department  
(8) Undergraduate Program Committee

(3) Admissions

(4) Institutional Research

(5) Continuing Education  
Initials \_\_\_\_\_

Date \_\_\_\_\_

(6) Graduate School

## **ATTACHMENT G3**

Proposal to the

### **ARKANSAS DEPARTMENT OF HIGHER EDUCATION**

for Two New Academic Programs

#### **CLINTON SCHOOL MASTER OF PUBLIC SERVICE and CERTIFICATE OF PUBLIC SERVICE**

**UNIVERSITY OF ARKANSAS, FAYETTEVILLE,  
UNIVERSITY OF ARKANSAS AT LITTLE ROCK, AND  
UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES**

#### **1. PROPOSED PROGRAM TITLES**

Master of Public Service (MPS); Certificate of Public Service (Certificate)

#### **2. CIP CODE REQUESTED**

#### **3. CONTACT PERSON**

Thomas A. Bruce, MD, Dean *Pro Tem*  
Clinton School of Public Service  
University of Arkansas  
4301 West Markham, #820  
Little Rock, AR 72205-7199  
Phone: 501 526-6619  
Fax: 501 526-6620  
E-mail: brucethomasa@uams.edu

#### **4. PROPOSED STARTING DATE**

September 2004 (School starts Continuing and Professional Education Programs)

September 2005 (School starts Master's degree and Certificate Programs)

#### **5. PROGRAM SUMMARY**

The mission of the Clinton School of Public Service of the University of Arkansas (UACS), is to prepare individuals for service that advances the common good in Arkansas communities and beyond. The primary purpose of UACS is to harness the University's overarching commitment in teaching, research, and service to the preparation of today's current and emerging leaders. As such, UACS will be a learning destination for people who are motivated to serve others and seek practical professional knowledge and experience about domestic and global career options. It is anticipated that many who are accepted into the master's degree program will be individuals with substantive prior involvement in the service sector.

UACS will be a unique program affiliated with the University of Arkansas System. It proposes to confer a Masters in Public Service (MPS) degree and a Certificate in Public Service (Certificate). In addition, the School proposes to sponsor non-credit courses for the general public and to hold town hall meetings,

symposia, conferences, lectures, and other events for its various audiences and often in conjunction with activities at the Clinton Presidential Center. UACS will cooperate extensively with the Clinton Presidential Center in bringing internationally prominent leaders to Arkansas to participate in educational and community demonstrations or outreach programs.

While the Clinton Presidential Center will attract tourists and generate international exposure for Arkansas, UACS will have a more sustained impact by collaborating with presidential scholars and preparing a variety of service leaders for the public, private, and non-profit sectors.

Currently, only two presidential libraries have an adjacent affiliated graduate degree program (the L. B. Johnson Library at the University of Texas, and the G. H.W. Bush Library at Texas A&M University). The Clinton School will be one component of the William Jefferson Clinton Presidential Center, which also will include the Presidential Library and Museum, the Archives of the Clinton presidency years, and the Presidential Park and Arboretum. The School will have ready access to the Presidential Library and Archives, which will be incredible resources for its students and the public. Faculty, students and staff also will be able to draw on expert visitors to the Center, who will be used from time to time for guest lectures. Unlike the LBJ and Bush Schools, the Clinton School will be unique in having a former president who actively teaches the enrolled students.

In addition, the UACS will be the academic arm for many of the President's public policy initiatives. These are now carried out in five priority areas: (1) economic empowerment of poor people, (2) racial, ethnic, and religious reconciliation, (3) health security, specifically combating AIDS, (4) leadership development, and (5) citizen service. Examples of some of the Clinton public policy projects under way include: work with former President Nelson Mandela to address AIDS in poor African countries; work in India for social and economic change following a devastating earthquake there; Protestant-Catholic reconciliation in Northern Ireland; Muslim-Christian reconciliation in the Middle East; and small business development and welfare-to-work initiatives in Harlem. A number of public policy projects are under consideration by President Clinton for the Lower Mississippi Delta. The UACS students will have an opportunity to select one or more of these sites (among others that are not connected to President Clinton) for their 'capstone' project in pursuit of a master's degree.

The proposed Master of Public Service (MPS) degree program will require 31 semester credit hours for students with in-depth experience in public service or 36 semester hours for regular students. The master's degree program is designed to prepare graduates for interdisciplinary leadership positions in elected office, advocacy groups, nonprofit organizations, community-based organizations, public agencies, private foundations, and policy research centers. The degree will be offered in collaboration with the University of Arkansas, Fayetteville (UAF); the University of Arkansas at Little Rock (UALR); and the University of Arkansas for Medical Sciences (UAMS). Beyond the 13-hour core, each MPS student will be required to participate in 6 semester hours of a capstone project and 12 semester hours from a selective and elective professional development cluster--- a group of courses designed to (a) strengthen a student's particular skills, (b) prepare the student for the capstone experience, or (c) work toward an applied interest field such as rural development, conflict transformation, or nonprofit organizational management. A five-hour practicum is required of all students who do not have significant public service prior to entry.

To maximize efficiency and avoid duplication, UACS students in the MPS program will be able to meet some of their course requirements through graduate courses offered on other campuses within the University System. Students will be encouraged by their UACS faculty advisor to seek expertise in their fields of professional interest without regard to whether the course is provided on-site at UACS. For example, the University of Arkansas, Fayetteville, (UAF) has an existing doctoral program in public policy. It would be duplicitous for UACS to offer such courses when students with public policy interests could merely take such courses on the Fayetteville campus. In like manner, those students who are interested in public administration should find easy access to desirable graduate courses at UALR, or those more interested in health policy issues will find ready-made courses available in the College of

Public Health at UAMS. In effect, the UACS academic program will be designed in partnership with the three graduate campuses at UAF, UALR, and UAMS. The UACS Committee on Academic Standards will be responsible for reviewing courses from these University System campuses that can be applied to the MPS degree. UACS currently is compiling an inventory of all appropriate courses offered throughout the University, and ‘partnership’ agreements will be developed with the prospective academic departments and campuses (see also Appendix A).

The core courses listed in Section 7 will initially be taught and/or coordinated by full-time UACS faculty or faculty recruited from within the UA system who have agreed to accept secondary appointments in the Clinton School of Public Service. In addition, visiting scholars will be used liberally to supplement the in-house UA faculty in teaching the UACS courses. These visiting faculty members will be drawn from distinguished members of the Clinton administration, or from prestigious universities or public service programs around the world, and the presence of the Presidential Library and Archives should be most helpful in identifying and recruiting these individuals for limited instructional duties. Special efforts will be made to assure that students are given bipartisan views on all political topics.

The proposed Certificate program, consisting of 13 credit hours of core UACS courses, has been designed to provide students who do not wish to complete all the requirements for a graduate degree a solid exposure to the key components of modern public service. On recommendation of the Faculty Adviser, substitutions may be made in the core courses if the professional interest of the enrolled students lies in a specialty area of public service. Graduate credit in the Certificate Program will require students to have completed a baccalaureate degree and meet other admission requirements.

UACS will utilize state-of-the-art distance learning technology and techniques to maximize access to its courses for executive students residing outside the Little Rock area. It is anticipated that some core courses will be taught using the internet streaming equipment available at the School and at the various satellite sites throughout the state, while others will be taught using a Web-assisted format. Because the core faculty will be individuals also teaching at other state institutions, it will be necessary to provide some training and technical assistance to revise courses to assure that off-site students receive the same high quality of public service instruction as those attending classes at the School. The UACS Committee on Academic Standards will be responsible for monitoring and evaluating the courses offered via distance learning methods.

## 6. NEED FOR THE PROGRAM

### A. Public Service, rather than Public Administration or Public Policy

Former President Clinton speaks often about the unparalleled importance to our nation of individuals who make substantial contributions in the field of public service. To Mr. Clinton, public service is exemplified by “elected office.” That is where his personal experience lies over the years. The field is much broader than that, however.

The key word is “public.” It is service that works for all, not just a few individuals. The focus of such service may be a neighborhood, a community, a state, the nation, or the world. Public service is a set of actions and activities that are devoted to the common good.

Author Andre Diaz stated the concept well in *The Harvard College Guide to Careers in Public Service*.

Public service work may be divided into three kinds: social service, social action, and social policy. Although the broad purpose of all three kinds of work is **social change**, they differ in their approach to it. **Social service** involves working directly with individuals to help improve their lives. **Social action** also involves working with individuals but in terms of organizing communities to effect societal change... Social and community activists seek to end injustice and to create strong communities fostering economic, social, and psychological health...Community organizing is another kind of social action...**Social policy** work involves

working for system change in a ‘top down’ strategy, whereby change is broad, systemic, and often effected through government and legislative changes.

In developing the Clinton School of Public Service, it was agreed that public service can be full time, as in preparing for a public service career, or it can be a single or repeated set of limited actions aimed at the betterment of society. The Clinton School is committed to preparing its students for both of these. In addition, public service need not be limited to actions taken in the public sector, since individuals in the business and corporate world, the private (non-state) sector, can be very much involved at the personal level in public service through volunteerism or election to part-time legislative positions. **For this reason, the Clinton School will adopt a broad definition of “public service” in seeking to fulfill the need to train not only career public servants but also provide opportunities for non-career students seeking to sharpen their skills in improving the civic life of their community.** Thus, the terms “public administration” and “public policy” were considered too narrow to adequately describe the comprehensiveness of the UACS experience.

### B. Similar Programs

The steering committee, comprised of three former chancellors of the collaborating campuses, stakeholder representatives from the community, and the Dean *pro tem*, visited other Presidential schools and schools of public service throughout the country to refine their thoughts concerning academic programming for UACS. In doing so, they collected information on the number of applicants and admissions. The demand for degrees in public policy, public administration, and now, with the UACS, public service, far outstrips current capacity as demonstrated in **Table 1**.

**Table 1. Numbers of Applicants Seeking Admission to Schools of Public Policy and Public Affairs and Numbers of Applicants Admitted.**

SCHOOL	LOCATION	NUMBER OF APPLICANTS	NUMBER ADMITTED 2003
George Bush School of Government and Public Service	Texas A & M University College Station, TX	248	50
Daniel J. Evans School of Public Affairs	University of Washington Seattle, WA	400	100
Gerald R. Ford School of Public Policy	University of Michigan Ann Arbor, MI	443	81
Richard and Rhoda Goldman School of Public Policy	University of California Berkeley, CA	800	60
Lyndon B. Johnson School of Public Affairs	University of Texas Austin, TX	360	149
John F. Kennedy School of Government	Harvard University Cambridge, MA	1494	301
Harry S. Truman School of Public Affairs	University of Missouri Columbia, MO	150	47
Robert F. Wagner Graduate School of Public Service	New York University New York, NY	665	400
Woodrow Wilson School of Public and International Affairs	Princeton University Princeton, NJ	796	95

### C. Demand for the Program

During the visits to other Presidential schools and schools of public service, the steering committee also heard of the many potential careers for students. In addition to various elective office positions, graduates become appointees to governmental boards and commissions or employees in governmental agencies at the local, state or national level. Students also find careers in religious and faith organizations, hospitals, health organizations, schools and colleges, professional associations, philanthropic foundations, children

and youth organizations, community development corporations and other civic and political groups. The Clinton School will prepare students beyond even these settings.

Although business and corporate organizations usually are not considered as *public service* careers, many positions within those groups have the potential to be--- community affairs and company foundation jobs, for instance. Training and experience in public service, when linked with specialty training in business administration, would be desirable for any corporate CEO, Executive Vice President, or Chairman of the Board if the organizational goal is more than self-serving. In today's world, the best national and international corporations take seriously the task of contributing back to the broader community they serve.

Although volunteering itself is not a *career* (as opposed to a job in volunteer *organizations*), many individuals in our society do offer their time, talents, and resources on behalf of others, often with little reward. These volunteer efforts, and related jobs such as service in the Peace Corps, AmeriCorps, and other such programs of national and foreign service, plus a range of humanitarian relief jobs (Red Cross/Red Crescent, Doctors Without Borders, etc.) fall clearly in the realm of public service and provide opportunities for UACS students.

## 7. CURRICULUM OUTLINE

The UACS Curriculum Subcommittee, comprised of faculty members from UAF, UALR, and UAMS, has made some preliminary recommendations based on the following assumptions:

- All applicants should have a minimum of two years of public service; for those who wish to apply to the executive program (31 hours) there should be seven years of public service experience, with at least two of these years in a leadership position in public service
- The MPS degree program should be designed for completion in 12- 24 months of full-time study
- The student body should be diverse, particularly in regard to gender, race and ethnicity, as well as areas of special focus in public service
- Program completion should require a capstone project rather than a thesis because the program is designed to be a terminal degree for professional practice rather than preparation for doctoral work.
- Applications from national and international students should be accepted and evaluated against the same high standards as applications from Arkansas students, but it is recommended that no foreign students be admitted during the first year, and that a balance between Arkansas and other American citizens be sought during this inaugural period.

The curriculum is outlined below.

### A. MASTER OF PUBLIC SERVICE

The following curriculum of core, elective, and capstone courses should be required for completion of a Master of Public Service from the Clinton School. Students without extensive prior experience in public service will be required to take an additional five credit hour practicum not described below.

#### Required Core

- |   |         |
|---|---------|
| ▪ Problem and Asset Analysis                          | 3 hours |
| ▪ Leadership in Public Service                        | 3 hours |
| ▪ Communication Processes and Conflict Transformation | 3 hours |
| ▪ Dynamics of Social Change                           | 3 hours |



▪ Ethical, Normative and Legal Dimensions of Leadership	1 hour
<b>Electives/Selectives (Professional cluster)</b>	12 hours
• May include up to three hours of seminar series or enrollment in public service clinic program	
<b>Practicum</b> (required for students without extensive public service experience)	5 hours
<b>Capstone Sequence</b>	6 hours
<b>Program Total (student with extensive public service)</b>	<b>31 hours</b>
<b>Program Total (regular students)</b>	<b>36 hours</b>

## **B. CERTIFICATE IN PUBLIC SERVICE**

▪ Problem and Asset Analysis	3 hours
▪ Leadership in Public Service	3 hours
▪ Communication Processes and Conflict Transformation	3 hours
▪ Dynamics of Social Change	3 hours
▪ Ethical, Normative, and Legal Dimensions of Leadership	1 hour

**Total** **13 hours**

UACS classes will be interactive, making extensive use of problem-based formats and employing instructional technology as needed. The classes will also have access to speakers and public leaders who visit the Clinton Presidential Library for special events.

## **C. DESCRIPTION OF CORE COURSES**

### **Problem and Asset Analysis (3 Hours)**

Citizens must recognize and understand the assets of a community or organization in order to maximize and increase their value. Similarly, identifying and understanding the problems within a community or organization are necessary to generate solutions. The Problem and Asset Analysis course will provide a foundation of quantitative and qualitative skills that may be used to diagnose and analyze conditions within communities and organizations. Students will practice decision-making and leadership by participating in case studies set in rural and urban communities. On completion of the course, students should be able to identify the problems and assets of diverse organizations and communities and formulate an approach to solutions.

#### ***Competencies covered***

- Identification of economic issues in public policy
- Inventory, analysis, and diagnosis of assets and problems in a community
- Acquisition of basic quantitative and qualitative analysis skills
- Understanding of decision and stakeholder analysis
- Recognition of differences as well as interdependencies for public service in urban and rural settings
- Recognition of global interdependence

### **Leadership in Public Service (3 Hours)**

Leadership in public service requires strong interpersonal skills, both to direct an organization effectively and to work successfully with other organizations and individuals in the public and private sectors. This course will focus on personal relationship skills needed in public service settings: team and coalition building, personnel and volunteer management, small group leadership, group dynamics and group facilitation, negotiation skills, and conflict resolution. To measure their achievement at the end of the course, students should be able to design a leadership strategy for mobilizing individuals, groups, and organizations to address a public problem, and to anticipate and resolve potential conflicts that may arise therein.

#### ***Competencies covered***

- Understanding theories of leadership and motivation
- Team/coalition building
- Group facilitation and management
- Strategic planning for conflict resolution

### **Communication Processes and Conflict Transformation (3 Hours)**

Communication and conflict management skills are essential for effective public service. This course includes practice in writing and speaking to inform and persuade, interviewing and active listening, group communication, and rhetorical strategy. In addition, the course will introduce students to the field of conflict transformation: analyzing conflicts, negotiating differences, and mediating disputes among individuals or groups.

#### ***Competencies covered***

- Written and oral communication
- Interviewing
- Active listening
- Leading meetings
- Organizational communications processes
- Negotiation and conflict resolution

### **Dynamics of Social Change (3 Hours)**

Positive social change is an implicit ideal of public service. This course will allow students to examine the dynamics of community and social change, with the goal of strengthening the skills required to facilitate such change. Course activities will include reading and discussion of case studies that demonstrate these premises: (1) even the best-planned changes cannot be successful outside the community's political, economic, and social context; (2) all communities are increasingly a part of a global system whose future is dependent on understanding ourselves as a part of a diverse local, regional, national, and international community.

#### ***Competencies covered***

- Understanding community change dynamics, including the political process
- Strategic planning for social change
- Identifying economic issues in public policy
- Assessing the role of diversity in communities and organizations

- Comprehending global interdependence
- Analyzing stakeholder claims as they affect social change

### **Ethical, Normative, and Legal Dimensions of Public Service (1 Hour)**

Ethical, normative, and legal considerations guide and shape every aspect of effective public service. This course will provide an overview of these concerns as they impact the proper functioning of government officials in a democracy. In addition to study of traditional academic resources, students will also explore issues of economic, political, and social justice through oral and written evaluation of current issues. Through group presentations, students will identify legal and ethical constraints on decision-making and implementation.

#### ***Competencies covered***

- Identification of ethical and social justice issues
- Examination of democratic values and equity concerns in the political environment
- Group presentation of issues from diverse perspectives
- Written evaluation of events and issues

### **Capstone Project (6 Hours)**

The Capstone Project, which may be designed for individual or group implementation, allows students to integrate and use the knowledge acquired in the core courses with the experience obtained in the development courses. The project is divided into two parts: (1) the fieldwork component allows students to gather and design data related to a community initiative; (2) the presentation component requires students to write up the results of the fieldwork, design a communication format for the results, and present results to faculty, fellow students, and other interested parties. At the conclusion of the course, students will meet to share results of all projects and integrate insights.

#### ***Competencies covered***

- Project design
- Data collection and design
- Report writing
- Public presentation

### **Professional Development Clusters (12 Hours)**

A full-time faculty member will work with each student in the Clinton School to choose a group of electives/selectives which we refer to as “professional development clusters.” For some students, selectives may address skill deficiencies. If a student comes to the Clinton School with a weak background in finance or economics, for instance, he or she might be advised to choose courses in that area to supplement core courses in the program. Some students may be advised to enroll in the seminar series to broaden their experience in public service. Others may select participation in the public service clinic program that will assist communities and organizations with research. Electives might be chosen to further prepare students for the specific project planned for the capstone course. Some students may wish to organize electives thematically toward an applied interest such as rural development, conflict transformation, nonprofit organizational management, health policy, or other areas. A list of existing courses at sponsoring campuses that might be appropriate as elements for professional development clusters is found in Appendix A.

## **D. ADMISSION REQUIREMENTS**

The general requirements for admission to the UACS will be based around a policy that balances the applicant's community service experience, academic background (courses and grades), and GRE (Graduate Record Exam) test scores, if applicable.

### **Admission Requirements for MPS Program**

Applicants for the MPS program will be expected to have been engaged in significant public service experience (a minimum of two years) prior to enrollment. Applicants to the executive program must have seven (7) years of significant public service experience, at least two (2) of which are in a leadership role. In addition, a baccalaureate degree, a personal statement or letter of interest (500 to 700 words), an applicant interview, three letters of reference (one academic, one personal, and one of prior community/public service), and a current *curriculum vitae* or *résumé* will be required. Applicants must provide original transcripts of all prior collegiate academic work. In addition, all international applicants, including resident and non-resident aliens, whose native language is not English and who do not have an undergraduate degree from a regionally accredited US college or university, will be required to document by an original copy of the test sent by the testing agency to UACS a minimum score of 550 on the paper-based or 213 on the computer-based Test of English as a Foreign Language (TOEFL) examination. Students seeking to enter the MPS program must also provide proof by an original copy sent by the testing agency to UACS of recently taking (within the past five years) the Graduate Record Examinations (GRE) and their scores. MPS program applicants who have completed a master, doctorate, or a professional degree or the UA Clinton School Certificate in Public Service program are exempt from the GRE requirement. Subject to the approval of the Student Admissions and Financial Aid Committee, scores on comparable graduate tests may be accepted as a substitute for the GRE requirement. The Student Admissions and Financial Aid Committee shall consider the sum total of the applicant's work and educational experience and shall not allow a single factor to out weigh others in making recommendations for admission.

### **Admission Requirements for Certificate in Public Service Program**

Applicants seeking to enroll in the Certificate in Public Service Program in the Clinton School must submit a completed application form, an application fee, and other documentation as outlined herein. All application forms must be accompanied by a personal statement or letter of interest (500 to 700 words), three letters of reference (one academic, one personal, and one of prior community/public service), a current *curriculum vitae* or *résumé*, and a copy of college transcripts showing post-secondary credits. All international applicants, including resident and non-resident aliens, whose native language is not English and who do not have an undergraduate degree from a regionally accredited US college or university, are required to document by an original copy of the test sent by the testing agency to UACS a minimum score of 550 on the paper-based or 213 on the computer-based Test of English as a Foreign Language (TOEFL) examination. The Student Admissions and Financial Aid Committee shall consider the sum total of the applicant's work and educational experience and shall not allow a single factor to out weigh others in making recommendations for admission.

### **Non-degree Seeking Students**

Students will be allowed to take courses in the Clinton School of Public Service as a non-degree seeking student. Non-degree seeking students will be allowed to enroll in courses on a space available basis once all degree candidates have been placed on the class roster. Non-degree seeking students should submit a completed application form and pay the application fee to the Administration Office of the UACS no later than one week prior to the first day of classes for the semester. Students will be notified by e-mail on the procedure to follow to register for classes and for payment of fees.

## **E. TUITION AND FEES**

Tuition for 2004-2005 in the Clinton School of Public Service shall be \$400 per semester hour for both Arkansas residents and for non-resident students. A \$50.00 graduation fee is payable at the last registration prior to completing program requirements. All future tuition and fees will be determined through the established procedures followed by UACS.

## **F. CATALOG AND STUDENT HANDBOOK**

A course catalog and student handbook for UACS are under preparation and will be available following program approval.

## **8. FACULTY**

Although some new faculty recruitment must begin immediately, the faculty development will accelerate upon the arrival of the Founding Dean. Three full-time faculty will be recruited and hired during the first year of operation of UACS. Three more full-time faculty are planned for the second year of operations. These faculty members will comprise the core faculty for the school that will be supplemented as outlined below.

### **INAUGURAL FACULTY**

During the initial planning and start-up phases, the Inaugural Faculty for the Clinton School of Public Service has been drawn from current members of faculty from within the University of Arkansas and in other universities, shown on the list below, or from skilled practitioners outside the academic community. These members will continue to serve in adjunct capacity after the school opens. These will be supplemented on occasion by members of the former President's administration, as well as Mr. Clinton himself. The Inaugural Faculty has thus far served on various planning subcommittees and, along with the Steering Committee, approved the department structure, admission requirements, curriculum, and governance for UACS.

**Thomas A. Bruce, MD**, Dean *pro tem*, is Professor of Health Policy and Management in the UAMS College of Public Health. Dr. Bruce, a former program director of the W. K. Kellogg Foundation, is also Professor of Medicine Emeritus at UAMS, having served as Dean of Medicine from 1974 through 1985. Dr. Bruce is a consultant to or on the board of several national philanthropic organizations. He is the recipient of numerous honors and awards and is well recognized in professional circles throughout the nation.

#### **John William Ahlen, PhD**

Inaugural Adjunct Professor, UACS  
President, Arkansas Science & Technology Authority, Little Rock, Arkansas

#### **T. Harri Baker, PhD**

Inaugural Professor, UACS  
Professor Emeritus of History, UALR College of Arts, Humanities, and Social Sciences

#### **Deborah Baldwin, PhD**

Inaugural Professor, UACS  
Professor of History, UALR College of Arts, Humanities, and Social Sciences

#### **Jay Barth, PhD**

Inaugural Associate Professor, UACS  
Associate Professor of Politics, Hendrix College

#### **Angela L. Brenton, PhD**

Inaugural Professor, UACS  
Professor of Organizational Communication, UALR College of Professional Studies

**Ann Bailey Bynum, EdD**

Inaugural Assistant Professor, UACS  
Assistant Professor of Health Policy and Management, UAMS College of Public Health

**Ann Chotard, DMusA**

Inaugural Adjunct Assistant Professor, UACS  
Artistic Director, Wildwood Park for the Performing Arts, Little Rock, Arkansas

**Cesar M. Compadre, PhD**

Inaugural Associate Professor, UACS  
Associate Professor, Department of Pharmaceutical Sciences, UAMS College of Pharmacy

**Charles O. Cranford, DDS, MPA**

Inaugural Professor, UACS  
Professor of Health Policy and Management, UAMS College of Public Health

**Susan Lynn DeAngelis, EdD**

Inaugural Professor, UACS  
Professor of Dental Hygiene, UAMS College of Health Related Professions

**Beverly Divers-White, EdD**

Inaugural Adjunct Professor  
Vice President for Programs, Foundation for the Mid South

**Timothy Edwards, PhD**

Inaugural Assistant Professor  
Assistant Professor of Journalism, UALR College of Professional Studies School of Mass Communications

**M. Joycelyn Elders, MD**

Inaugural Professor, UACS  
Professor Emeritus, UAMS College of Medicine

**Deborah Oates Erwin, PhD**

Inaugural Professor, UACS  
Professor of Surgery, UAMS College of Medicine

**Frank L. Farmer, PhD**

Inaugural Professor, UACS  
Professor of Rural Sociology, UAF School of Human Environmental Sciences

**Gary D. Ferrier, PhD**

Inaugural Professor, UACS  
Lewis P. Epley, Jr. Professor of Economics, UAF Sam M. Walton College of Business

**Jacqueline J. Fickel, PhD**

Inaugural Instructor, UACS  
Postdoctoral Fellow in Psychiatry, UAMS College of Medicine

**Joseph T. Foglia, BS**

Inaugural Adjunct Instructor, UACS  
Former District Director (Arkansas), Small Business Administration

**Carol R. Goforth, JD**

Inaugural Professor, UACS  
Clayton N. Little Endowed Professor of Law, UAF School of Law

**Daniel J. Gudahl, MS**

Inaugural Adjunct Instructor, UACS  
Contracts Officer, Winrock International, Morrilton, Arkansas

**Meagan M. Jordan, PhD**

Inaugural Assistant Professor, UACS  
Assistant Professor, UALR Institute of Government

**Lacy J. Kennedy IV, JD**

Inaugural Adjunct Instructor, UACS  
Attorney at Law, Holiman & Kennedy, Little Rock, Arkansas

**Johanna Miller Lewis, PhD**

Inaugural Professor, UACS  
Professor of History, UALR College of Arts, Humanities, and Social Sciences

**Mary Stuart Lindsey, BA, MSW**

Inaugural Instructor, UACS  
Director of Continuing Medical Education, UAMS Department of Family and Community  
Medicine

**Bettye A. Lowe, MD**

Inaugural Professor, UACS  
Professor Emeritus of Pediatrics, UAMS College of Medicine

**Floyd W. Martin, PhD**

Inaugural Professor, UACS  
Professor of Art, UALR College of Arts, Humanities, and Social Sciences

**Catherine Rimmel Matthews, BA**

Inaugural Adjunct Instructor, UACS  
Director, Department of Arkansas Heritage

**Nancy Bellhouse May, JD**

Inaugural Professor, UACS  
Research Professor, UALR William H. Bowen School of Law

**Freeman McKindra, Sr., BS**

Inaugural Instructor, UACS  
Community Liaison, UAMS College of Public Health

**William H. Miller, PhD**

Inaugural Associate Professor, UACS  
Associate Professor of Political Science, UAF Fulbright College of Arts and Sciences

**Robert C. Mock, Jr., EdD**

Inaugural Instructor, UACS  
Assistant Dean, UALR College of Professional Studies

**Creshelle R. Nash, MD, MPH**

Inaugural Assistant Professor, UACS  
Assistant Professor of Health Policy and Management, UAMS College of Public Health

**Matthew H. Pelkki, PhD**

Inaugural Associate Professor, UACS  
Associate Professor and George H. Clippert Endowed Chair of Forest Resource Economics,  
Management and Policy, University of Arkansas at Monticello School of Forest Resources

**Thomas R. Peterson, BA**

Inaugural Adjunct Instructor, UACS  
Vice President of Communications and Marketing, Heifer International, Little Rock, Arkansas

**Ellen A. Plummer, PhD, MBA**

Inaugural Adjunct Assistant Professor, UACS

Executive Director, Arkansas Arts Center, Little Rock, Arkansas

**Sandra Kay Pope, PhD**

Inaugural Assistant Professor, UACS  
Assistant Professor of Geriatrics, UAMS College of Medicine

**Tommy L. Riley, Jr., PhD**

Inaugural Adjunct Professor, UACS  
Section Leader–Environmental Policy, UAF Cooperative Extension Service

**Gary W. Ritter, PhD**

Inaugural Assistant Professor, UACS  
Assistant Professor of Educational Counseling, Leadership and Foundations, UAF College of Education and Health Professions

**Sandra L. Robertson, EdD**

Inaugural Assistant Professor, UACS  
Assistant Professor of Higher Education, UALR

**Carol L. Roddy, JD**

Inaugural Assistant Professor, UACS  
Assistant Professor of Health Policy and Management, UAMS College of Public Health

**Margaret E. Scranton, PhD**

Inaugural Professor, UACS  
Professor of Political Science, UALR College of Arts, Humanities, and Social Sciences

**M. Kathryn Stewart, MD, MPH**

Inaugural Associate Professor, UACS  
Associate Professor of Health Policy and Management, UAMS College of Public Health

**Ted Swedenburg, PhD**

Inaugural Professor, UACS  
Professor of Anthropology, UAF Fulbright College of Arts and Sciences

**Joseph W. Thompson, MD, MPH**

Inaugural Assistant Professor, UACS  
Assistant Professor of Pediatrics, UAMS College of Medicine

**Carolyn Lazaro Turturro, PhD**

Inaugural Assistant Professor, UACS  
Assistant Professor of Social Work, UALR School of Social Work

**Donald E. Voth, PhD**

Inaugural Professor, UACS  
Professor Emeritus of Rural Sociology, UAF School of Human Environmental Sciences

**Jeannie M. Whayne, PhD**

Inaugural Associate Professor, UACS  
Associate Professor of History, UAF Fulbright College of Arts and Sciences

**Mylon Winn, PhD**

Inaugural Associate Professor, UACS  
Associate Professor, UALR Institute of Government

**Terry Yamauchi, MD**

Inaugural Professor, UACS  
Professor of Pediatrics, UAMS College of Medicine



## **9. DESCRIPTION OF RESOURCES**

### **A. CLINTON SCHOOL OF PUBLIC SERVICE LIBRARY/READING ROOM**

The UACS Library/Reading Room will open in November 2004. This elegant room will be approximately 2,000 square feet in size, located on the first floor of the Sturgis Building (Choctaw Station), and adjacent to the Clinton Presidential Library. The UACS library/reading room will contain a limited, specialized collection of reference books, selected journals and newspapers, and current monographs in support of the School's programs. It will offer access to electronic journals and databases, as well.

The resources of local libraries, including those at the University of Arkansas at Little Rock, the University of Arkansas for Medical Sciences, and the Central Arkansas Library System, will be available to all students to supplement the holdings in the UACS reading room. In addition, UA System Libraries will provide services to UACS students.

The limited physical collection will promote the objectives of the School which emphasizes public service in many aspects, with special interest fields of health policy, public policy, public administration, public service leadership, rural development, and arts and cultural administration. This 'virtual' library will be available to students and faculty through the electronic resources that are installed on site.

### **B. UAMS LIBRARY**

The University of Arkansas for Medical Sciences has the most comprehensive collection of books, periodicals, and medical teaching materials addressing health profession education in the state. The UAMS Library occupies 47,000 square feet in the Education II Building (Ed II), and currently serves students and faculty in the Colleges of Medicine, Nursing, Pharmacy, Health Related Professions, Public Health and the Graduate School. As the largest biomedical library in the state, its holdings include 171,941 bound books and periodicals, 1,533 current periodical subscriptions, 6,532 audiovisual titles and computer software programs, and 31 health professions databases. In addition to the major collections housed in the library are small and highly specialized collections of medical history and rare and obscure medical texts.

In addition to supporting students and faculty located in central Arkansas, the UAMS Library also contributes to the learning resources of the Area Health Education Centers (AHECs) across the state. In supporting the AHECs, the library directly meets the information needs of practitioners and students in 19 cities in nine rural Arkansas counties. Access to many of UAMS's learning resources is attainable throughout the state via the Internet, as well. The Library Web-site links to more than 40 full-text journals and the OVID literature search system, which has added 84 full-text journals.

The UAMS library participates in consortium agreements with ARKLink (libraries throughout Arkansas) and SCAMeL (South Central Academic Medical Libraries in Arkansas, Louisiana, New Mexico, Oklahoma and Texas), which discuss ways to share resources and improve access to information. The library also shares a network of biomedical information sources with the AHEC and Delta Health Education Centers (DHEC) libraries, Arkansas Children's Hospital Library, and the John L. McClellan VA Medical Center Library. Liaison between the Little Rock campuses and the Fayetteville campus of the University of Arkansas is excellent, and requested materials are available within five to seven days. Patrons also have access to interlibrary loan services.

On-line computer access is available through the UAMS library's Learning Resource Center (LRC) and the Jeff Banks Learning Resource Center (Center). The LRC is located on the fifth level of the Library and is dedicated primarily to computer-based instruction including interactive videodisc programs. The Center has 50 IBM-compatible microcomputers, seven MacIntosh computers plus five hybrid computers, and 14 laser disc printers for faculty and student use. The LRC can initiate closed-circuit broadcasting of its videotaped programs and one can access the broadcasts in the student dormitory, at specific locations in Ed II, and in the University Hospital, as well as over the Internet. The Center is open 24 hours and has

computer-based instructional programs, MacIntosh and IBM-compatible PCs, laser printer connections to the School network VAX, alpha microcomputers, and Internet access.

In addition to the UAMS Library, other libraries in the UA System and the Central Arkansas Library System libraries are available to students through the ARKLink Library Consortium. Brief information on these libraries follows.

### **C. UALR OTTENHEIMER LIBRARY**

The UALR Ottenheimer Library occupies 121,008 square feet in a five-story building on the Little Rock campus. The Library is a modern facility which meets the academic needs of UALR students and faculty. It makes its resources available to the general public, as well. The staff of 36 FTEs comprises the library's personnel.

The Library houses over 470,000 volumes and subscribes to more than 2,500 journals. In addition, the microform inventory numbers nearly a million items, and there are 10,000 phonograph albums, audio books, and music compact disks. As a selective depository for federal documents, the Library receives about 30 percent of the items offered by the Government Printing Office. This Library is the state's only depository of European Union documents. Over 300,000 government documents are in the collection.

Online and remote access to the Library's online catalog and full-text information resources are provided through the Library's website ([www.library.ualr.edu](http://www.library.ualr.edu)). The Library provides interlibrary loan access through Online Computer Library Center (OCLC) and its regional affiliate, Amigos Library Services. Public computers number 32 and access to 33 databases is provided.

Individual study carrels and self-service photocopiers are available for faculty and student use. Multimedia Services supplies equipment and video programs directly to classroom faculty, in addition to serving the larger campus community through teleconference downlinks.

The Library's Archives and Special Collections department is located on the second floor. This area houses materials on Arkansas and the lower Mississippi Valley. Five and a half million items of archival or manuscript material; 16,250 books; 4,500 pamphlets and posters; 25,000 photographs and postcards; and a variety of memorabilia comprise this collection.

### **D. MULLINS LIBRARY**

Mullins Library occupies 222,000 square feet, exclusive of branch libraries, in a modern, well-equipped academic library serving students and faculty on the Fayetteville campus. Most recent statistics show a full-time student body of 12,329 and 3,666 part-time. The staff of 141 FTEs provides the usual services of a large academic library.

The library contains a variety of print and online services, including 1,689,976 print volumes. In addition, the library subscribes to 17,868 current journal titles and houses over 3 million microform units and over 154,000 audiovisual materials.

Online and remote service to the collection is provided through the Library's website ([www.libinfo.uark.edu](http://www.libinfo.uark.edu)). There are 83 public computers for student and faculty use providing access to 136 reference databases. Interlibrary loan services have recently been upgraded with ILLiad, an interlibrary loan management software, to provide materials not available on campus, and distance education is provided to the campus population.

The Special Collections department is located on the north end of the first floor of Mullins Library. This collection numbers 9,964 manuscripts and archives items including the University Archives and papers of various Arkansas political figures.

### **E. CENTRAL ARKANSAS LIBRARY SYSTEM**

Originally established as the Carnegie Little Rock Public Library in 1910, the Central Arkansas Library System (CALs) concept was created in 1975 to serve the City of Little Rock, Pulaski, and Perry counties.

In 1993, voters passed a millage increase allowing the system to become one of *the* premier public library systems among its peers in the nation. The 170,000 square foot Main Library is the largest in Arkansas. Located in the downtown River Market area of Little Rock, the campus is also home to the library's Cox Creative Center. It provides the largest research collection in Central Arkansas for public use. Personnel of the Main Library includes 99 FTEs excluding branch library personnel. More than 140,000 people hold CALS library cards, and over 1.2 million books were circulated last year.

The System's collection includes over 645,000 volumes plus audio books, music CDs, and online databases. Database access is provided by 43 public computers. Among the databases provided are FirstSearch, EBSCOhost, Social Issues Resource Series (SIRS), and MasterFILE Premiere. The web access for the library is ([www.cals.lib.ar.us](http://www.cals.lib.ar.us)). Endowed centers of CALS include

- Richard C. Butler Center for Arkansas Studies
- Sturgis Technology Center
- Fred K. Darragh, Jr. Center for Intellectual Freedom
- Raymond Rebsamen Memorial Plaza
- Ottenheimer Main Reading Room.

#### **F. ALLIANCE FOR THE STUDY OF ARKANSAS HISTORY AND POLITICS**

The Alliance for the Study of Arkansas History and Politics is a joint venture between the Central Arkansas Library System and the University of Arkansas in Little Rock. Its mission is to encourage the study, research, and teaching of Arkansas History. Included in the holdings of the Alliance are the gubernatorial papers of Winthrop Rockefeller, Dale Bumpers, Bill Clinton, Frank White and Jim Guy Tucker. The Alliance will be located in the River Market District on President Clinton Avenue and Rock Street.

#### **G. CLINTON PRESIDENTIAL CENTER LIBRARY**

Located on the banks of the Arkansas River in downtown Little Rock's River Market District, the Clinton Presidential Center will house the largest archival collection in American Presidential history. The Clinton School of Public Service will be adjacent to the Library.

The William J. Clinton Presidential Library will open in November 2004, preserving the Presidential records, personal and donated papers, and memorabilia of the Clinton Administration. All Presidential records of the Clinton White House are administered in accordance with the terms of the Presidential Records Act of 1978.

Approximately 76.8 million pages of paper documents, 75,000 museum artifacts, and 1.85 million photographs were transported from Washington, DC, to Little Rock. Materials are currently being processed by the Clinton Presidential Materials Project personnel.

All records are closed for five years following the end of a President's term. A wide variety of Presidential records will be available in the Clinton Library on January 20, 2006. Personal papers and other donated historical materials will be available to researchers according to the terms of the donor's deed of gift. This collection of materials will be available for use by Clinton School of Public Service students and faculty.

### **10. NEW PROGRAM COSTS**

#### **FACILITIES: STURGIS HALL**

The Clinton School of Public Service will occupy the main floor of the old Choctaw Railway Station (11,000 square feet) located adjacent to the future Presidential Library and Archives. Built in 1899, the Choctaw Station for half a century was one of Little Rock's two main passenger railroad depots, serving the Rock Island Line. It was listed in the National Register of Historic Places in 1975, then because of

exceptionally ornate terra cotta friezes and was renovated for use as a restaurant in the 1980s. For the past several years, it has remained empty. The William J. Clinton Presidential Foundation, with a generous grant from the Roy and Christine Sturgis Charitable and Educational Trust, is spending >\$4 million to restore the exterior of the building to its original condition, and will outfit the interior with sophisticated technology and furnishings to become a first-rate educational facility. The School will have two fully equipped classrooms (600 square feet each), a small library, ten administrative and faculty offices with eight additional offices outfitted to house visiting faculty. The classrooms, each with seating for approximately 30 students, will be wired and equipped to provide for video streaming over the Internet as well as teleconferencing to broadcast programs to other colleges and universities as well as K-12 public schools and community colleges in the state. In addition, there will be two small conference rooms. (See Appendix B.) The Little Rock offices of the Clinton Presidential Foundation will be located on the second floor of the facility.

## 11. SOURCES OF FUNDING

Finances for program development will be provided through appropriations of the General Assembly, supplemented by funds from private solicitations. The UACS has received funding from general revenue since 1997. The University of Arkansas System received an appropriation of \$1,500,000 from the 1997 Revenue Stabilization Act for initial planning of the Clinton School of Public Service, and a supplementary award of \$479,000 in 2001 from the Arkansas Economic Development Commission, based on early plans. In the 2001 session of the General Assembly, the legislature approved several administrative and academic positions for the school, although no appropriation occurred at that time because of the necessity of budget cutbacks. However, with the start-up of the school, it is anticipated that future appropriation bills will provide faculty and administrative funds, including maintenance and operations for the Clinton School of Public Service. See **Table 2**.

**Table 2. Clinton School of Public Service Appropriations 2004 – 2006**

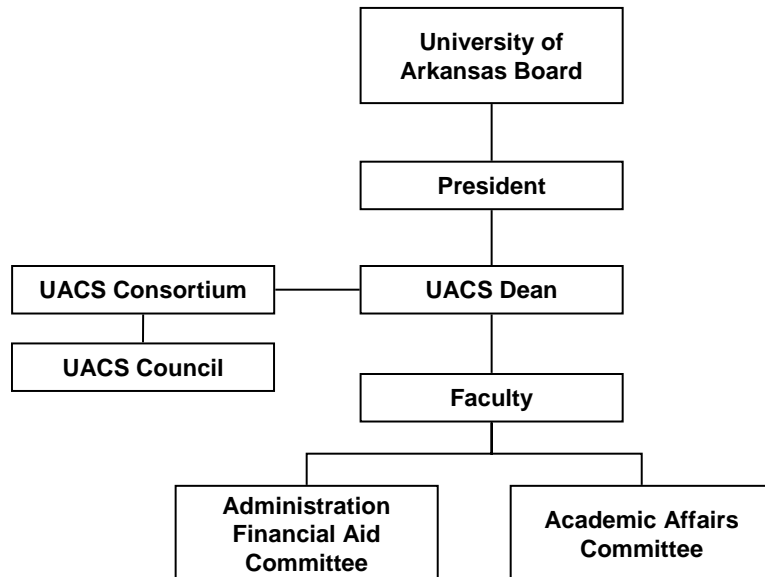
	2004-2005	2005-2006
<b>Expenditures</b>		
<b>1. Admin. Salaries (Dean &amp; admin. support)</b>	<b>\$179,000</b>	<b>\$187,000</b>
<b>2. Faculty (3 FT 2005, 6 FT 2006 + fringe)</b>	<b>352,500</b>	<b>670,000</b>
<b>3. Faculty (Visiting, Seminars)</b>	<b>90,000</b>	<b>100,000</b>
<b>4. Admin. Support Staff</b>	<b>74,000</b>	<b>77,000</b>
<b>5. Academic Support</b>		
(a) Library	60,000	61,000
(b) Copier rental/telephone system	25,000	35,000
(c) Office/classroom supplies	10,000	20,000
<b>6. Contract services, facility and program support</b>	<b>283,400</b>	<b>317,500</b>
<b>7. Utilities/Building Maintenance</b>		
(a) Utilities, energy	16,800	18,000
(b) Housekeeping and Maintenance	22,400	25,000
(c) AV equipment maintenance	10,000	12,000
<b>Grand Total</b>	<b>\$1,123,200</b>	<b>\$1,522,500</b>

<b>Income</b>		
1. Private donations	\$280,000	\$350,000
2. Federal support	120,000	240,000
3. UACS planning grant (Ark. Econ. Dept. Commission)	150,000	----
4. Tuition and Seminar fees	20,000	85,000
<b>Grand Total in Hand</b>	<b>\$570,000*</b>	<b>\$645,000*</b>

**\*does not include state appropriated funds (to be requested)**

All revenue generated from the collection of student tuition by UACS will accrue to the UACS general fund for the support of UACS. In keeping with the tradition of Federal support for scholarships at schools affiliated with the presidential libraries, US Senator Blanche Lincoln has submitted a request for start up support to the US Senate Committee on Appropriations for consideration in the Senate Labor, Health and Human Services, Education, and Other Related Agencies appropriation bill for markup during 2004. In addition to the \$4.5 million Sturgis grant for renovation of the school's facilities, more than \$500,000 in private contributions have been pledged to date in support of the school, contingent on fiscal support from the Arkansas General Assembly. Private contributions will continue to be sought on behalf of the school to support its programs and scholarships.

## 12. ORGANIZATIONAL CHART REFLECTING NEW PROGRAM



## 13. SPECIALIZED REQUIREMENTS

### A. SPECIALIZED ACCREDITATION REQUIREMENTS

The Master of Public Service degree program will be offered under a consortium agreement of the three campuses (UAF, UALR, and UAMS) that already have been accredited by the Higher Learning Commission of the North Central Association (HLC), and thus are authorized to open new or expended educational programs. This process assures integrity in fulfilling the

institution's mission through structures and processes that involve the Board of Trustees, the administration, the faculty, staff and students until such time as the School can seek separate accreditation with HLC, a requirement for professional accreditation.

A final decision about the timing of subsequent *professional* accreditation through the National Association of Schools of Public Affairs and Administration (NASPAA) has not been made, but likely will occur after the School is separately accredited through the Higher Learning Commission.

Some 'Guiding Principles' have been established between the parent campuses for joint graduate degree programs, based on the three concepts below:

1. Transparency (management of the program will be transparent to the students)
2. Collegiality (academic issues will be decided jointly)
3. Acknowledgement (the cooperative nature of the program will be recognized in program correspondence, reporting, writings, and academic documents.)

Degree programs to be offered by UACS will be authorized by the UA Board of Trustees and awarded jointly by the three parent campuses and UACS to students admitted to the UACS until the School is separately accredited through the Higher Learning Commission.

The UACS opening will be assisted by the three sponsoring campuses. A UACS Council will be established, comprised of the Vice Chancellors for Academic Affairs of UAF, UALR and UAMS. The purpose of the UACS Council is to represent the consortium in providing oversight of the joint degree programs offered in the UACS, assuring that such programs meet general requirements for graduate or professional-level education for the state, and to facilitate exchange of students between UACS and various campus graduate programs. The Council also will assist the UACS in gaining its own accreditation status as soon as it is eligible to do so.

Under the consortium agreement, all academic support functions will be handled by UACS. This includes registration, student records, financial aid, payment of tuition, and grievances. Distribution of tuition income will be negotiated by the appropriate administrative officers of the consortium colleges. All sponsoring campuses will share the credit for student enrollment and graduation until UACS is separately accredited by HLC. The MPS degree program will be listed identically in all campus catalogs, web-sites, etc. Courses will retain the number of the campus on which they are delivered; cross-listing of courses will not be needed. All campuses will include the degree program in their Higher Learning Commission accreditation process. UACS students will receive full benefits on all consortium campuses, including parking, library use, recreation, sporting events, etc.

Academic integrity will be assured by having the Clinton School faculty (see above) make final decisions on all governance and programmatic operations of the Clinton School including curriculum; student admissions; faculty appointments, promotion, and tenure; and due process.

## **B. LICENSURE/CERTIFICATION REQUIREMENTS FOR STUDENTS**

No state or national licensure or certification program for public service graduates currently exists.

#### **14. BOARD OF TRUSTEES APPROVAL**

**Pending.** The UA Board of Trustees will consider this program during its meeting in January, 2004.

#### **15. SIMILAR PROGRAMS IN ARKANSAS AND IN ADJOINING STATES**

There are no other current graduate degree programs in public service in Arkansas. Graduate programs that are remote “cousins” to the anticipated Master of Public Service now exist on three campuses of the UA system. These include a Master of Public Administration in Fayetteville and UALR, a Master of Arts in Political Science (UAF), a Master of Health Services Administration (UALR), and a Master of Public Health with a concentration in Health Policy and Management at UAMS College of Public Health. Arkansas State University also offers a Master in Public Administration degree. UAF offers a Doctor of Philosophy in Public Policy with a range of specialty areas. However, none of these offerings focuses on the core courses to be provided through the Clinton School of Public Service. As indicated previously, the professional cluster areas would draw from faculty and courses being offered at these institutions.

There are no graduate degree programs in public service in Oklahoma, Tennessee, Louisiana, or Mississippi. The Stennis Center for Public Service at Mississippi State, a Congressionally established center to promote and strengthen public service leadership in America, does not offer graduate education programs of its own. There are three Presidential Schools in states adjoining Arkansas: The University of Missouri (Columbia) Harry S. Truman School of Public Affairs; the University of Texas Lyndon B. Johnson School of Public Affairs; and the Texas A&M George W. Bush School of Government and Public Service. The Truman School offers a Master’s in Public Administration and is separate from the Truman Library located in Independence, Missouri. The Lyndon B. Johnson School offers a Master of Public Affairs and a Doctor of Philosophy in Public Policy. The George W. Bush School, part of the Texas A & M College of Liberal Arts, offers a Certificate in Advanced International Affairs, a Master of International Affairs and a Master of Public Service and Administration, and a Public Service Leadership Program. It is of interest that the Bush School’s programs cater strongly to military interests, and have contracts with several of the Armed Forces of the U.S.

#### **16. DESEGREGATION**

The School has set as its goal to be culturally and ethnically diverse. Initially, the School will seek to represent and reflect the current demographic makeup of our state, seeking to model diversity in both student enrollment and faculty appointments. Meeting this challenge will be necessary to serve the needs of the State of Arkansas, the nation, and the world in a culturally-competent and excellent manner.

## Appendix A. UACS Potential Electives/Selectives

### Possible SELECTIVES (Students must select one from the following)

#### Business

- UALR      ACCT 7302 Accounting Methods and Reports  
            ACCT 7304 Accounting for Decision Making (prereq. ACCT 7302)  
            ACCT 7305 Analysis of Financial Statements (prereq. ACCT 7304)  
            ECON 7300 Economic Principles  
            ECON 7311 Economic Environment of Business (prereq. ECON 7300)  
            ECON 7330 Public Sector Economics (prereq. ECON 7300)  
            MKTG 7200 Marketing analysis, planning and control  
            MKTG 7311 Marketing Strategy (prereq. MKTG 7200)  
            MKTG 7320 E-Commerce: Strategic Issues (Prereq. MKTG 7200)
- UAF        PLSC 5113 Seminar in Human Resource Management  
            MGMT 5383 Intra/Entrepreneurship of Technology (The Process of Research  
            Communication)

#### Organizational Development

- UALR      MGMT 7310 Organizational Behavior  
            SPCH 7323 Conflict Analysis and Intervention  
            SPCH 7324 Negotiation  
            PSYC 5363 Organizational Psychology  
            PSYC 7350 Training and Development  
            PSYC 7361 Social Psychology  
            SPCH 5311 Organizational Communication  
            SPCH 7312 Intercultural Communication  
            SPCH 7300 Interpersonal Communication Concepts  
            SPCH 7311 Small Group Communication  
            SPCH 7332 Communication Assessment and Consulting  
            SPCH 7351 Managerial Communication  
            PSYC 7230, 7330, 7430. Graduate Seminar in Psychology
- UAF        COMM 5413—Organizational Communication Research

#### Communications and Media

- UALR      JOUR 7305 Mass Communication Processes and Effects  
            JOUR 7315 International Mass Communication  
            RHET 5304 Technical Style and Editing (prereq. RHET 3316 or 3326)



RHET 5305 Document Design (prereq. RHET 3316 or 3326)  
RHET 5306 Writing for Business and Government (prereq. RHET 3316 or 3326)  
RHET 5345 Topics in Persuasive Writing (prereq. RHET 3315)  
RHET 5346 Topics in Technical Communication (prereq. RHET 3316 or 3326)  
RHET 5371 Writing on the Web (prereq. RHET 3316 or 3326)

Potential future topics: Stress, Cost and Coping

## **Possible ELECTIVES**

### **Health Policy**

UALR      GERO 5315 Interdisciplinary Health Care of the Elderly  
              GERO 7310 Social Gerontology  
              GERO 7330 Aging and Social Policy  
              GERO 7340 Social Geriatrics  
              GERO 7370 Program Evaluation  
              PSYC 5385 Psychology and Public Health  
              PSYC 7370. Health Psychology

UAF         COMM 5193 Health Communication  
              HLSC 5563 Public Health  
              HLSC 5583 Voluntary Health Agencies  
              HLSC 5623 Health Planning  
              HLSC 5633 Health Services Administration  
              HESC 5403 Advanced Family Relations

UAMS       N4435: Nursing Leadership and Management.  
              PBHL 5003 Introduction to Public health (F):  
              PBHL 5013 Biostatistics I  
              PBHL 5173 Epidemiology I  
              PBHL 7013 Health Planning  
              PBHL 8133 Health System Strategic Planning  
              PBHL 9323 Strategic Planning in Public Health Programs  
              PBHL 594V Health Communication Seminar  
              PBHL 9313 Communication for Public Health Leaders  
              PBHL 5653 Social and Behavioral Aspects of Health  
              PBHL 7223 Public Health Policy  
              PBHL 5123 The Health Care System  
              PBHL 8053 International Health  
              PBHL 8103 Introduction to Rural Health Policy  
              PBHL 9033 Advanced Public Health Policy and Management

PBHL 8153 Public Health Communication Theory and Application  
 PBHL 7113 Health Economics  
 PBHL 8123 Decision Analysis (Quantitative Management)  
 PBHL 592V Leadership Seminar  
 PBHL 9303 Leadership Theories and Applications  
 PBHL 5623 Program Planning and Evaluation  
 PBHL 7803 Law and Ethics  
 PBHL 7113 Law Policy, and Procedure in Nursing Administration  
 PBHL 8143 Community Planning and Development  
 PBHL 5363 Policy Analysis  
 PBHL 5633 Health Strategies for Multicultural Populations  
 PBHL 9343 Legal/Legislative Issues in Public Health

### **Public Administration**

UALR PADM 7333 Administrative Leadership and Public Management  
 PADM 7334 Grant Writing and Fund-raising  
 PADM 7335 Urban Management  
 PADM 7336 Managing the Not-for-Profit Sector  
 PADM 7345 Urban Management and Community Change  
 PADM 7380 Public Program Evaluation  
 PADM XXXX Mediating Public Disputes  
 SOWK 7340 Ethics in Public Administration  
 UAF PLSC 5123 Public Budgeting and Finance  
 PLSC 5133 Management of Service Sector Organizations  
 PUBP 6301 Policy and Administrative Ethics  
 PLSC 5183 Comparative Public Administration  
 RSOC 5623 Advanced Community Development  
 SOCI 5133 Contemporary Community Systems

### **Rural Development**

UAF LAWW 500\* Introduction to Agricultural Policy  
 LAWW 7783 Agricultural Administrative Procedure and Practice  
 LAWW 500\* International Agricultural Trade  
 LAWW 7753 Agriculture and the Environment  
 LAWW 6913 Environmental Law  
 AGED 5033 Developing Leadership in Agricultural Organizations  
 AGECE 4163 Agricultural and Rural Development  
 AGECE 4413 Economics and Environmental Management  
 AGECE 4613 Domestic and International Agricultural Policy

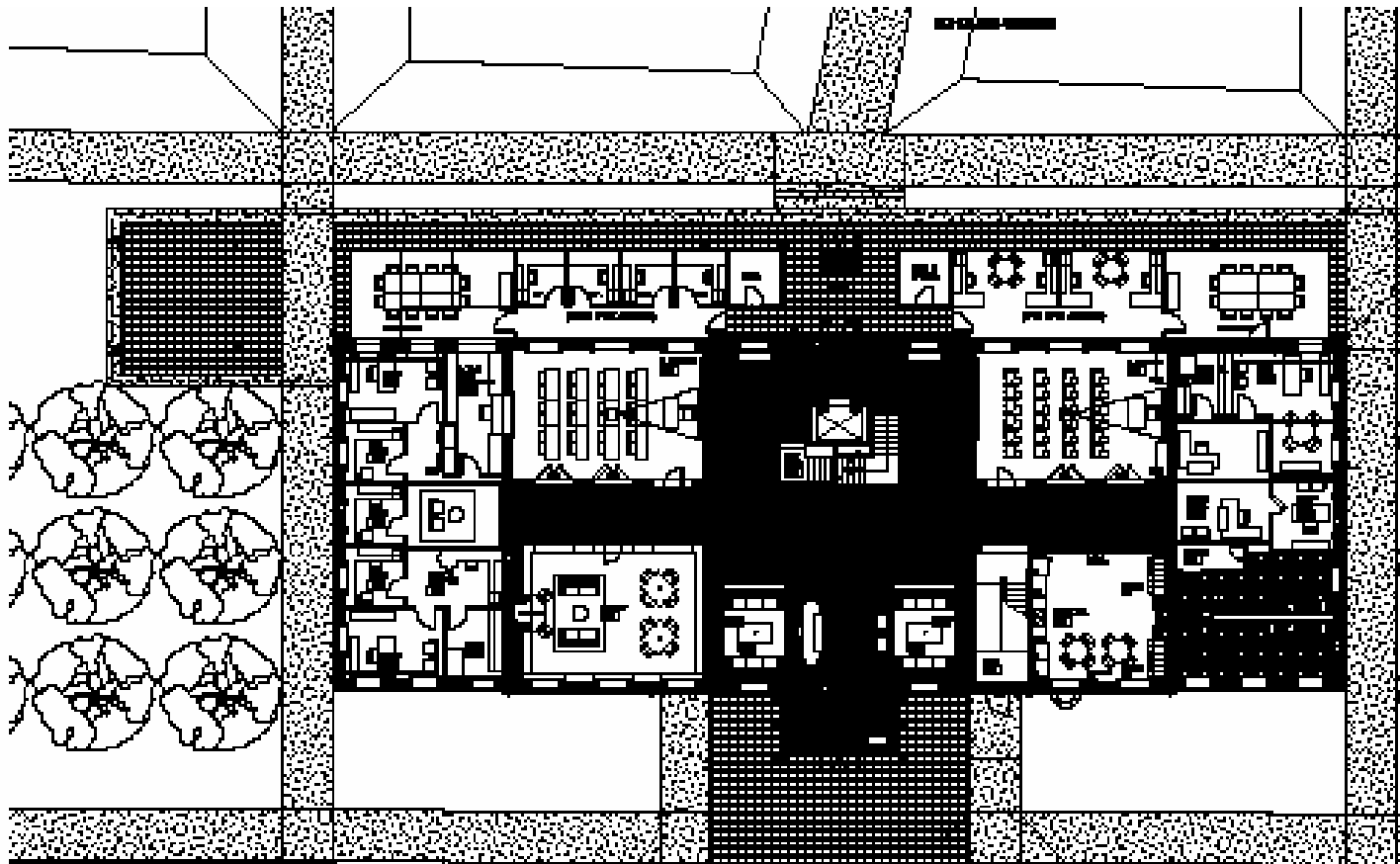
AGEC 5143 Economics of Agricultural Policy  
AGEC 4413 Economics of Environmental Management  
CESE 4043 Environmental Impact and the Fate of Pesticides  
ENDY 4043 Water Resources Issues  
ENCY 5113 Global Change  
ENDY 5153 Environmental Site Assessment  
ENDY 6013 Environmental Dynamics  
BENG 4113 Risk Analysis for Biological Systems

**Public Policy**

UALR        SOWK 7350 Social Welfare Policies and Services  
              SOWK 7390 Diversity and Oppression  
                                Ethno political Conflict

UAF         PLSC 5163 Public Policy Form/Analysis  
              EDFD 6613 Seminar: Evaluation of Policies  
              SOCJ 5113 Seminar in Social Stratification  
              EDFD 5683 Issues in Education Policy  
              PUBP 6113 Agenda Setting and Policy Formation  
              SOCJ 6043 Public Policy, Children and Families

**APPENDIX B**



**UNIVERSITY OF ARKANSAS SCHOOL OF PUBLIC SERVICE**

**WILLIAM J. CLINTON PRESIDENTIAL CENTER**

**LEGISLATIVE HALL**

**FOR OFFICIAL USE ONLY & CONFERENCE**

