UNIVERSITY COURSE AND PROGRAMS COMMITTEE
AGENDA
October 27, 2006
2:30 PM
Upchurch Conference Room

1. Approval of minutes for September 22, 2006. Meeting minutes can be viewed at http://www.uark.edu/depts/gradinfo/dean/courseprog/minutes/index.html.
2. Consent Agenda (Course change proposals can be reviewed at https://www2.uark.edu/servlet/edu.uark.regr.ccf.Main or by going to the website of the Registrar and clicking on "Faculty/Staff" then "Curriculum Change Form," and then "View Changes Pending Before the University Course and Programs Committee.")
   Proposals for course changes are enclosed. (To print tables, print each table separately)
   a. Undergraduate Courses (Table A)
   b. Graduate Courses (Table B)
   c. Dual Credit Courses (Table C)
   d. Law School Courses (Table D)
3. Old Business: None
4. New Business:

1. Proposed program changes for Fulbright College of Arts and Sciences (Table 1, Attachments 1A-1M)
2. Proposed program changes for the College of Education and Health Professions (Table 2, Attachments 2A-2B)

5. Other

. Item for discussion -Pat Koski

TABLE A **UCPC**

Undergraduate Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
AFLS	Agricultural, Food & Life Sciences Dean	AFLD	AFLS	3412H	Honors Proposal Development	U	ANC	2	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	2325	Landscape Arch Design II	U	ELC	5	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	4355	Landscape Arch Design V	u	ELC	5	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	4371	Senior Thesis Prep	U	ELC	1	Fall 2007
ARSC	Anthropology	ANTH	ANTH	2013	Introduction to Latin American Studies	U	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	4543 to 3543	Geographic Information Systems	D to U	CHN, CEGUC	3	Fall 2007
ARSC	Arts and Science Dean	ARSD	ARSC	0013	Reading Strategies for College Students	U	ANC	3	Fall 2007
ARSC	Art	ARTS	ARTS	3203	Sculpture I to Sculpture I: Fundamentals of Modeling, Carving & Casting	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	3213	Sculpture II to Sculpture II: Construction Methods & Alternative Media	U	CT, CD	3	Fall 2007
ARSC	Art	ARTS	ARTS	4213	Sculpture III to Mixed Media & Spatial Context	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	4223	Sculpture IV: to Advanced Sculpture	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	4663	Visual Design: Advanced Animation	U	ANC	3	Fall 2007

ARSC	Art	ARTS	ARTS	4853	Documentary Photography	U	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2011L	General Microbiology Laboratory	U	CD, OTH	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2011M	Honors General Microbiology Laboratory	U	CD, OTH	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2013	General Microbiology	U	CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2013H	Honors General Microbiology	U	CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	3123	Microbial Cell Structure to Prokaryote Biology	U	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4003	Laboratory Techniques in Microbiology to Laboratory in Prokaryote Biology	D to U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4233	Microbial Genetics to Genomics Bioinformatics	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4313	Physiology of Microorganisms to Molecular Cell Biology	D TO U	CT, CD, CEGUC,OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4643	Eukaryote Phylogeny	U	CD	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4743 to 4744	Fish Biology	U	CD, CHN, CCH	3 to 4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4753	General Virology	D To U	CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4783	Mammalogy	U	ANC	3	Fall 2007
ARSC	Communication	COMM	COMM	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	English	ENGL	ENGL	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	Geosciences	GEOS	GEOG	4384 to 3383	Principles of Landscape Evolution	D to U	CD, CHN, CCH, CEGUC, OTH	4 to 3	Fall 2007

ARSC	Geosciences	GEOS	GEOG to GEOS	4543 to 3543	Geographic Information Science	D to U	CD, CHN, CEGUC, OTH	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	3032	Geology of Arkansas	U	ANC	2	Fall 2007
ARSC	Geosciences	GEOS	GEOL	3413	Sedimentary Rocks to Sedimentary Rocks & Fossils	U	CT, CD	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4643 to 4924	Historical Geology to Earth System History	U to D	CT, CD, CHN, CCH, CEUDC	3 to 4	Fall 2007
ARSC	Foreign Language	FLAN	GREK	2203	Continuation of Beginning Modern Greek	U	ANC	3	Fall 2007
ARSC	Foreign Language	FLAN	GREK	2213	Continuation of Intermediate Modern Greek I	U	ANC	3	Fall 2007
ARSC	Music	MUSC	MUHS	4733	Survey of Symphonic Literature	U to D	CD, CEUDC	3	Fall 2007
ARSC	Philosophy	PHIL	PHIL	3983	Capstone Course for Philosophy Majors	U	ANC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	207V	Laboratory Experience	U	ANC	variable	Fall 2007
ARSC	Psychology	PSYC	PSYC	3033	Infancy and Early Childhood	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	306V to 206V	Special Readings and Projects to Direct Readings	U	CT, CD, CHN	variable	Fall 2007
ARSC	Psychology	PSYC	PSYC	3083	Research in Applied Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3093	Childhood and Adolescence to Developmental Psychology	U	CT, CD, OTH	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3183	Research in Human Learning	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3283	Research in Social Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	328V	Advanced Research	U	ANC	variable	Fall 2007

ARSC	Psychology	PSYC	PSYC	3383	Research in Developmental Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3483	Research in Physiological Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3583	Research in Personality	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3683	Research in Perception	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3783	Research in Cognition	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	4283	Advanced Seminar	U	ANC	3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	403V	Individual Study in Sociology	D to U	CEGUC	variable	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	0003	Development Reading	U	ELC	3	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	4413	Acquiring a Second Language	U	ANC	3	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	4423	Teaching a Second Language	U	ANC	3	Fall 2007
EDUC	Health Science, Kinesiology, Recreation & Dance	HKRD	KINS	4733 to 2733	Senior Seminar to Seminar In Exercise Science	U	CD, CT, CCN	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	3001	Orientation to VOED	U	ELC	1	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	3112	Vocational Student Organizations	U	ELC	2	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	4403	Nutrition Education and Counseling	U	ELC	3	Fall 2007
WCOB	Finance	FINN	FINN	450V	Independent Study	U to D	CD, CEUDC	variable	Fall 2007
WCOB	Finance	FINN	FINN	4843	Property and Casualty Insurance II	U	ELC	3	Fall 2007

TABLE B **UCPC**

Graduate Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
ARSC	Anthropology	ANTH	ANTH	5113	Anthropology of the City	G	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	681V to 6813	Seminar: Cultural Anthropology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	682V to 6823	Seminar: Archeology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	683V to 6833	Seminar: Biological Anthropology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5003	Laboratory in Prokaryote Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5101	Bibliographic Practicum	G	ELC	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5233	Genomics and Bioinformatics	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5313	Molecular Cell Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5323	Plant Growth and Growth Substances	G	ELC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5404	Comparative Botany	G	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5503	Ecosystem Ecology	G	ELC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5643	Invertebrate Phylogeny to Eukaryote Phylogeny	G	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5753	General Virology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5843	Conservation Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5922	Conservation of Endangered Species	G	ELC	2	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	5001	Proseminar	G	ANC	1	Fall 2007

EDUC	Curriculum & Instruction	CIED	CIED	5783	Professional and Family Partnerships	G	ANC	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	5233	Cooperative Education/Apprenticeship	G	ELC	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	574V	Internship	G	ELC	variable	Fall 2007

TABLE C **UCPC**

Dual Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
ARSC	Anthropology	ANTH	ANTH	4543 to 3543	Geographic Information Systems	D to U	CHN, CEGUC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4003	Laboratory Techniques in Microbiology to Laboratory in Prokaryote Biology	D to U	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4114	Dendrology	D	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4163	Dynamic Models in Biology	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4233	Microbial Genetics to Genomics Bioinformatics	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4313	Physiology of Microorganisms to Molecular Cell Biology	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4683	Analysis of Animal Populations	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4693	Forest Ecology	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4734	Wildlife Management Techniques	D	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4753	General Virology	D To U	CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4774	Biometry	D	ANC	4	Fall 2007
ARSC	Geosciences	GEOS	GEOG	4384 to 3383	Principles of Landscape Evolution	D to U	CD, CHN, CCH, CEGUC, OTH	4 to 3	Fall 2007

ARSC	Geosciences	GEOS	GEOG to GEOS	4543 to 3543	Geographic Information Science	D to U	CD, CHN, CEGUC, OTH	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4063	Principles of Geochemistry	D	ANC	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4643 to 4924	Historical Geology to Earth System History	U to D	CT, CD, CHN, CCH, CEUDC	3 to 4	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4863	Geological Data Analysis	D	ANC	3	Fall 2007
ARSC	Mathematical Sciences	MASC	MATH	4163	Dynamic Models in Biology	D	ANC	3	Fall 2007
ARSC	Music	MUSC	MUHS	4733	Survey of Symphonic Literature	U to D	CD, CEUDC	3	Fall 2007
ARSC	Political Sciences	PLSC	PLSC	4303	History of Political Parties in the U.S. 1789 - 1896	D	ANC	3	Fall 2007
ARSC	Political Sciences	PLSC	PLSC	4313	History of Political Parties in the United States Since 1896	D	ANC	3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	401V to 4013	Special Topics in Sociology	D	CHN, CCH	variable to 3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	403V	Individual Study in Sociology	D to U	CEGUC	variable	Fall 2007
WCOB	Finance	FINN	FINN	450V	Independent Study	D from U	CD, CEUDC	variable	Fall 2007

TABLE D **UCPC**

Law Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
LAWW	Law Department	LAWD	LAWW	6823	Legislative Externship	L	ANC	3	Fall 2007

KEY

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 COURSE
IN=	INACTIVATE COURSE

TABLE A **UCPC**

Undergraduate Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
AFLS	Agricultural, Food & Life Sciences Dean	AFLD	AFLS	3412H	Honors Proposal Development	U	ANC	2	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	2325	Landscape Arch Design II	U	ELC	5	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	4355	Landscape Arch Design V	u	ELC	5	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	4371	Senior Thesis Prep	U	ELC	1	Fall 2007
ARSC	Anthropology	ANTH	ANTH	2013	Introduction to Latin American Studies	U	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	4543 to 3543	Geographic Information Systems	D to U	CHN, CEGUC	3	Fall 2007
ARSC	Arts and Science Dean	ARSD	ARSC	0013	Reading Strategies for College Students	U	ANC	3	Fall 2007
ARSC	Art	ARTS	ARTS	3203	Sculpture I to Sculpture I: Fundamentals of Modeling, Carving & Casting	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	3213	Sculpture II to Sculpture II: Construction Methods & Alternative Media	U	CT, CD	3	Fall 2007
ARSC	Art	ARTS	ARTS	4213	Sculpture III to Mixed Media & Spatial Context	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	4223	Sculpture IV: to Advanced Sculpture	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	4663	Visual Design: Advanced Animation	U	ANC	3	Fall 2007

ARSC	Art	ARTS	ARTS	4853	Documentary Photography	U	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2011L	General Microbiology Laboratory	U	CD, OTH	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2011M	Honors General Microbiology Laboratory	U	CD, OTH	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2013	General Microbiology	U	CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2013H	Honors General Microbiology	U	CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	3123	Microbial Cell Structure to Prokaryote Biology	U	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4003	Laboratory Techniques in Microbiology to Laboratory in Prokaryote Biology	D to U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4233	Microbial Genetics to Genomics Bioinformatics	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4313	Physiology of Microorganisms to Molecular Cell Biology	D TO U	CT, CD, CEGUC,OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4643	Eukaryote Phylogeny	U	CD	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4743 to 4744	Fish Biology	U	CD, CHN, CCH	3 to 4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4753	General Virology	D To U	CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4783	Mammalogy	U	ANC	3	Fall 2007
ARSC	Communication	COMM	COMM	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	English	ENGL	ENGL	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	Geosciences	GEOS	GEOG	4384 to 3383	Principles of Landscape Evolution	D to U	CD, CHN, CCH, CEGUC, OTH	4 to 3	Fall 2007

ARSC	Geosciences	GEOS	GEOG to GEOS	4543 to 3543	Geographic Information Science	D to U	CD, CHN, CEGUC, OTH	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	3032	Geology of Arkansas	U	ANC	2	Fall 2007
ARSC	Geosciences	GEOS	GEOL	3413	Sedimentary Rocks to Sedimentary Rocks & Fossils	U	CT, CD	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4643 to 4924	Historical Geology to Earth System History	U to D	CT, CD, CHN, CCH, CEUDC	3 to 4	Fall 2007
ARSC	Foreign Language	FLAN	GREK	2203	Continuation of Beginning Modern Greek	U	ANC	3	Fall 2007
ARSC	Foreign Language	FLAN	GREK	2213	Continuation of Intermediate Modern Greek I	U	ANC	3	Fall 2007
ARSC	Music	MUSC	MUHS	4733	Survey of Symphonic Literature	U to D	CD, CEUDC	3	Fall 2007
ARSC	Philosophy	PHIL	PHIL	3983	Capstone Course for Philosophy Majors	U	ANC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	207V	Laboratory Experience	U	ANC	variable	Fall 2007
ARSC	Psychology	PSYC	PSYC	3033	Infancy and Early Childhood	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	306V to 206V	Special Readings and Projects to Direct Readings	U	CT, CD, CHN	variable	Fall 2007
ARSC	Psychology	PSYC	PSYC	3083	Research in Applied Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3093	Childhood and Adolescence to Developmental Psychology	U	CT, CD, OTH	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3183	Research in Human Learning	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3283	Research in Social Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	328V	Advanced Research	U	ANC	variable	Fall 2007

ARSC	Psychology	PSYC	PSYC	3383	Research in Developmental Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3483	Research in Physiological Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3583	Research in Personality	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3683	Research in Perception	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3783	Research in Cognition	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	4283	Advanced Seminar	U	ANC	3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	403V	Individual Study in Sociology	D to U	CEGUC	variable	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	0003	Development Reading	U	ELC	3	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	4413	Acquiring a Second Language	U	ANC	3	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	4423	Teaching a Second Language	U	ANC	3	Fall 2007
EDUC	Health Science, Kinesiology, Recreation & Dance	HKRD	KINS	4733 to 2733	Senior Seminar to Seminar In Exercise Science	U	CD, CT, CCN	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	3001	Orientation to VOED	U	ELC	1	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	3112	Vocational Student Organizations	U	ELC	2	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	4403	Nutrition Education and Counseling	U	ELC	3	Fall 2007
WCOB	Finance	FINN	FINN	450V	Independent Study	U to D	CD, CEUDC	variable	Fall 2007
WCOB	Finance	FINN	FINN	4843	Property and Casualty Insurance II	U	ELC	3	Fall 2007

TABLE B **UCPC**

Graduate Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
ARSC	Anthropology	ANTH	ANTH	5113	Anthropology of the City	G	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	681V to 6813	Seminar: Cultural Anthropology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	682V to 6823	Seminar: Archeology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	683V to 6833	Seminar: Biological Anthropology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5003	Laboratory in Prokaryote Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5101	Bibliographic Practicum	G	ELC	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5233	Genomics and Bioinformatics	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5313	Molecular Cell Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5323	Plant Growth and Growth Substances	G	ELC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5404	Comparative Botany	G	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5503	Ecosystem Ecology	G	ELC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5643	Invertebrate Phylogeny to Eukaryote Phylogeny	G	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5753	General Virology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5843	Conservation Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5922	Conservation of Endangered Species	G	ELC	2	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	5001	Proseminar	G	ANC	1	Fall 2007

EDUC	Curriculum & Instruction	CIED	CIED	5783	Professional and Family Partnerships	G	ANC	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	5233	Cooperative Education/Apprenticeship	G	ELC	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	574V	Internship	G	ELC	variable	Fall 2007

TABLE C **UCPC**

Dual Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
ARSC	Anthropology	ANTH	ANTH	4543 to 3543	Geographic Information Systems	D to U	CHN, CEGUC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4003	Laboratory Techniques in Microbiology to Laboratory in Prokaryote Biology	D to U	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4114	Dendrology	D	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4163	Dynamic Models in Biology	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4233	Microbial Genetics to Genomics Bioinformatics	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4313	Physiology of Microorganisms to Molecular Cell Biology	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4683	Analysis of Animal Populations	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4693	Forest Ecology	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4734	Wildlife Management Techniques	D	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4753	General Virology	D To U	CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4774	Biometry	D	ANC	4	Fall 2007
ARSC	Geosciences	GEOS	GEOG	4384 to 3383	Principles of Landscape Evolution	D to U	CD, CHN, CCH, CEGUC, OTH	4 to 3	Fall 2007

ARSC	Geosciences	GEOS	GEOG to GEOS	4543 to 3543	Geographic Information Science	D to U	CD, CHN, CEGUC, OTH	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4063	Principles of Geochemistry	D	ANC	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4643 to 4924	Historical Geology to Earth System History	U to D	CT, CD, CHN, CCH, CEUDC	3 to 4	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4863	Geological Data Analysis	D	ANC	3	Fall 2007
ARSC	Mathematical Sciences	MASC	MATH	4163	Dynamic Models in Biology	D	ANC	3	Fall 2007
ARSC	Music	MUSC	MUHS	4733	Survey of Symphonic Literature	U to D	CD, CEUDC	3	Fall 2007
ARSC	Political Sciences	PLSC	PLSC	4303	History of Political Parties in the U.S. 1789 - 1896	D	ANC	3	Fall 2007
ARSC	Political Sciences	PLSC	PLSC	4313	History of Political Parties in the United States Since 1896	D	ANC	3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	401V to 4013	Special Topics in Sociology	D	CHN, CCH	variable to 3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	403V	Individual Study in Sociology	D to U	CEGUC	variable	Fall 2007
WCOB	Finance	FINN	FINN	450V	Independent Study	D from U	CD, CEUDC	variable	Fall 2007

TABLE D **UCPC**

Law Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
LAWW	Law Department	LAWD	LAWW	6823	Legislative Externship	L	ANC	3	Fall 2007

KEY

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 COURSE
IN=	INACTIVATE COURSE

TABLE A **UCPC**

Undergraduate Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
AFLS	Agricultural, Food & Life Sciences Dean	AFLD	AFLS	3412H	Honors Proposal Development	U	ANC	2	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	2325	Landscape Arch Design II	U	ELC	5	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	4355	Landscape Arch Design V	u	ELC	5	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	4371	Senior Thesis Prep	U	ELC	1	Fall 2007
ARSC	Anthropology	ANTH	ANTH	2013	Introduction to Latin American Studies	U	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	4543 to 3543	Geographic Information Systems	D to U	CHN, CEGUC	3	Fall 2007
ARSC	Arts and Science Dean	ARSD	ARSC	0013	Reading Strategies for College Students	U	ANC	3	Fall 2007
ARSC	Art	ARTS	ARTS	3203	Sculpture I to Sculpture I: Fundamentals of Modeling, Carving & Casting	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	3213	Sculpture II to Sculpture II: Construction Methods & Alternative Media	U	CT, CD	3	Fall 2007
ARSC	Art	ARTS	ARTS	4213	Sculpture III to Mixed Media & Spatial Context	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	4223	Sculpture IV: to Advanced Sculpture	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	4663	Visual Design: Advanced Animation	U	ANC	3	Fall 2007

ARSC	Art	ARTS	ARTS	4853	Documentary Photography	U	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2011L	General Microbiology Laboratory	U	CD, OTH	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2011M	Honors General Microbiology Laboratory	U	CD, OTH	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2013	General Microbiology	U	CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2013H	Honors General Microbiology	U	CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	3123	Microbial Cell Structure to Prokaryote Biology	U	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4003	Laboratory Techniques in Microbiology to Laboratory in Prokaryote Biology	D to U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4233	Microbial Genetics to Genomics Bioinformatics	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4313	Physiology of Microorganisms to Molecular Cell Biology	D TO U	CT, CD, CEGUC,OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4643	Eukaryote Phylogeny	U	CD	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4743 to 4744	Fish Biology	U	CD, CHN, CCH	3 to 4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4753	General Virology	D To U	CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4783	Mammalogy	U	ANC	3	Fall 2007
ARSC	Communication	COMM	COMM	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	English	ENGL	ENGL	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	Geosciences	GEOS	GEOG	4384 to 3383	Principles of Landscape Evolution	D to U	CD, CHN, CCH, CEGUC, OTH	4 to 3	Fall 2007

ARSC	Geosciences	GEOS	GEOG to GEOS	4543 to 3543	Geographic Information Science	D to U	CD, CHN, CEGUC, OTH	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	3032	Geology of Arkansas	U	ANC	2	Fall 2007
ARSC	Geosciences	GEOS	GEOL	3413	Sedimentary Rocks to Sedimentary Rocks & Fossils	U	CT, CD	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4643 to 4924	Historical Geology to Earth System History	U to D	CT, CD, CHN, CCH, CEUDC	3 to 4	Fall 2007
ARSC	Foreign Language	FLAN	GREK	2203	Continuation of Beginning Modern Greek	U	ANC	3	Fall 2007
ARSC	Foreign Language	FLAN	GREK	2213	Continuation of Intermediate Modern Greek I	U	ANC	3	Fall 2007
ARSC	Music	MUSC	MUHS	4733	Survey of Symphonic Literature	U to D	CD, CEUDC	3	Fall 2007
ARSC	Philosophy	PHIL	PHIL	3983	Capstone Course for Philosophy Majors	U	ANC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	207V	Laboratory Experience	U	ANC	variable	Fall 2007
ARSC	Psychology	PSYC	PSYC	3033	Infancy and Early Childhood	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	306V to 206V	Special Readings and Projects to Direct Readings	U	CT, CD, CHN	variable	Fall 2007
ARSC	Psychology	PSYC	PSYC	3083	Research in Applied Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3093	Childhood and Adolescence to Developmental Psychology	U	CT, CD, OTH	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3183	Research in Human Learning	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3283	Research in Social Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	328V	Advanced Research	U	ANC	variable	Fall 2007

ARSC	Psychology	PSYC	PSYC	3383	Research in Developmental Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3483	Research in Physiological Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3583	Research in Personality	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3683	Research in Perception	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3783	Research in Cognition	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	4283	Advanced Seminar	U	ANC	3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	403V	Individual Study in Sociology	D to U	CEGUC	variable	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	0003	Development Reading	U	ELC	3	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	4413	Acquiring a Second Language	U	ANC	3	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	4423	Teaching a Second Language	U	ANC	3	Fall 2007
EDUC	Health Science, Kinesiology, Recreation & Dance	HKRD	KINS	4733 to 2733	Senior Seminar to Seminar In Exercise Science	U	CD, CT, CCN	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	3001	Orientation to VOED	U	ELC	1	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	3112	Vocational Student Organizations	U	ELC	2	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	4403	Nutrition Education and Counseling	U	ELC	3	Fall 2007
WCOB	Finance	FINN	FINN	450V	Independent Study	U to D	CD, CEUDC	variable	Fall 2007
WCOB	Finance	FINN	FINN	4843	Property and Casualty Insurance II	U	ELC	3	Fall 2007

TABLE B **UCPC**

Graduate Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
ARSC	Anthropology	ANTH	ANTH	5113	Anthropology of the City	G	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	681V to 6813	Seminar: Cultural Anthropology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	682V to 6823	Seminar: Archeology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	683V to 6833	Seminar: Biological Anthropology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5003	Laboratory in Prokaryote Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5101	Bibliographic Practicum	G	ELC	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5233	Genomics and Bioinformatics	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5313	Molecular Cell Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5323	Plant Growth and Growth Substances	G	ELC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5404	Comparative Botany	G	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5503	Ecosystem Ecology	G	ELC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5643	Invertebrate Phylogeny to Eukaryote Phylogeny	G	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5753	General Virology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5843	Conservation Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5922	Conservation of Endangered Species	G	ELC	2	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	5001	Proseminar	G	ANC	1	Fall 2007

EDUC	Curriculum & Instruction	CIED	CIED	5783	Professional and Family Partnerships	G	ANC	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	5233	Cooperative Education/Apprenticeship	G	ELC	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	574V	Internship	G	ELC	variable	Fall 2007

TABLE C **UCPC**

Dual Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
ARSC	Anthropology	ANTH	ANTH	4543 to 3543	Geographic Information Systems	D to U	CHN, CEGUC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4003	Laboratory Techniques in Microbiology to Laboratory in Prokaryote Biology	D to U	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4114	Dendrology	D	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4163	Dynamic Models in Biology	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4233	Microbial Genetics to Genomics Bioinformatics	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4313	Physiology of Microorganisms to Molecular Cell Biology	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4683	Analysis of Animal Populations	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4693	Forest Ecology	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4734	Wildlife Management Techniques	D	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4753	General Virology	D To U	CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4774	Biometry	D	ANC	4	Fall 2007
ARSC	Geosciences	GEOS	GEOG	4384 to 3383	Principles of Landscape Evolution	D to U	CD, CHN, CCH, CEGUC, OTH	4 to 3	Fall 2007

ARSC	Geosciences	GEOS	GEOG to GEOS	4543 to 3543	Geographic Information Science	D to U	CD, CHN, CEGUC, OTH	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4063	Principles of Geochemistry	D	ANC	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4643 to 4924	Historical Geology to Earth System History	U to D	CT, CD, CHN, CCH, CEUDC	3 to 4	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4863	Geological Data Analysis	D	ANC	3	Fall 2007
ARSC	Mathematical Sciences	MASC	MATH	4163	Dynamic Models in Biology	D	ANC	3	Fall 2007
ARSC	Music	MUSC	MUHS	4733	Survey of Symphonic Literature	U to D	CD, CEUDC	3	Fall 2007
ARSC	Political Sciences	PLSC	PLSC	4303	History of Political Parties in the U.S. 1789 - 1896	D	ANC	3	Fall 2007
ARSC	Political Sciences	PLSC	PLSC	4313	History of Political Parties in the United States Since 1896	D	ANC	3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	401V to 4013	Special Topics in Sociology	D	CHN, CCH	variable to 3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	403V	Individual Study in Sociology	D to U	CEGUC	variable	Fall 2007
WCOB	Finance	FINN	FINN	450V	Independent Study	D from U	CD, CEUDC	variable	Fall 2007

TABLE D **UCPC**

Law Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
LAWW	Law Department	LAWD	LAWW	6823	Legislative Externship	L	ANC	3	Fall 2007

KEY

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 COURSE
IN=	INACTIVATE COURSE

TABLE A **UCPC**

Undergraduate Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
AFLS	Agricultural, Food & Life Sciences Dean	AFLD	AFLS	3412H	Honors Proposal Development	U	ANC	2	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	2325	Landscape Arch Design II	U	ELC	5	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	4355	Landscape Arch Design V	u	ELC	5	Fall 2007
ARCH	Landscape Architecture	LARC	LARC	4371	Senior Thesis Prep	U	ELC	1	Fall 2007
ARSC	Anthropology	ANTH	ANTH	2013	Introduction to Latin American Studies	U	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	4543 to 3543	Geographic Information Systems	D to U	CHN, CEGUC	3	Fall 2007
ARSC	Arts and Science Dean	ARSD	ARSC	0013	Reading Strategies for College Students	U	ANC	3	Fall 2007
ARSC	Art	ARTS	ARTS	3203	Sculpture I to Sculpture I: Fundamentals of Modeling, Carving & Casting	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	3213	Sculpture II to Sculpture II: Construction Methods & Alternative Media	U	CT, CD	3	Fall 2007
ARSC	Art	ARTS	ARTS	4213	Sculpture III to Mixed Media & Spatial Context	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	4223	Sculpture IV: to Advanced Sculpture	U	CT, CD, OTH	3	Fall 2007
ARSC	Art	ARTS	ARTS	4663	Visual Design: Advanced Animation	U	ANC	3	Fall 2007

ARSC	Art	ARTS	ARTS	4853	Documentary Photography	U	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2011L	General Microbiology Laboratory	U	CD, OTH	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2011M	Honors General Microbiology Laboratory	U	CD, OTH	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2013	General Microbiology	U	CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	2013H	Honors General Microbiology	U	CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	3123	Microbial Cell Structure to Prokaryote Biology	U	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4003	Laboratory Techniques in Microbiology to Laboratory in Prokaryote Biology	D to U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4233	Microbial Genetics to Genomics Bioinformatics	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4313	Physiology of Microorganisms to Molecular Cell Biology	D TO U	CT, CD, CEGUC,OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4643	Eukaryote Phylogeny	U	CD	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4743 to 4744	Fish Biology	U	CD, CHN, CCH	3 to 4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4753	General Virology	D To U	CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4783	Mammalogy	U	ANC	3	Fall 2007
ARSC	Communication	COMM	COMM	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	English	ENGL	ENGL	3143	Language and Expressive Culture	U	ANC	3	Fall 2007
ARSC	Geosciences	GEOS	GEOG	4384 to 3383	Principles of Landscape Evolution	D to U	CD, CHN, CCH, CEGUC, OTH	4 to 3	Fall 2007

ARSC	Geosciences	GEOS	GEOG to GEOS	4543 to 3543	Geographic Information Science	D to U	CD, CHN, CEGUC, OTH	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	3032	Geology of Arkansas	U	ANC	2	Fall 2007
ARSC	Geosciences	GEOS	GEOL	3413	Sedimentary Rocks to Sedimentary Rocks & Fossils	U	CT, CD	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4643 to 4924	Historical Geology to Earth System History	U to D	CT, CD, CHN, CCH, CEUDC	3 to 4	Fall 2007
ARSC	Foreign Language	FLAN	GREK	2203	Continuation of Beginning Modern Greek	U	ANC	3	Fall 2007
ARSC	Foreign Language	FLAN	GREK	2213	Continuation of Intermediate Modern Greek I	U	ANC	3	Fall 2007
ARSC	Music	MUSC	MUHS	4733	Survey of Symphonic Literature	U to D	CD, CEUDC	3	Fall 2007
ARSC	Philosophy	PHIL	PHIL	3983	Capstone Course for Philosophy Majors	U	ANC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	207V	Laboratory Experience	U	ANC	variable	Fall 2007
ARSC	Psychology	PSYC	PSYC	3033	Infancy and Early Childhood	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	306V to 206V	Special Readings and Projects to Direct Readings	U	CT, CD, CHN	variable	Fall 2007
ARSC	Psychology	PSYC	PSYC	3083	Research in Applied Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3093	Childhood and Adolescence to Developmental Psychology	U	CT, CD, OTH	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3183	Research in Human Learning	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3283	Research in Social Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	328V	Advanced Research	U	ANC	variable	Fall 2007

ARSC	Psychology	PSYC	PSYC	3383	Research in Developmental Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3483	Research in Physiological Psychology	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3583	Research in Personality	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3683	Research in Perception	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	3783	Research in Cognition	U	ELC	3	Fall 2007
ARSC	Psychology	PSYC	PSYC	4283	Advanced Seminar	U	ANC	3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	403V	Individual Study in Sociology	D to U	CEGUC	variable	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	0003	Development Reading	U	ELC	3	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	4413	Acquiring a Second Language	U	ANC	3	Fall 2007
EDUC	Curriculum & Instruction	CIED	CIED	4423	Teaching a Second Language	U	ANC	3	Fall 2007
EDUC	Health Science, Kinesiology, Recreation & Dance	HKRD	KINS	4733 to 2733	Senior Seminar to Seminar In Exercise Science	U	CD, CT, CCN	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	3001	Orientation to VOED	U	ELC	1	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	3112	Vocational Student Organizations	U	ELC	2	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	4403	Nutrition Education and Counseling	U	ELC	3	Fall 2007
WCOB	Finance	FINN	FINN	450V	Independent Study	U to D	CD, CEUDC	variable	Fall 2007
WCOB	Finance	FINN	FINN	4843	Property and Casualty Insurance II	U	ELC	3	Fall 2007

TABLE B **UCPC**

Graduate Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
ARSC	Anthropology	ANTH	ANTH	5113	Anthropology of the City	G	ANC	3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	681V to 6813	Seminar: Cultural Anthropology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	682V to 6823	Seminar: Archeology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Anthropology	ANTH	ANTH	683V to 6833	Seminar: Biological Anthropology	G	CD, CHN, CCH	variable to 3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5003	Laboratory in Prokaryote Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5101	Bibliographic Practicum	G	ELC	1	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5233	Genomics and Bioinformatics	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5313	Molecular Cell Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5323	Plant Growth and Growth Substances	G	ELC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5404	Comparative Botany	G	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5503	Ecosystem Ecology	G	ELC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5643	Invertebrate Phylogeny to Eukaryote Phylogeny	G	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5753	General Virology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5843	Conservation Biology	G	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	5922	Conservation of Endangered Species	G	ELC	2	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	5001	Proseminar	G	ANC	1	Fall 2007

EDUC	Curriculum & Instruction	CIED	CIED	5783	Professional and Family Partnerships	G	ANC	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	5233	Cooperative Education/Apprenticeship	G	ELC	3	Fall 2007
EDUC	Rehabilitation, Human Resources & Communication Disorders	RHRC	VOED	574V	Internship	G	ELC	variable	Fall 2007

TABLE C **UCPC**

Dual Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
ARSC	Anthropology	ANTH	ANTH	4543 to 3543	Geographic Information Systems	D to U	CHN, CEGUC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4003	Laboratory Techniques in Microbiology to Laboratory in Prokaryote Biology	D to U	CT, CD, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4114	Dendrology	D	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4163	Dynamic Models in Biology	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4233	Microbial Genetics to Genomics Bioinformatics	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4313	Physiology of Microorganisms to Molecular Cell Biology	D TO U	CT, CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4683	Analysis of Animal Populations	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4693	Forest Ecology	D	ANC	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4734	Wildlife Management Techniques	D	ANC	4	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4753	General Virology	D To U	CD, CEGUC, OTH	3	Fall 2007
ARSC	Biological Sciences	BISC	BIOL	4774	Biometry	D	ANC	4	Fall 2007
ARSC	Geosciences	GEOS	GEOG	4384 to 3383	Principles of Landscape Evolution	D to U	CD, CHN, CCH, CEGUC, OTH	4 to 3	Fall 2007

ARSC	Geosciences	GEOS	GEOG to GEOS	4543 to 3543	Geographic Information Science	D to U	CD, CHN, CEGUC, OTH	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4063	Principles of Geochemistry	D	ANC	3	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4643 to 4924	Historical Geology to Earth System History	U to D	CT, CD, CHN, CCH, CEUDC	3 to 4	Fall 2007
ARSC	Geosciences	GEOS	GEOL	4863	Geological Data Analysis	D	ANC	3	Fall 2007
ARSC	Mathematical Sciences	MASC	MATH	4163	Dynamic Models in Biology	D	ANC	3	Fall 2007
ARSC	Music	MUSC	MUHS	4733	Survey of Symphonic Literature	U to D	CD, CEUDC	3	Fall 2007
ARSC	Political Sciences	PLSC	PLSC	4303	History of Political Parties in the U.S. 1789 - 1896	D	ANC	3	Fall 2007
ARSC	Political Sciences	PLSC	PLSC	4313	History of Political Parties in the United States Since 1896	D	ANC	3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	401V to 4013	Special Topics in Sociology	D	CHN, CCH	variable to 3	Fall 2007
ARSC	Sociology & Criminal Justice	SOCI	SOCI	403V	Individual Study in Sociology	D to U	CEGUC	variable	Fall 2007
WCOB	Finance	FINN	FINN	450V	Independent Study	D from U	CD, CEUDC	variable	Fall 2007

TABLE D **UCPC**

Law Courses October 27, 2006

COLL	DEPARTMENT NAME	DEPT	CRSE ALPHA	CRSE NUM	CRSE TITLE	CREDIT LEVEL	ACTION	CREDIT HOURS	EFFECTIVE DATE
LAWW	Law Department	LAWD	LAWW	6823	Legislative Externship	L	ANC	3	Fall 2007

KEY

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 COURSE
IN=	INACTIVATE COURSE

University Course and Programs Committee
27-Oct-06

TABLE ONE
Fulbright College of Arts and Sciences

Department of Art

ARTHFA - Changes in Honors Program - Attachment 1A
Course requirement changes for the four year honors program as specified in Section V of the attachment.

Department of Biological Sciences

BIOLBS - Change course requirements - Attachment 1B
Disallow BIOL 2013/2011 from counting toward the requirement of two elective lab courses at the 2000 level or higher as specified in Section V of the attachment.

BIOLMA - Eliminate the degree - Attachments 1C and 1D
Eliminate the degree program as specified in Section V of Attachment 1C.

Department of English

ENGLMA - Add new concentration - Attachments 1E and 1F
Add new concentration in Rhetoric, Composition, and Literacy as specified in Section V of Attachment 1E.

Department of Geosciences

GEOSPH - Add new degree program - Attachments 1G and 1H
Add new Ph D program in Geosiences as specified in Section VI of Attachment 1G.

Fulbright College of Arts and Sciences (Continued)

The Walter J. Lemke Department of Journalism

JOURBA - Adding prerequisite requirement for JOUR 1033 - Attachment 1I
Course is required by several other degree programs. The change is specified in Section V of the attachment.

Department of Music

MUSCBM - Adding graduation requirement - Attachment 1J
Students must receive a grade of 'B' or higher in MUTH 2603, 3603, and 3613 as specified in Section V of the attachment.

Department of Philosophy

PHILBA - Change of graduation requirements - Attachment 1K
Changes of graduation requirements are specified in Section V of the attachmen

Department of Psychology

PSYCBA - Change in degree requirements - Attachment 1L
Several changes are proposed and listed in Section V of the attachment.

PSYC-M - Change in requirements for the minor - Attachment 1M
Several changes are proposed and listed in Section V of the attachment.

TABLE TWO
College of Education and Health Professions

Department of Curriculum and Instruction

ELEDBS - Change in degree requirements - Attachment 2A
Several changes are proposed and listed in Section V of the attachment.

MLEDBS - Eliminate program - Attachment 2B
Eliminate the BSE in Middle Level Education as specified in the attachment.

ATTACHMENT 1A
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 _____

Current Name **ARTS Honors: Bachelor of Fine Arts**

College, School, Division **ARSC** Department Code **ARTS**

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

☐ Interdisciplinary Program CIP Code **500701**
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: Four-Year Honors Option I (non-H2P):
1) Change Honors World Literature to a 3 hour requirement--WLIT 1113H (3 hours)
2) Give options for taking Honors World Literature II, Honors Philosophy and Honors fine arts---
Fine Arts/World Lit./ Philosophy (6 hours)
Must be selected from two different areas.
Fine Arts: COMM 1003H, DANC 1003H, DRAM 1003H, HUMN 1003H, MLIT 1003H
Philosophy: PHIL 2003H
World Literature: WLIT 1123H

3) Change Humanities Colloquium requirement from 6 to 3 hours--

Colloquium in Humanities (3 hours)

Four-Year Honors Option II:
4) HUMN 2124H, Honors Philosophy, and a Humanities Colloquia not each required for Option II but 2 of 3 must be taken-- HUMN 2124H, PHIL 2003H and Humanities Collqouia (6-7 hours)
Select two.

5) Only one Social Science Colloquium required, rather than 2--
Colloquium in Social Sciences (3 hours):

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 current Four Year Honors BFA degree requires an unusually high number of credit hours making the degree virtually impossible to complete within four years. As it stands, this degree requires (depending on AP credits and courses waived for high test scores) somewhere between 50-66 general education credits, as well as 84 Art and Art History credits, for a total of somewhere between 134 and 150 credits. Not surprisingly, few students complete this degree, choosing instead to take either the Honors BA degree or switching to Departmental Honors to do the BFA degree. Since the BFA degree is the preferred degree for students wishing to go on to graduate study in Studio Art, the Art Department would like to see the Honors BFA become reasonably attainable for our most gifted students.

By reducing the total of general education credits to 44, the proposed changes are comparable to those required for the Honors Bachelor of Music (41 hours of general education) and will bring the total hours of the Four Year BFA in line with other Fulbright College Bachelors degrees. To keep the overall balance of the degree, reductions in required courses were spread out amongst the Humanities, Social Sciences, and Mathematics.

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.

I. Page 111 in the 2005-2006 Catalog of Studies

II. Stated core requirements for a Bachelor of Fine Arts, Four-Year Honors where changes will be made

Bachelor of Fine Arts Degree
Humanities Option 1
…
World Literature 6
WLIT 1113H, WLIT 1123H
Philosophy 3
PHIL 2003H

Fine Arts 3
Select from the following.
COMM 1003H, DANC 1003H, DRAM 1003H,
HUMN 1003H, MLIT 1003H
Colloquia in Humanities 6
Must be selected from two different areas of humanities. Course offerings vary each semester. See adviser.

Humanities Option 2
Honors Roots of Culture
HUMN 1114H, HUMN 1124H, HUMN 2114H, 16
HUMN 2124H

Philosophy 3
PHIL 2003H
Colloquia in Humanities 6
Completion of HUMN 2124H waives one 3-hour Humanities Colloquium requirement. Course offerings vary each semester. See adviser.

Students pursuing either option must also complete the following:
…
Colloquia in Social Sciences
Must be selected from two different areas of social sciences. Course offerings vary each semester. See adviser.
Natural Science: …

III. Proposed changes to Bachelor of Fine Arts, Four-Year Honors core

Bachelor of Fine Arts Degree
Humanities Option 1
…
World Literature 3
WLIT 1113H

Fine Arts, World Literature, Philosophy 6
Must be selected from two different areas.
Fine Arts
COMM 1003H, DANC 1003H, DRAM 1003H,
HUMN 1003H, MLIT 1003H
Philosophy
PHIL 2003H
World Literature
WLIT 1123H

Colloquium in Humanities 3

Humanities Option 2
Honors Roots of Culture
HUMN 1114H, HUMN 1124H, HUMN 2114H 12

Roots of Culture(H2P), Philosophy, Colloquium 6-7
Honors Humanities Project (H2P)
HUMN 2124H
Philosophy
PHIL 2003H
Colloquia in Humanities

Students pursuing either option must also complete the following:
. . .
Colloquium in Social Sciences 3
Natural Science . . .

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 1B
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 _____

Current Name **Biology, Bachelor of Science**

College, School, Division **ARSC** Department Code **BISC**

Current Code (6 digit Alpha) **BIOLBS** 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: Adding an exclusionary statement which disallows BIOL 2013/2011 from counting toward the requirement for 2 elective lab courses numbered 2000 or higher. This statement is needed to coincide with the changes in the description to BIOL 2013/2011 which will now state "Does not count towards BS in Biology."

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.)

BIOL 2013/2011 General Microbiology/Lab is a service course for many students in various programs outside of the department of Biological Sciences for whom it may be the only relatively advanced biology course. As such, it has to cover a great deal of cell biology and shares a lot of redundancy with the course, Cell Biology (BIOL 2533), a required Biology Core course for our BS Biology majors. We would prefer that BS majors who wish to emphasize microbiology would take more advanced courses after they have taken Cell Biology. Therefore we wish to remove General Microbiology from the list of courses that may count for the BS. BIOL 2013/2011 have pending course change proposals which would add the statement "Does not count towards BS in Biology" to the catalog description of each course.

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:

Requirements for a B.S. Degree with a Major in Biology: A minimum of 124 hours is required, including 40 hours in the major as specified below.
1. Biology Core . . .
2. Bibliographic Practicum . .
3. An additional 26 hours of electives in biology and/or biology related electives including:
a. No more than 8 hours . . .
b. At least 2 elective courses numbered 2000 or higher which are lab courses. This includes Core Labs taken in addition to the basic Core requirement.
c. At least 18 hours in courses numbered 3000 or higher . . .
. . .

Proposed Catalog Text [Changes occurring in #3 b.]
Requirements for a B.S. Degree with a Major in Biology: A minimum of 124 hours is required, including 40 hours in the major as specified below.
1. Biology Core . . .
2. Bibliographic Practicum . .
3. An additional 26 hours of electives in biology and/or biology related electives including:

a. No more than 8 hours . . .

b. At least 2 elective courses numbered 2000 or higher which are lab courses. This includes Core Labs taken in addition to the basic Core requirement. Courses whose catalog description explicitly excludes them from counting toward the major may not be used to meet this requirement.

c. At least 18 hours in courses numbered 3000 or higher . . .

. . .

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 1C
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 **2007**

Current Name **Master of Arts**

College, School, Division **ARSC** Department Code **BISC**

Current Code (6 digit Alpha) **BIOLMA** 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 **BISC/Master of Arts** Effective Catalog Year **2007**

No new students admitted to program after Term: Fall Year: 2007
Allow students in program to complete under this program until Term: Spring Year: 2008

SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: Removal of the Biology MA necessitates changes to the catalog copy which makes reference to more than one Master's program (MA vs. MS).

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 degree reflected a time when the department had non-research graduate students. The faculty are now all research oriented and we have not graduated a M.A. student during the last 3 years, as we have gradually phased out this degree. All graduate students are now responsible for completing a resear-based degree (M.S. or Ph. D.).

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:

Degrees Conferred:

M.A., M.S., Ph.D. in Biology (BIOL)

. . . .

Requirements for the Master's Degree: Two degree programs are available, both of which require 30 semester hours of gradute credit specified by the department. The Master of Science includes at least 24 semester hours of course credit and thesis research. Master of Science students are required to enroll in BIOL 600V for 6 hours of credit and to submit a scholarly thesis based on field and/or laboratory research. Master of Arts students must enroll in BIOL 600V for 6 hours of credit and submit a scholarly thesis based on critical evaluation of scientific literature (on a topic agreed upon by their advisory committee), and complete at least 24 hours of graduate courses. A specific coursework program will be selected under the guidance of the student's major professor and graduate committee. An oral comprehensive examination is required of all candidates, including a defense of the thesis, which in the case of M.S. students will follow their research seminar.

. . .

Proposed Catalog Text:

Degrees Conferred:

M.S., Ph.D. in Biology (BIOL)

. .

Requirements for the Master's Degree: The Master of Science requires 30 semester hours of gradute credit specified by the department to include at least 24 semester hours of course credit and thesis research. Master of Science students are required to enroll in BIOL 600V for 6 hours of credit and to submit a scholarly thesis based on field and/or laboratory research. A specific coursework program will be selected under the guidance of the student's major professor and graduate committee. An oral comprehensive examination is required of all candidates, including a defense of the thesis which will follow the research seminar.

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 1D
LETTER OF NOTIFICATION – 5

DELETION

(Certificate, Degree, Option, Organizational Unit)

1. Institution submitting request: University of Arkansas, Fayetteville
2. Contact person/title: Dr. Nancy E. Talburt, Vice Provost-Academic Affairs
3. Phone number/e-mail address: 479-575-2151 netal@uark.edu
4. Proposed effective date: Fall 2007
5. Title of certificate, degree program, option, or organizational unit: Master of Arts
6. CIP Code:
7. Degree Code: BIOLMA
8. Reason for deletion: This degree reflected a time when the department had non-research graduate students. The faculty are now all research oriented and we have not graduated a M.A. student during the last 3 years, as we have gradually phased out this degree. All graduate students are now responsible for completing a resear-based degree (M.S. or Ph. D.).
9. Number of students still enrolled in program: 1
10. Expected graduation date of last student: Summer 2006
11. Name of courses which will be deleted as a result of this action: none
12. How will students in the deleted program be accommodated: N/A
13. Are funds available for reallocation? N/A

Board of Trustees Approval Date:

Chief Academic Officer: Date:

ATTACHMENT 1E
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
University Course and Programs Committee	Date	Board of Trustees Approval/Notification Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval/Notification 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 **2007**

Current Name **Master of Arts in English**

College, School, Division **ARSC** Department Code **ENGL**

Current Code (6 digit Alpha) **ENGLMA** Proposed Code (6 digit Alpha) **RHET (for sub-plan code)**
Prior approval from the Office of the Registrar is required.

☐ Interdisciplinary Program CIP Code **23.0101**
Prior assignment from Office of Institutional Research is required.

Proposed Name **Master of Arts in English, Concentration in Rhetoric, Composition and Literacy**
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: Students in the Master of Arts in English Concentration in Rhetoric, Composition, and Literacy will complete all the current 18-hour distribution requirements for the M.A., plus complete English 5003 (Composition Pedagogy) and 12 additional hours in either coursework or thesis hours in rhetoric, composition, and literacy. Of those additional 12 hours, at least three must be in rhetoric and three must be in literacy. This M.A. concentration will require a total of 33 hours, in contrast to 30 for the M.A. in English without this concentration.

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 proposed change will not adversely affect or eliminate any existing degree program. It will attract a new clientele to the graduate program in English, a group of students who foresee a career of teaching and scholarship in rhetoric, composition, and literacy, as well as in literature and creative writing.

SECTION VII: Catalog Text and Format

Insert the current catalog text, with proposed changes identified in Section V inserted and tracked in Microsoft Word. Be sure that all proposed changes are inserted and tracked. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate.

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:
Requirements for the Master of Arts Degree: In addition to the general requirements . . .
1. Each master's candidate must present . . .
2. Each master's candidate must demonstrate a reading knowledge of a language other than English . . .

Proposed Catalog Copy:

(a new Requirment #2 will be inserted)

Requirements for the Master of Arts Degree: In addition to the general requirements . . .
1. Each master's candidate must present . . .
2. Candidates for the Concentration in Rhetoric, Composition, and Literacy must present 33 hours of course work or 27 hours of course work and a thesis. Candidates for this concentration must meet all the requirements listed in 1, 1a, 1b, 1c, and 1d above. In addition, candidates for this concentration must take:

a. English, 5003, Composition Pedagogy.
b. At least one three-hour course in the history and/or theory of rhetoric.
c. At least one three-hour course in literacy, the English language, and/or linguistics.
3. Each master's candidate must demonstrate a reading knowledge of a language other than English . . .

(the old requirements #2,3, and 4 will be renumbered 3, 4, and 5.)

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 1 F
LETTER OF NOTIFICATION – 3

NEW OPTION, CONCENTRATION, EMPHASIS

(Maximum 18 semester credit hours of new theory courses and 6 credit hours of new practicum courses)

1. Institution submitting request: University of Arkansas at Fayetteville

2. Contact person/title: Nancy Talburt, Vice Provost

3. Phone number/e-mail address: 479-575-2151 netal@uark.edu

4. Proposed effective date: August 2007

5. Title of degree program: Master of Arts in English

6. CIP Code: 23.0101

7. Degree Code: ENGLMA

8. Proposed option/concentration/emphasis name: Concentration in rhetoric, composition, and literacy

9. Reason for proposed action: A growing number of students nationally and within Arkansas seek master's degrees in English that focus on the theory and practice of effective written communication and on the relationships among language use, language policy, and social, educational, political, and cultural change. These students foresee for themselves a number of careers that involve the study, practice, and teaching of writing.

10. New concentration objective: To prepare students to work in teaching or writing-intensive positions in education, government, business, industry, or the not-for-profit sector or to pursue doctoral study in rhetoric, composition, and literacy.

11. Provide the following:
    a. List of required courses:
        - the current 18-hour distribution requirements for the M.A. in English plus
        - English 5003 Composition Pedagogy
        - an additional 12 hours of either course work or thesis hours in graduate courses in rhetoric, composition, and literacy. Three of these hours must be in courses in the history and/or theory of rhetoric and three must be in courses in literacy, language, and/or linguistics.

b. New course descriptions: No new courses will need to be created.
c. Program goals and objectives: See #s 9, 10 and 11d.
d. Expected student learning outcomes: Students will be able to analyze the interrelationships of language use, language policy, and social, educational, cultural, and political change in a context. Students will be able to understand the major principles of rhetorical appeal, rhetoric action, textual organization and structure, and style that undergird effective writing in many genres in English. Students will be able to analyze the many ways that the organization, structure, and style of a text manifest its meaning, purpose, and effective. Students will be able to teach principles of rhetoric, composition, and literacy to specific populations, both within school and beyond.

12. Will the new option be offered via distance delivery? No.

13. Mode of delivery to be used: It will be offered via traditional graduate courses on the campus of the University of Arkansas at Fayetteville.

14. Explain in detail the distance delivery procedures to be used. N/A

15. Is the degree approved for distance delivery? N/A

16. List courses in option/concentration/emphasis. Include course descriptions for new courses.

- English 5003, Composition Pedagogy. Introduction to teaching college composition.
- English 5183, The Structure of Present English. Structural analysis of the language.
- English 5973, Studies in Rhetoric and Composition. Subject matter changes depending on student interest and faculty expertise. May be repeated up to 12 hours.
- English 6193, The Development of English. Intensive course in the fundamentals of linguistic study and their application to the study of English.
- English 6973, Seminar in Rhetoric and Composition. Subject matter changes depending on student interest and faculty expertise. May be repeated up to 12 hours.

17. Specify the amount of the additional costs required, the source of funds, and how funds will be used: No additional costs are required to implement this concentration.

Board of Trustees Approval Date:

Chief Academic Officer Date:

ATTACHMENT 1G
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 **2007**

Current Name _____

College, School, Division **ARSC** Department Code **GEOS**

Current Code (6 digit Alpha) _____ Proposed Code (6 digit Alpha) **GEOSPH**
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 **Doctor of Philosophy in Geosciences**
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: N/A.

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.)

Please refer to ADHE proposal

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.

Proposed Catalog Text

PROPOSED CATALOG TEXT:

Doctor of Philosophy (Ph.D.) in Geosciences

The Department of Geosciences offers graduate studies leading to the Master of Arts (Geography), Master of Science (Geology), and the Doctor of Philosophy (Geosciences) degrees.

The Department of Geosciences focuses on research and education dealing with the nature, genesis, and history of the Earth and the global environment, the evolution of landscapes and biota at the Earth's surface, and the advance of geospatial technologies. The faculty of the Department of Geosciences maintains active research programs in the following areas:

Basin Analysis and Stratigraphy
Dendrochronology and Paleoclimatology
Geochemistry
Geodesy
Geomorphology and Surface Processes
Geoscience Education
Geospatial Technologies and Geoinformatics
Neotectonics
Hydrogeology. Groundwater Modeling, Limnology, Watershed Sciences
Regional Tectonics and Structural Geology
Remote Sensing
Petrology and Volcanology

The Doctor of Philosophy degree is designed for students who are committed to scholarship in the geosciences and who wish to prepare for professional employment within the academic community, industry, or government. Given the interdisciplinary nature of Geosciences, the Department of Geosciences encourages research including elements of space and planetary sciences, biological sciences, environmental sciences, physics and chemistry to address relevant problems at the boundaries of geoscience and other disciplines.

Applicants for the doctoral program must have completed the baccalaureate with a major in geosciences or an allied discipline. Students with academic preparation at the undergraduate or masters level in other disciplines of physical science, engineering, and mathematics are also encouraged to apply. All applicants must submit their scores on the Graduate Record Examination directly to the University of Arkansas Graduate School, provide three letters of recommendation from individuals qualified to assess the applicant's academic potential, a personal curriculum vita, and a statement of academic and research interests. Contact the department for application materials.

Qualified students with a bachelor's degree or a master's degree may be accepted into the Ph.D. program. Academic requirements for admission to the program are listed in the table below. In addition, prospective applicants are encouraged to contact Department of Geosciences faculty with similar research interests to initiate dialogue regarding availability for mentoring, potential research topics, and research funding opportunities.

Requirements for admission to doctoral study in Geosciences:

Minimum Undergraduate GPA: 2.85 on a 4.0 system
Minimum Graduate GPA: 3.20 on a 4.0 system
Minimum GRE Verbal: 500
Minimum GRE Quantitative: 500
Minimum GRE combined: 1000
Minimum TOEFL (Int'l Students only): 550 paper exam (or equivalent on computer exam)
MS/MA requirements: 24 units graduate courses, 6 hours thesis
Recommendations: Three (3) letters of recommendation from individuals qualified to assess the applicant's academic potential
PhD course requirements: 24 units graduate courses; 18 hours dissertation; completed original dissertation research. No course with a grade of less than a C (graduate or undergraduate) will be accepted as fulfilling prerequisites.
Acceptance by an advisor
Other: Current Curriculum Vita
Statement of academic and research interests

Course Requirements
• 24 course hours beyond the U of A MS/MA degree or equivalent.
• Required – GEOS 5023 Technical and Proposal Writing for the Geosciences
• It is strongly recommended that two courses be taken outside of the Department that are supplementary to the students interests and dissertation topic. These may be 3000-level undergraduate courses, if approved by the Advisory Committee and the Graduate School.
• No more than 3 hours of Special Problems or Independent Research
• Dissertation - 18 hours to be taken after admission to candidacy.
Any waivers to these requirements should be appealed to the Advisory or Dissertation committee and the departmental Graduate Advisor

The student must maintain a 3.0 GPA in course work taken for the PhD degree.

The Doctor of Philosophy degree is primarily a research degree, but communication of that research is critical for professional development and required for most professional pursuits. To promote development of the communication skills, each student is required to teach labs and/or a course for at least one semester and to present scientific results at one or more national or international professional meetings.

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 1H
LETTER OF INTENT - 1
NEW CERTIFICATE OR DEGREE PROGRAM

1. PROPOSED PROGRAM TITLE
   Doctor of Philosophy in Geosciences

2. CIP CODE REQUESTED
   N/A

3. CONTACT PERSON
   Name: Pamela Jansma, Chair, Department of Geosciences
   Name of Institution: University of Arkansas, Fayetteville
   Address: Department of Geosciences, 113 Ozark Hall, Fayetteville, AR 72701
   E-mail Address: pjansma@uark.edu
   Phone Number: 479-575-4748

4. PROPOSED STARTING DATE: August 2008

5. PROGRAM SUMMARY

The objective of the program is to provide doctoral-level training for students in areas of strengths unique to the University of Arkansas, Fayetteville (UAF). These areas of faculty expertise include basin analysis and petroleum exploration (including sedimentation and stratigraphy), dendrochronology and paleoclimatology, environmental geology and hydrology, limnology, surficial processes, active tectonics, geographic information systems, cartography, geodesy, remote sensing, shallow geophysics, volcanology, and natural hazards.

Students with doctoral-level expertise in these areas will contribute to the economic and environmental well being of Arkansas and of surrounding states. This is particularly relevant now with the new-found interest in petroleum resources within the region and the rapid expansion of the energy industry. The economic impact on Arkansas of natural gas extraction from the Fayetteville Shale, a geologic formation present throughout the state, is estimated at $5.5 billion. In addition to the increased importance of petroleum resources, environmental problems related to water quality and quantity exist and are becoming more severe. Their long-term resolution requires strong and forward-thinking research led by highly trained investigators. Natural resources including water, coal, oil, natural gas, and building materials are necessities for economic development in the state. Graduates of this program will contribute in their vital area through geologic analysis of sedimentary basins, and through advanced geographic and cartographic depiction of their distribution. Surficial processes such as stream erosion and deposition, slope erosion, glaciation, and weathering, all impact the land surface that we use for living, for storage of waste materials, for agriculture, and for construction. Natural hazards such as earthquakes affect the surface and construction. We envision that students who study the processes and deposits will contribute to mitigating any deleterious effects and promote wise use of our natural and cultural resources.

The Department of Geosciences at the University of Arkansas merges the formerly distinct Departments of Geography and Geology into a single academic unit. Separate degree requirements (BA and MA in Geography and BS and MS in Geology) and course curricula are maintained, although there is some cross-registration in undergraduate and graduate courses by students. The

combined department has a total of 21 faculty members in fall 2006, all of whom have PhDs and Graduate I faculty status within UAF. Geology has 10 full-time teaching faculty with 1 part-time appointment shared with the US Geological Survey. Geography has 10 full-time teaching faculty, of which one is a joint appointment with the Department of Anthropology, and another is an Associate Dean of Fulbright College. One tenure-track assistant professorship will be filled for academic year 2007-2008.

Research continues to be a primary focus within the Department of Geosciences, despite the lack of a doctoral program in the field. Total active external funding was $6,456,361 in 2005-2006, an increase of 32% from $4,874,120 in 2004-2005. Research grants awarded to the Department of Geosciences came from a variety of federal, state, and local agencies including NSF, NASA, DOE, DOD, USGS, USDA, the Department of Justice, the states of Arkansas, Oklahoma, and California, the Arkansas Natural Resources Commission, and the Beaver Lake Water District. Faculty and their students had more than 50 articles either in press or published during 2005-2006 and gave more than 60 presentations at (inter)national meetings.

The curriculum will use existing courses at the 4000-5000 level within the Department of Geosciences. One new course on technical and proposal writing will be required. The process to create this course was begun last academic year.

The library resources, facilities, and equipment are adequate for the short-term. Library resources were improved within the last several years as faculty with new research foci joined the Department and the Environmental Dynamics doctoral program was initiated.

Funds for two new hires are included in the budget for the proposed PhD program. One will be at the junior level and the other at the senior level. The hire at the senior level will be a person with extensive experience with doctoral students and graduate education to provide guidance as the Department moves forward with the PhD program. The budget also has monies allocated for additional graduate assistantships and increases in stipend levels as the Department shifts away from support of master's degree students toward support of doctoral candidates. We anticipate that the number of master's degree students on graduate assistantships will decline over time.

6. NEED FOR THE PROGRAM

RATIONALE

We believe that the proposal to initiate a PhD program in Geosciences is timely and justified for a number of important reasons. UAF strives to be a "student-centered, research university, serving the needs of the State of Arkansas and beyond," but we note that no institution of higher education in Arkansas offers a PhD in Geography, Geology, or Geosciences. The creation of the doctoral program is critical to solidify the campus at the forefront of energy-related research in the state. The potential $5.5 billion impact on Arkansas of the development of the Fayetteville Shale as a petroleum resource is unparalleled in recent years. Effects already can be seen in Conway, where a corporate presence is emerging. Southwestern Energy and Schlumberger are both building regional headquarters in the area. These companies, and others, will require a well-prepared workforce that includes geoscientists with doctoral degrees. As the field of geosciences has become more quantitative and technologically sophisticated over the past decade, the demand for scientists with doctoral degrees has increased exponentially, such that the preferred degree for exploration research currently is the doctorate. With no option to pursue relevant doctoral studies at any institution within the state, any interested and qualified students must seek alternatives outside Arkansas at a time when demand for such professionals is enormous.

Students who pursue the PhD are often the best prepared and motivated of all students that seek advanced degrees. The impact of the loss of these highly skilled and well-educated individuals

who attended UAF or other Arkansas institutions is difficult to estimate quantitatively, but surely the potentially positive contributions of such individuals are nevertheless easily appreciated. UAF is the only primary state university among all the 50 states that does not offer a PhD in Geosciences. Again, as we seek to improve the quality of the educational environment at UAF and within Arkansas, it is imperative that the only comprehensive university within the state offers the full diversity of modern intellectual endeavors to all its citizens. Last, while it should not be seen as a motivation in and of itself, the Department of Geosciences is the only natural science department in the Fulbright College of Arts and Sciences that does not offer a PhD.

The Department of Geosciences at the University of Arkansas merges the formerly distinct Departments of Geography and Geology into a single academic unit. Separate degree requirements (BA and MA in Geography and BS and MS in Geology) and course curricula are maintained, although there is some cross-registration in undergraduate and graduate courses by students. The combined department has total of 21 faculty members, all of whom have PhDs and Graduate I faculty status at UAF. Geology has 10 full-time teaching faculty with 1 part-time appointment shared with the US Geological Survey and Geography has 10 full-time teaching faculty, although one professor has served as Associate Dean for many years and is thus less involved with teaching than the other members of the department. Another professor is a joint appointment with Anthropology. The number of Geosciences faculty is less than most of the other cohort institutions (Figures 1 and 2) and most of the other mathematics and science faculties at UAF (Figure 3).

The Department of Geosciences is somewhat unique in that it merges disciplines and faculty from social science (economic and human geography) and natural science (physical geography and geology) traditions. While many aspects of geography, including areas in which UAF faculty excel such as paleoclimatology, natural earth-material erosion rates, and impacts of natural hazards, are commonly found in geology or earth science departments, other equally important aspects of geography, such as cartography, demographics, and geographically-based economic or sociological analyses are not well integrated into a natural science tradition. Because of these different emphases, different degree programs are required. UAF has a vibrant, interdisciplinary PhD program in Environmental Dynamics, ENDY, which has been very successful in producing students whose dissertation research has included some aspect of environmental characterization *and its impact on human population*. Indeed, many areas of research that would be associated traditionally with geography and geology can easily be accommodated within the ENDY degree program, but others cannot, particularly in those cases where the research focuses on the basic science rather than on any human dimension.

An obvious question is the potential impact and synergy of the proposed Geosciences PhD program, outlined here, on the existing PhD program in ENDY. The ENDY doctoral program was implemented in 1998 with the stated mission to investigate environmental processes at all spatial and temporal scales, but with emphasis on understanding human interactions with the environment. The program began as a collaborative PhD among the departments of Anthropology, Geography, and Geology. Currently, ENDY has 30 doctoral students. It admits 8 to 12 new students annually, depending on available financial resources.

The ENDY cohort is comprised of students with diverse academic backgrounds interested in pursuit of broadly interdisciplinary research leading to the PhD. Among students with Geosciences backgrounds enrolled in the ENDY program, the academic interests are primarily from subdisciplines in Geosciences concerned with environmental issues (e.g. watershed science, hydrology and hydrogeology, or geoarcheaology). However, many areas of the Geosciences do not integrate humans and their environment and do not fit into this program (e.g. petroleum geology, tectonics, stratigraphy and sedimentology, remote sensing and GIS) and thus the need for a

Geosciences PhD program. As such, implementation of a doctoral degree offering in Geosciences will have a minimal

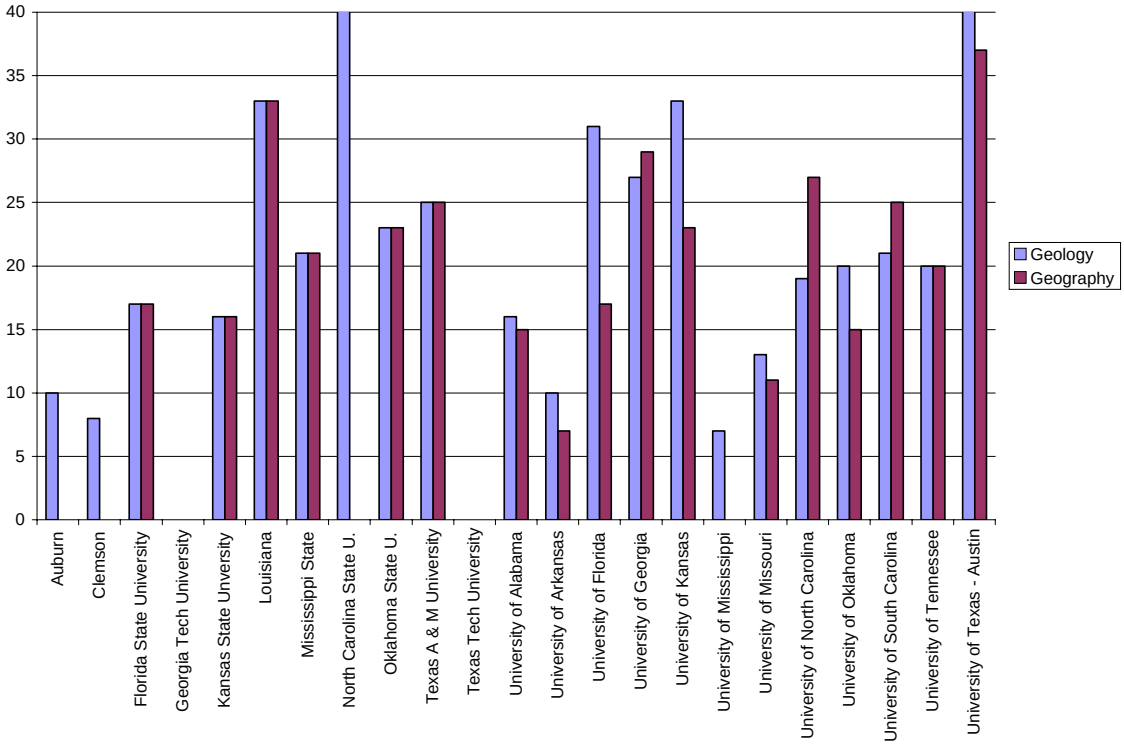


Figure 1. Number of Geology and Geography faculty at cohort institutions (2004). Auburn University, Clemson University, North Carolina State University, and the University of Mississippi do not have Departments of Geography.

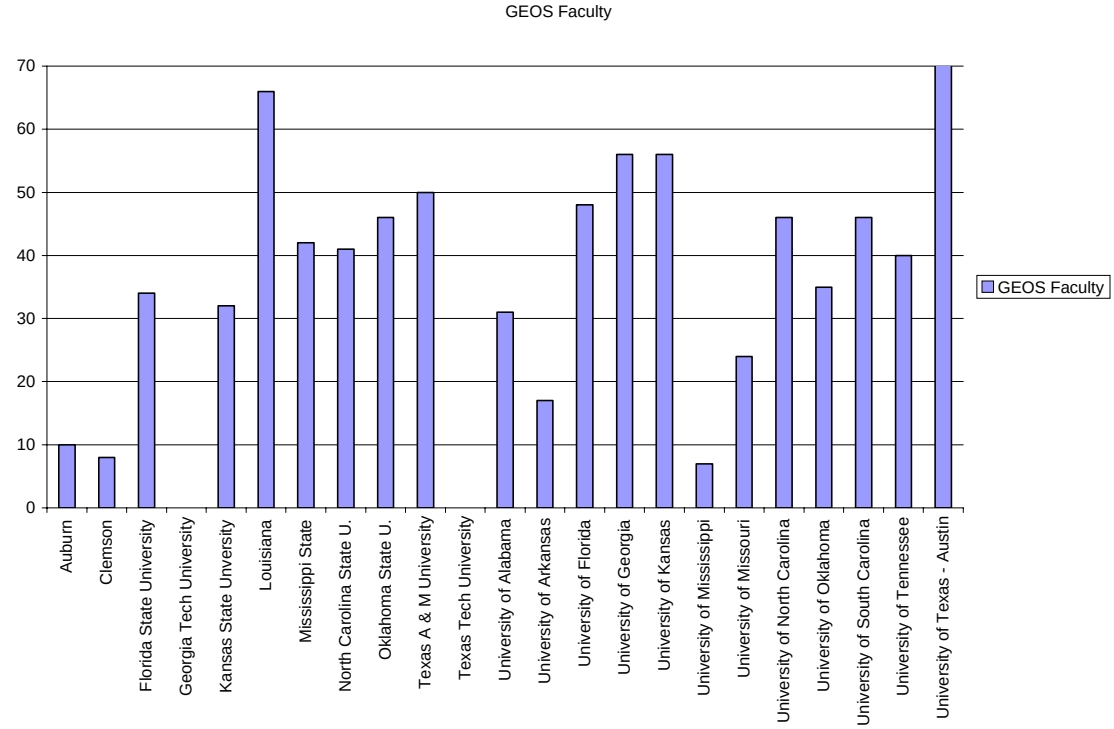


Figure 2. Number of faculty in Geosciences at cohort institutions (2004).

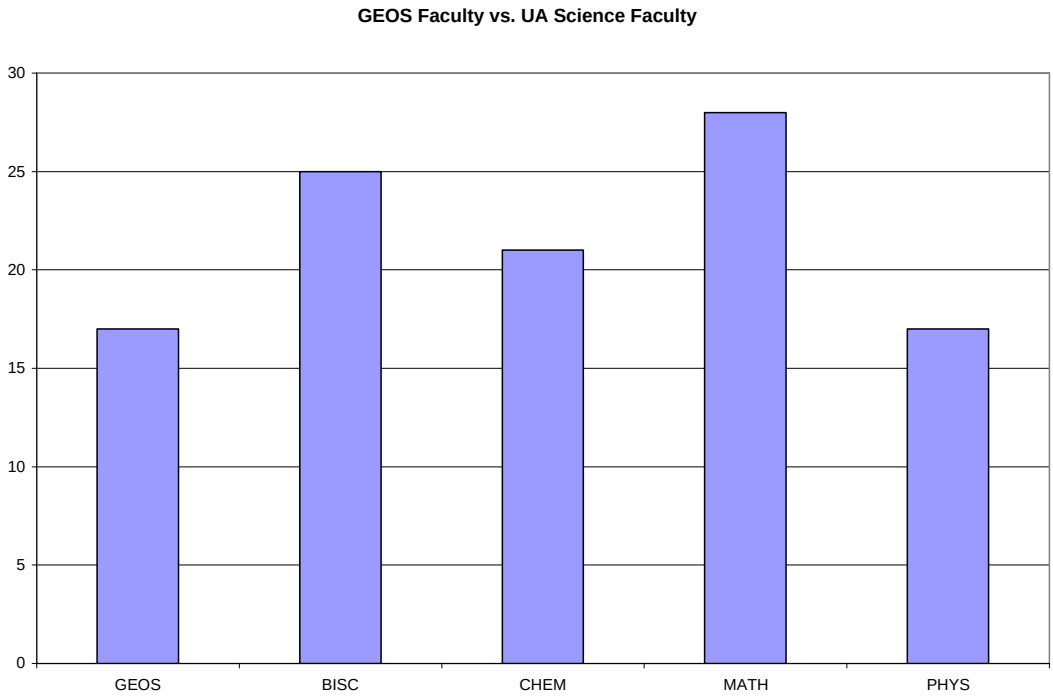


Figure 3. Number of faculty in science and mathematics departments at the University of Arkansas (2004).

impact on ENDY enrollments as the new Geosciences PhD program will focus on physical geography, geology, geochemistry, and geophysics. Indeed, the availability of two doctoral degree tracks within the department may serve to attract even larger numbers of applicants. The availability of a Geosciences PhD will also engage faculty in Geosciences who are not currently active in the ENDY program. Therefore, we believe that a need exists to develop a new PhD program that will address these concerns. On balance, then, establishment of a doctoral degree track in Geosciences will complement rather than compete with the doctoral degree in ENDY by attracting additional applicants from a largely different cohort of PhD-seeking students. The development of a PhD in Geosciences will allow existing faculty to become more productive scholars and therefore more competitive for external research dollars. Geosciences research requires rigorous observation, quantitative analysis, and modeling in order to yield scientific results that are acceptable for publication in first-rate, internationally-ranked journals. Though some masters theses contain sufficient original research to merit publication, individual creativity and depth are essential requirements to PhD level research. The increased coursework and time required for the proposed PhD will allow students more opportunity to develop and hone the necessary skills to make important scientific contributions in their respective fields. This will have a significant positive feedback effect on the faculty. As the students strive to enhance their skills and training, faculty can propose to examine increasingly complex issues that were previously untenable for masters theses. In addition, a PhD program should make the Department of Geosciences at UAF more attractive to future faculty members interested in a vigorous research and teaching environment. We expect that the initial number of PhD students will be relatively modest in comparison with the number of

undergraduate majors and terminal masters students; nevertheless, the presence of a small cadre of PhD candidates should be beneficial to students at all academic levels: PhD candidates will become mentors to masters candidates as well as an intellectual resource for undergraduates and faculty.

KEY POINTS

- The natural resource and energy industries are expanding rapidly in Arkansas and the region.
- UAF is the only primary state university in the US that does not have a PhD program in Geological Sciences or Geosciences. No PhD program in either Geology or Geography exists at any institution in the state of Arkansas. Geology is the only natural science at UAF that does not have a PhD program.
- An additional PhD program at UAF will increase the number of PhD graduates, research productivity of faculty, and externally derived funding, and therefore improve the national ranking of UAF. We anticipate admitting approximately 6 PhD students each academic year and as the program develops we expect about 20-22 students to be enrolled at a time.
- Degree/Faculty ratio for both Geology and Geography is very high in comparison with cohort institutions and other Fulbright College natural science departments.
- Highly motivated, active, and well-funded core of Geosciences faculty are willing and able to supervise PhD students.
- Proposed Geosciences PhD affords a unique opportunity to develop a complementary program to the successful Environmental Dynamics (ENDY) PhD and thus serve a broader set of applicants.
- Funding levels for basic Earth Science research are scheduled to increase as a result of the new National Science Foundation (NSF) EarthScope instrumentation and science initiative, and continued and expanded support from existing programs such as the US Geological Survey National Earthquake Hazards Reduction Program (NEHRP), Federal Emergency Management Agency (FEMA, now part of Homeland Security), Department of Energy (DoE), Basic Energy Sciences, and the National Aeronautics and Space Agency (NASA).
- Geospatial technologies are becoming increasingly used as part of normal business operations for a range of governmental and industrial sectors. Advanced techniques (e.g. 3D seismic imaging and satellite geodesy) and models (e.g. basin analysis and hydrogeological simulations) are now routine in Geosciences. Highly skilled professionals are needed to fill the burgeoning job market.
- The relationship with the Arkansas Space and Planetary Center is beneficial to Geosciences, allowing synergistic research in planetary sciences and related fields. Similar positive benefits accrue to Geosciences as a result of its ongoing relationship with the Center for Advanced Spatial Technologies (CAST) in areas related to geospatial technologies.
- Direct economic impacts from water-quality, land use management, and resource extraction are obvious. Indirect economic impacts are likely to accrue from increased external research dollars related to the PhD program's success.

SIMILAR PROGRAMS IN COHORT DEPARTMENTS

Of the 22 benchmark institutions in the southeastern US and the surrounding states, three schools have a Geology MS program, but do not have a graduate program in Geography (Auburn University, Clemson University., and Texas Tech University) (Figures 1 and 2), and four programs have no PhD in Geosciences (Auburn University, Clemson University, Kansas State University, and Mississippi State University) (Figures 1 and 2). Thus in the regional cohort of 22 schools, only 17 have PhD programs in the Geosciences.

The number of faculty in these PhD Geosciences programs (Geology and Geography) ranges from 24 to 175, compared to the 21 faculty presently at UAF. Despite the greater number of faculty

at most of the cohort Geosciences departments, including those programs that offer only a masters degree program, the faculty at UAF generates more degrees per faculty member than all but three of these Geosciences programs (Figure 4).

Some areas of expertise in the Department of Geosciences at UAF are common to our cohort departments, but other areas are unique or more rigorous. The areas of expertise at UAF include cartography, geodesy, geospatial analysis, karst hydrology, Middle East studies, neotectonics, paleoclimatology, and Quaternary studies. Other areas of common expertise, such as basin analysis, petroleum geology, hydrology, sedimentation, stratigraphy, structural geology, and weathering processes are directed at unique geographic areas.

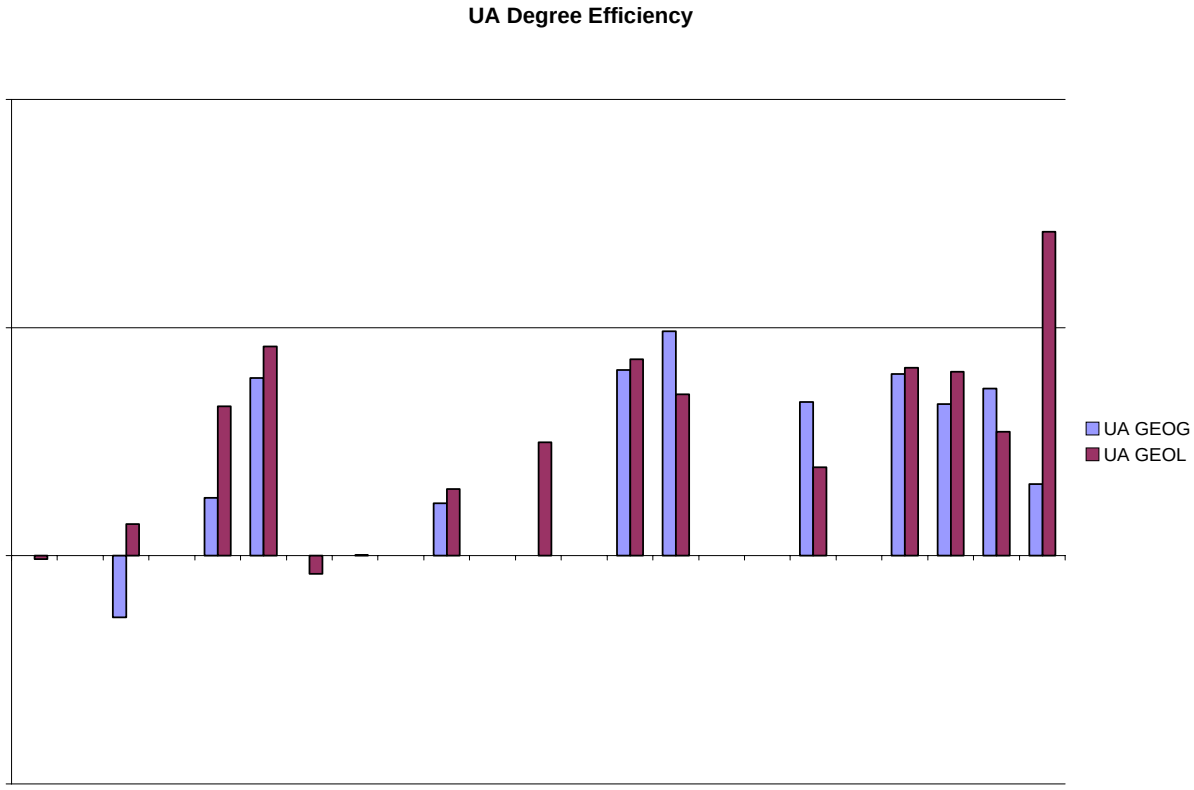


Figure 4. Number of faculty per degree granted in Geology and Geography normalized to the number of faculty per degree granted in Geology and Geography at the University of Arkansas (2003).

PHD STUDENT POOL

It is difficult to predict the source of the graduate students who would enter the PhD program, but we anticipate that the majority would be from outside of the University of Arkansas after the program becomes established. We will encourage our Geography and Geology undergraduate and masters students to apply to other universities and we will recruit Geography and Geology undergraduate and masters students from other colleges and universities to our program. We anticipate that most of the students will be attracted from our regional cohort of schools, but

students beyond the region, including international students, may also be attracted.

PhD students will be recruited using an attractive and informative web site about opportunities and current research at UAF, booths at professional meetings, personal contacts with faculty at other colleges and universities, advertisements of research opportunities on listservers of professional scientific organizations, and the summer research experiences for undergraduates (REU) hosted by the department.

Students are likely to be attracted to the Geosciences PhD program based on the strengths of the department.

In Geography, the department focuses on

- Cartography
- Dedrochronology, Limnology, and Paleoclimatology
- Geospatial Methodology using Geographic Information Systems (GIS) as a support for many research areas and a source for much regional data. This strength resides in the Center for Advanced Spatial Technology (CAST).
- Geomorphic Processes with an emphasis on weathering and soil formation
- Middle East Studies

In Geology, the department focuses on

- Basin Analysis and Petroleum Exploration
- Sedimentation, Stratigraphy, and Structural geology
- Environmental Geology and Hydrogeology
- Geodesy and Tectonics
- Quaternary Studies
- Remote Sensing and Shallow Geophysics
- Active Volcanism

PHD GRADUATE JOB OPPORTUNITIES

Geography

The theories and methods in the Geographic Sciences provide analytical techniques applicable to a wide range of questions asked over a broad spectrum of occupations. An advanced degree provides marketable skills and global perspectives on environment, science and society that enable graduates to move beyond entry-level positions in fields that include geology, geography, environmental studies for business, land use planning, law, and medicine. Increasingly, the potential for practicing the geographic sciences in private enterprise and government has grown dramatically in recent years, although few such positions are designated with the title of geographer. In fact, roughly a quarter of all geographers now work in the private sector. The field of geography is conventionally comprised of eight distinct fields: cartography, geospatial analysis and remote sensing, environmental studies, physical geography, regional geography, geographic education, urban and regional planning, cultural and human geography, and economic geography. With this proposed PhD in the Geosciences, only the first four are germane.

Cartography, Geographic Information Systems, Geospatial Analysis, and Remote Sensing ***(FEMA, private mapping firms, public agencies, and news organizations)*** Many cartographers, GIS specialists and remote sensing analysts are employed by the US Government to make maps and analyze spatial data for various purposes. Governmental agencies include the National Security Agency, the Central Intelligence Agency, and the US Geological Survey. The private sector also employs advanced cartographers to make all kinds of maps. (A geographic information system, GIS, is a computer hardware and software system that is used to store, display, analyze, and map

geoscience spatial information).

Another important area of mapping is remote sensing. This involves the interpretation of aerial photos and the analysis of satellite images. Virtually all modern maps of large areas are based in part on remote sensing, including maps used by the US Geological Survey and the soil maps used by the Department of Agriculture. The Departments of Defense, State, and the Homeland Security employ thousands of people to interpret photos that have been taken by high-flying aircraft or satellites to determine foreign activities as well.

Environmental Studies ***(EPA, State EMS, NOAA, private EIA-EA services***) Environmental problems have become the concern of government officials and citizens alike. Because of catastrophes involving toxic waste, air pollution, and water pollution, great care is now being taken to monitor the delicate balance between nature and the human use of the earth. As a result, hundreds of new jobs have been created in environmental fields. Geographic sciences involves course work and research in such interdisciplinary fields as biology; chemistry; geology; hazard perception; emergency and disaster planning; and environmental, energy-resource, and waste management, all of which are critical to environmental studies. Environmental studies typically includes anything from the preparation of an environmental impact statement (EIS), to geographic aspects of environmental law, to the general principles of forest and wildlife management. Currently, many US National Park and Bureau of Land Management (BLM) administrators have advanced degrees in geography.

Environmental managers protect and conserve natural resources so their jobs will involve the management of water, air quality, soil, energy, land reclamation, coast lands, river basins, and solid-, hazardous-, and toxic-waste disposal. Geographers with advanced degrees commonly work as environmental managers in government or private industry such as the US Environmental Protection Agency, National Park Service, US Forestry Service, or similar state agencies where they ensure adherence to the laws that keep the soil, water, and air clean. Some environmental managers work for land development companies or subdivision planners, where they prepare environmental impact statements describing how various projects would affect the natural environment.

Physical Geography & Earth Science ***(NOAA, FEMA, USGS)*** Those with a good background in physical geography, including climatology, meteorology, oceanography, geomorphology (landforms), soils, biogeography (distribution and ecology of plants), zoogeography (distribution and ecology of animals), and natural resources are well prepared to deal with problems of air pollution, water pollution, and the management and disposal of solid, toxic, and hazardous wastes and are commonly hired by private sector firms that monitor, assess and document environmental quality. Physical geographers also study the impact of such natural hazards as hurricanes, tornadoes, volcanic eruptions, and earthquakes and are currently employed at middle to upper management levels in Federal and state Emergency Management Services programs (FEMA and EMS).

Geology

Below we excerpt the executive summary from the joint American Geophysical Union (AGU) — American Geological Institute (AGI) study on Earth & Space Science PhDs, Class of 2002 (Henly et al., 2003). This document was published electronically and is freely available on the AGI website (http://www.agiweb.org). It is the most comprehensive study of its kind and is the companion to the AGI "Report on the Status of Academic Geosciences Departments," which is based on survey responses from 198 (55%) of US geosciences degree recipients queried. It was published electronically in 2003 and also is available on the AGI website. Though accurate forecasting of the employment environment some five years in the future , after implementation of the program and graduation of first geosciences PhD students who would be seeking their first jobs, is difficult, the overall picture of employment for geosciences PhDs looks very bright.

Job market indicators for 2002 graduates show that the market for recent PhDs in the geosciences is strong with 88% of the graduates finding work in the earth and space sciences that was challenging, relevant, and appropriate for someone with a PhD. Time spent looking for work also decreased. In 1998, graduates spent an average of 5.5 months looking for a job, whereas in 2002, they spent only 4 months.

Recent PhD graduates in the Earth and space sciences are, as a group, the oldest (33) among all of the natural sciences and engineering, according to the National Science Foundation. Geoscientists also spend the most years completing their degrees and delay beginning graduate school after earning their bachelor's degree, resulting in a lapse time of 9.9 years from baccalaureate to doctorate degree.

Trends indicate employment prospects for new PhDs in geosciences are steady and improving. Though the AGU-AGI study does not provide any regional demographic breakdown, it would seem safe to assume that graduates from the proposed geosciences PhD program would achieve similar success when looking for employment upon graduation. With the present cost of oil and its limited availability, the petroleum companies are recruiting aggressively, with levels commensurate with that in the 1980's. Although statistics are not available for the past year, anecdotal evidence indicates that most graduates now receive multiple job offers well before completion of their doctoral degrees.

For the future, demographics show that the aging of the geosciences workforce is at such a rate that the impending retirements over the next 5 to 10 years will severely strain the potential pool of geosciences graduates. It is likely that there will be more geosciences jobs available than there are new geosciences graduates to fill them (American Geological Institute, 2001, Report on the Status on Academic Geosciences Departments)

Jobs in Arkansas

A Geosciences PhD graduate has numerous job opportunities in government agencies, education, and private industry within Arkansas. We conservatively estimate state and federal government and private industry jobs that could require advance Geosciences degrees average 10 jobs/year based on advertised jobs for a six month period (Appendix II). Agencies, such as the Arkansas Geological Commission, Soil and Water Commission, Oil and Gas Commission, Department of Environmental Quality, Department of Health, Department of Transportation, and US Geological Survey currently hire geoscientists with advanced degrees.

Industry positions for geoscientists are concentrated in the environmental, petroleum, and spatial analysis fields. The exploitation of the Fayetteville Shale and its resources will require a cadre of PhD geoscientists for years to come. Mr. John Williams, former head of global exploration of Conoco-Phillips, and Dr. Edith Wilson, exploration geophysicist with Samson Energy in Tulsa,

Oklahoma, are strong advocates of the doctoral program because of the dearth of qualified personnel. Both Mr. Williams and Dr. Wilson are members of the External Advisory Board of the Department of Geosciences. (We did not include in the above estimate the burgeoning demand for geoscientists as a consequence of exploitation of the Fayetteville Shale. This demand is likely to be at least 5 per year for the foreseeable future).

All of the industries or corporations on the list below also have strong environmental sections within their organization and have employed or do employ geologists with PhDs:

Great Lakes Chemical Co.
Albemarle Corp.
El Dorado Chemical Co.
Pollution Management Inc. (PMI)
Genesis Environmental Consulting (GEC)
Enecotech
Atoka
Tyson
FTN Associates
URS Engineering
GBMC and Associates
Entergy
Southwestern Bell
Anderson Engineering Lion Oil Co.
International Paper Co.
Georgia-Pacific Crossett Paper OPS.

Private industry, such as Tyson, Wal Mart, Alltel, and JB Hunt hire geoscientists for spatial analysis. Southwestern Energy Production Company in Fayetteville and various petroleum companies in Ft. Smith, Tulsa, Dallas, and Houston routinely hire geoscientists for petroleum and gas exploration and, as a consequence of the Fayetteville Shale and increased oil prices, will continue to do so at a higher level.

Opportunities also exist in education. Higher Education teaching positions for which a PhD in Geosciences might qualify are estimated to be 1/year at 4-year institutions and 3-4/year at 2-year colleges, based on the number of geosciences courses taught at Arkansas colleges and universities (Tables 1 and 2) (This assumes 10% turnover per year in faculty slots). Administrative positions in Higher Education that a geoscientist might fill are estimated to be1-2/year. In Secondary Education up to 26 of the 33 AAAAA high schools in Arkansas have a Science/Math coordinator to head the math/science department (Table 3). This may translate into 1 job/year for a Geosciences PhD. In summary, we estimate there is a total potential market for Geosciences PhDs of a minimum of 15 jobs/year in Arkansas, more than we expect will actually graduate with a PhD in geosciences initially.

Table 1. List of 4 year colleges and universities in Arkansas and the number of geography (GEOG), geology (GEOL), earth science (ESCI) and other science faculty (Phys Sci: Physical Science; Chem: Chemistry; Env Sciences: Environmental Sciences; Env. Studies: Environmental Studies; Rem Sens: Remote Sensing; Nat Sci: Natural Science). Turnover of 3% per year in faculty slots is assumed for a demand of 1/yr**.**

INSTITUTION	LOCATION	GEOG	GEOL	ESCI	OTHER
Arkansas State University, Jonesboro	Jonesboro	1	1	0	Env. Sciences (PhD)
Arkansas Tech University	Russellville	1	1	1	Phys Sci, Chem, Physics
Central Baptist College	Conway	1	0	0	Phys Sci, Chem, Physics
Harding University	Searcy	1	1	1	Env. Sciences
Henderson State University	Arkadelphia	1	1	1	Env. Sciences
Hendrix College	Conway	0	0	1	Env. Studies
John Brown University	Siloam Springs	0	0	0	none
Lyon College	Batesville	1	0	1	Env. Studies
Ouachita Baptist University	Arkadelphia	1	0	1	none
Philander Smith College	Little Rock	0	0	0	none
Southern Arkansas University	Magnolia	1	1	0	none
University of Arkansas System					
Fayetteville	Fayetteville	1	1	0	Env. Dynamics, Env. Sciences
Little Rock	Little Rock	1	1	0	Env. Sciences
Medical Sciences	Little Rock	0	0	0	none
Monticello	Monitcello	0	1	1	GIS, GPS, Rem Sens, Nat Sci
Pine Bluff	Pine Bluff	0	0	0	none
University of Central Arkansas	Conway	1	1	1	Env. Sciences
University of the Ozarks	Clarksville	1	0	1	Env. Sciences
Williams Baptist College		0	0	0	none
	TOTAL	**12**	**9**	**9**	
	%	**60**	**45**	**45**	

30 faculty slots in GEOS currently
assume turnover of 3%/per year, this is a demand of 1/y

Table 2. List of 2 year colleges in Arkansas and the number of geography (GEOG), geology (GEOL), earth science (ESCI) and other science faculty (Phys Sci: Physical Science; Chem: Chemistry) at each. Cotton Boll, Crowley's Ridge Delta, and Great Rivers Technical Institutes have no geosciencesfaculty

INSTITUTION	LOCATION	GEOG	GEOL	ESCI	OTHER
Arkansas Valley Technical Institute	Ozark	0	0	0	None
Arkansas State University - Beebe (1)	Beebe	1	0	0	Phys Sci, Chem, Physics
Arkansas State University - Beebe (1)	Heber Springs	1	0	0	Phys Sci, Chem, Physics
Arkansas State University - Beebe (1)	Jacksonville	1	0	0	Phys Sci, Chem, Physics
Arkansas State University - Beebe (1)	Searcy	1	0	0	Phys Sci, Chem, Physics
Arkansas State University - Newport	Newport	1	0	0	Phys Sci, Chem, Physics
Arkansas State University - Mountain Home	Mountain Home	1	1	0	Phys Sci, Chem, Physics
Cossatot Technical College	DeQueen	1	1	0	Phys Sci, Chem, Physics
East Arkansas Community College	Forrest City	1	1	0	Physical Science, Chem, Physics, Env. Sci.
Garland County Community College (now National Park Community College)	Hot Springs	1	1	1	Phys Sci, Chem, Physics, Env. Sci., Astronomy, Oceanography
Mid-South Community College	West Memphis	1	0	0	Phys Sci, Chem, Physics
Mississippi County Community College (now Arkansas Northeastern College)	Blytheville	1	1	0	Phys Sc, Chem, Physics, Env. Sci.
North Arkansas Community Technical College	Harrison	1	1	0	Phys Sc, Chem, Physics, Env. Sci.
Northwest Arkansas Community College	Bentonville	1	1	0	Phys Sc, Chem, Physics, Env. Sci.
Northwest Technical Institute	Springdale	0	0	0	None
Ouachita Technical College	Malvern	1	0	1	Phys Sc, Chem, Physics, Env. Sci.
Ozarka Technical College	Melbourne	1	0	1	Phys Sci, Chem, Physics
Petit Jean College (now UA Community College, Morrilton)	Morrilton	1	0	1	Phys Sci, Chem, Physics
Pulaski Technical College	Little Rock	1	1	0	Phys Sci, Chem, Physics
Quapaw Technical	no information				
Rich Mountain Community College	Mena	1	0	1	Phys Sc, Chem, Physics, Env. Sci.
South Arkansas Community College	El Dorado	1	1	0	Phys Sci, Chem, Physics
Southeast Arkansas College	Pine Bluff	1	0	0	Phys Sci, Chem, Physics
Southern Arkansas University Tech	Camden	1	0	0	Phys Sc, Chem, Physics, Env. Sci.
U of A Community College at Batesville	Batesville	1	0	0	Phys Sci, Chem, Physics
U of A Community College at Hope	Hope	1	0	0	Phys Sci, Chem
	TOTAL	**23**	**9**	**5**	
37 faculty in GEOS in 2004	**%**	**77**	**30**	**17**	

10% turnover yields demand of 3-4/yr

1: catalogue for Beebe campus only; assume same courses at other campuses

Table 3. Enrollment, grades, and existence of a coordinator for science, math, engineering, and technology for AAAAA high schools in Arkansas

School	Enrollment	Grades	SMET Coord.
Conway	1064	11-12	No
Catholic HS for Boys	600	9-12	Yes
LR Central	2012	9-12	Probably
LR Hall	1361	9-12	Probably
LR McClellan	1066	9-12	Maybe
LR Parkview	1139	9-12	Probably
Mountain Home	922	10-12	No
North Little Rock (West)	1311	11-12	Maybe
Blytheville	889	9-12	No
Cabot	1589	2-12	Maybe
Forrest City	815	10-12	Maybe
Jacksonville	857	9-12	Maybe
Jonesboro	1049	9-12	Maybe
Mills	928	9-12	Maybe
Sylvan Hills	1110	9-12	No
West Memphis	1088	10-12	Maybe
Benton	912	10-12	Maybe
Bryant	1261	10-12	Probably
Camden Fairview	1013	9-12	No
El Dorado	1344	9-12	No
Lake Hamilton	844	10-12	Probably
Pine Bluff	1212	10-12	Maybe
Sheridan	862	10-12	No
Arkansas HS (Texarkana)	1335	9-12	Maybe
Bentonville	1495	10-12	Probably
Fayetteville	1627	10-12	Probably
FS Northside	1347	10-12	Probably
FS Southside	1469	10-12	Probably
Rogers	1588	11-12	Maybe
Russellville	1145	10-12	Maybe
Springdale	2350	10-12	Probably
Van Buren	1142	10-12	Probably
Arkansas School for MSA			Yes

7. CURRICULUM OUTLINE

The proposed Geosciences PhD program is designed to provide the students with a broad foundation of coursework across the major areas of the Geography or Geology subdisciplines. This foundation will provide them flexibility in their future careers and provide a foundation for their own chosen area of expertise. Geosciences is an interdisciplinary science that includes study of the interior, the lithosphere, atmosphere, biosphere, and hydrosphere of the earth and other celestial bodies. For this reason we will encourage students to include coursework in other departments so that they develop an ability to synthesize diverse information. We will also encourage development of communication skills by requiring that the student attains some teaching experience (verbal skills) and produces a manuscript to be submitted for publication (writing skills).

Requirements for Admission to Program

• Minimum Undergraduate GPA	2.85 on a 4.0 system
• Minimum Graduate GPA	3.20 on a 4.0 system
• Minimum GRE Verbal	500
• Minimum GRE Quantitative	500
• Minimum GRE combined	1000
• Minimum TOEFL	550 paper exam (or equivalent on computer exam)
• MS/MA requirements	24 hours of courses, 6 hours of thesis, master's thesis or research paper
• Recommendations	3 letters of recommendation from academic or work supervisors
• Course requirements	Specific courses should be approximately equivalent to present discipline-specific BA/BS and MA/MS requirements. No required BA/BS or MA/MS course with a grade of less than a C (graduate or undergraduate) will be accepted as fulfilling prerequisites.
• Acceptance by an advisor	

Declaration of Intent

Students must file a statement of their Declaration of Intent to become candidates for the degree of Doctor of Philosophy and their major field of study with the Dean of the Graduate School upon registration for their first semester of graduate work beyond the master's degree or its equivalent. The student cannot satisfy any part of the residence requirement for the doctoral degree until after the Declaration of Intent has been filed.

Advisory Committee

At the time of matriculation and after submission of the Declaration of Intent, the student will be assigned an advisory committee of three Geosciences faculty by either the Geography or Geology graduate advisor in consultation with the student. The student's major advisor will serve as the committee chair, unless they are prevented from doing so by Graduate School conflict of interest rules. The committee will oversee administration of a written assessment test to be taken the first semester. This test is to be used as a diagnostic tool and to recommend remediation if necessary in the appropriate areas.

The Graduate School policy requires that only graduate faculty may serve on doctoral dissertation or advisory committees. All of our teaching/tenure track faculty are members of the graduate faculty with Group I Status and can chair dissertation committees.

Graduate Advisor

The department will have a Vice Chair who will act as Graduate Advisor for the PhD program in Geosciences. The job of the departmental Graduate Advisor will include the roles: 1) contact person for graduate applicants and departmental information and 2) coordinator for all graduate committees to track student progress and conformity to departmental and graduate school regulations.

Residency Requirements

After filing the Declaration of Intent, a student must complete at least two consecutive semesters of full-time graduate study. Full-time graduate study is considered to be at least nine hours per semester or six hours per semester if the student is a half-time graduate assistant.

Course Requirements

- 24 course hours beyond UAF MS/MA degree or equivalent.
- Required - Proposal writing (new course)- 3 hours
- It is strongly recommend that two courses be taken outside of the Department that are supplementary to the students interests and dissertation topic. These may be 3000-level undergraduate courses, if approved by the Advisory Committee and the graduate school.
- No more than 3 hours of Special Problems or Independent Research
- Dissertation - 18 hours to be taken after admission to candidacy.

Any waivers to these requirements should be appealed to the Advisory or Dissertation committee and the departmental Graduate Advisor

Additional Geosciences courses that are presently available and that could be used to fulfill the remaining course requirements:

ENDY 5023	Digital Remote Sensing
ENDY 5043	Spatial Analysis and Modeling
ENDY 5063	Paleoclimatology
ENDY 6013	Environmental Dynamics
GEOG 4353	Elements of Weather
GEOG 4363	Climatology
GEOG 4384	Principles of Landscape Evolution
GEOG 4523	Computer Mapping
GEOG 4543	Geographic Information Systems
GEOG 4553	Introduction to Raster GIS
GEOG 4563	Vector GIS
GEOG 4573	Introduction to GRASS Applications
GEOG 4593	Introduction to Global Positioning Systems
GEOG 4653	Advance Raster GIS
GEOG 4863	Quantitative Techniques in Geography
GEOG 5093	History of Geography
GEOG 5113	Global Change
GEOL 4033	Hydrology
GEOL 4043	Water Resource Issues
GEOL 4053	Geomorphology
GEOL 4153	Karst Hydrology

GEOL 4253	Petroleum Geology
GEOL 4413	Principles of Remote Sensing
GEOL 4433	Geophysics
GEOL 5053	Quaternary Environments
GEOL 5063	Geochemistry
GEOL 5076	Advanced Field Methods of Applied Hydrogeology
GEOL 5123	Stratigraphic Principles and Practice
GEOL 5132	Ammonoid Biostratigraphy
GEOL 5142	Conodont Biostratigraphy
GEOL 5153	Environmental Site Assessment
GEOL 5163	Hydrogeologic Modeling
GEOL 5223	Sedimentary Petrology
GEOL 5263	Hydrochemical Methods
GEOL 5423	Remote Sensing of Natural Resources
GEOL 5444	Advanced Petroleum Geology
GEOL 5533	Marine Geology
GEOL 5543	Tectonics
GEOL 5603	Special Problems in Volcanology
GEOS 4633	Near Surface Prospection
GEOS 4733	Geodesy in Geosciences
GEOS 5853	Stable Isotope Geology

The student must maintain a 3.0 GPA in course work taken for the PhD degree.

The University requires that graduate-only courses (5000 and 6000 level) must have a minimum enrollment of five students. We anticipate that approximately 6 students will be admitted into the PhD program each year and that there would be an adequate number of students enrolled in the one required course.

We will allow and encourage the PhD students to take courses outside of the department in allied fields. We recognize that some of these courses may be at an undergraduate or dual undergraduate/graduate level, 3000 and 4000 level. We anticipate that the students will register for graduate credit and be required to perform additional work in the course for that graduate credit.

No student can receive graduate credit for a course that is taught by an instructor who is not a member of UAF graduate faculty.

Teaching Requirement

The Doctor of Philosophy degree is primarily a research degree, but communication of that research is critical for professional development and required for most professional pursuits. To promote development of the communication skills, each student is required to teach labs and/or a course for at least one semester and to present scientific results at one or more national or international professional meetings.

Graduate School Residency Requirements

The Graduate School requires that a student register as a full-time student (registered for 9 hours of course work or 6 hours of course work with a Teaching or Research Assistantship) for two consecutive semesters. We strongly discourage students from being employed more than 50% time either within or outside the University while pursuing their advanced degrees and particularly discourage such employment during their year of residency.

Dissertation Committee

Prior to the Comprehensive exam, the student should choose a dissertation committee of five Graduate faculty to replace the advisory committee. The committee should include the dissertation advisor from Geosciences who has a Graduate Faculty Class I status and four additional members with a Graduate Faculty Class I or II status. At least three committee members should be Geosciences Faculty and at least one committee member should be from outside the department.

If the doctoral candidate would like someone to serve on the PhD committee who does not hold a faculty position on our campus, that person may be granted a temporary graduate faculty status by being appointed to an adjunct faculty position in the department, using the normal departmental process. The adjunct faulty serve only one-year terms, which may be renewed and generally are used to assist a student with research opportunities. The adjunct faculty member is not allowed to direct doctoral dissertations or to chair doctoral advisory committees, except under unusual circumstances and by direct appeal to the Graduate Dean.

Candidacy Exams

Students will take a comprehensive examination after they have completed the Graduate School residency requirement and have completed the one required departmental core course. This exam will be taken in the third semester after matriculation and can only be delayed with the approval of the Advisory or Dissertation committee and the departmental Graduate Advisor. The exam will be taken during the fall or spring semester when classes are in session, but not during final exams. At the time of the exam, the student must have a grade point average of 3.25 on 12 or more hours of course work taken beyond the master's degree. This exam must be taken at least one year prior to completing all requirements for the degree.

The format of the comprehensive exam will be five written exams, one from each committee member. The subject matter and format for the exam will be at the discretion of the examiner, but must be completed in a single day during a 6-hour period. Students are encouraged to meet with their committee members prior to the examination to discuss the exam format and topic area.

Dissertation Proposal

Upon admission to candidacy (passing the comprehensive exam), the student will present to his/her Dissertation Committee a written and oral proposal of the dissertation topic for comment, suggestions, and approval. The dissertation advisor will chair the committee, unless prohibited by Graduate School conflict of interest rules. Successful completion of the proposal defense requires the positive vote of the committee. Normally this proposal will be completed by the fourth semester after matriculation and can only be delayed with the approval of the dissertation committee and the appropriate departmental Graduate Advisor.

Dissertation and Dissertation Defense

The dissertation topic should be an original scientific study of a problem in the Geosciences and the anticipated results should contribute to the advancement of the science. Within the time limits specified by the Graduate School (degree must be completed within seven consecutive years after submission of the Declaration of Intent), the students must submit a dissertation acceptable to the dissertation committee. The final exam will be oral and primarily a defense of the dissertation. A successful defense requires the positive vote of the committee. The student must submit a manuscript that has been reviewed by the student's advisor to a first-ranked, peer-reviewed journal prior to final approval of the dissertation.

Split Decisions Among Advisory and Dissertation Committees

In the situation where there is a split decision among the committee members of a advisory or dissertation committee, the situation must be resolved to the satisfaction of each committee member. In the event that each committee member is not satisfied, the committee member may insist on the necessary steps to reach a resolution or elect to step down from the committee.

8. FACULTY

Current faculty:

Brief curriculum vitae may be found in the in Appendix I

Stephen K. Boss
University of North Carolina, Chapel Hill
Associate Professor and Director, ENDY Program

J. Van Brahana
University of Missouri
Professor

Jackson Cothren
Ohio State University
Assistant Professor

Fiona M. Davidson
University of Nebraska, Lincoln
Associate Professor, Director of European Studies

Ralph K. Davis
University of Nebraska, Lincoln
Associate Professor and Director, Arkansas Water Resources Center

John C. Dixon
University of Colorado
Professor

Thomas O. Graff
University of Kansas
Associate Professor

Margaret J. Guccione
University of Colorado
Professor

Sonja Hausmann
University of Bern (Switzerland)
Assistant Professor

Phillip D. Hays
Texas A & M University
Research Associate Professor and U.S. Geological Survey

John G. Hehr
Michigan State University
Professor and Associate Dean of the Fulbright College of Arts and Sciences

Pamela E. Jansma
Northwestern University
Professor and Chair, Department of Geosciences

Ronald H. Konig
Cornell University
Professor

Fred Limp
Indiana University
University Professor and Leica Chair in Geospatial Systems

Walter L. Manger
University of Iowa
Professor

Glen S. Mattioli
Northwestern University
Professor

Thomas R. Paradise
Arizona State University
Professor

David W. Stahle
Arizona State University
Distinguished Professor

Kenneth F. Steele
University of North Carolina
Professor

Jason A. Tullis
University of South Carolina
Assistant Professor

Doy L. Zachry
University of Texas
Professor

New faculty:

The Department of Geosciences has 1 tenure-track assistant professorship for which it is seeking a candidate. The field is geochemistry of terrestrial and extra-terrestrial materials with emphasis on ICPMS techniques. We expect the successful candidate to have a doctoral degree in Geosciences, Geology, Geochemistry, or Geophysics, to have post-doctoral experience, and to have published in referred journals.

9. DESCRIPTION OF RESOURCES

Library resources (Mullins Library)

130 journals essential to Geosciencesresearch are held by the library.

Geoworld (an on-line journal service) is available.

Resources are listed in Appendix II.

Classroom Facilities

Six classrooms in Ozark Hall are dedicated to Geosciences classes and laboratory instruction of 25 or fewer students. One large lecture hall is used by the Department of Geosciences for large introductory classes of 180 students and colloquia with invited speakers. In addition, approximately 15 classrooms are used part time for Geosciences instruction. These facilities are heavily used, but some time slots are available for additional classes and labs.

Research Laboratory Facilities

Computer Laboratories

Four general computer labs are available for both Geosciences teaching and research purposes. There are 42 networked PC computers (maintained by CAST-Center for Advanced Spatial Technology and purchased with telefunds) available with a variety of word processing, graphic, and GIS software. Each lab has color and black and white printers and scanners. Twenty-five percent of the computers are replaced each year. The new computers are reserved for the teaching labs. As the teaching computers are replaced, the computers are cycled through the other two labs.

An additional Earth Visualization computer lab with six computers and a plotter is primarily available for research purposes.

CAST and the Department of Geosciences fund a system administrator to maintain the hardware and software of the two entities.

Each faulty and staff member has at least one networked computer.

Geochemistry Laboratory *(Ozark Hall)*

The Geochemistry Laboratory includes a fume hood, de-ionized water, and gas and compressed air jets. It currently provides space for both teaching and research functions. This laboratory is used to support teaching in a number of Geosciences courses including Geochemistry, Hydrochemical Methods, Hydrogeology, Karst Hydrogeology, Applied Field Methods in Hydrogeology, Sedimentary Rocks, Invertebrate Paleontology, and Landscape Evolution. In addition, this laboratory provides space for researchers within Geosciences involved in water quality investigations, and ongoing paleontological research. There are currently six Geosciences faculty using this laboratory for sample preparation, and limited sample analysis.

Geodesy Laboratories *(U of A, Arkansas, the CALIPSO borehole observatory in Montserrat, and*

CGPS receivers in Puerto Rico, Antigua)

The lab has all necessary intact or mobile gear for geodetic GPS campaign work, including Trimble 4000 SSi, Ashtech Z-12, Ashtech Micro-Z dual-frequency code-phase receivers and Dorn-Margolin choke ring antennae. Computer hardware to collect and analyze the data includes Sun Microsystems UltraSPARC 10 and 60 workstations with extensive storage (250 Gb), Dell P5 Linux workstations, and a license for GIPSY-OASISII software. Post-processing software is available for high-precision satellite geodetic data analysis.

Soil and Sediment Laboratories *(Ferritor Hall)*

The two soil and sediment laboratories are used to examine, describe, photograph, and sample cores. The labs can be used to analyze sediment for grain size, pH, and prepare the samples for isotope analysis. The labs are wired with 220 outlets, have two fume hoods, gas and compressed air jets, dionized water, and computer facilities.

Tree Ring Laboratory *(Ozark Hall)*

The laboratory is used for dendrochronology and paleoclimatology research to extend climate records. It has five microscopes, photomicrograph capability, three measuring machines capable of linear measurements to 0.001 mm, tree-ring samples from hundreds of sites in at least five countries and a database of measurements, and chronologies from 22 years of research.

Water Resources Laboratory *(Chemistry Building)*

The Arkansas Water Resources Center (AWRC), with the director housed in the Department of Geosciences, maintains a Water Quality Laboratory that provides fee-based analytical services in support of researchers across the University of Arkansas Campus. Faculty in six departments from the colleges of Arts and Sciences, Engineering, and Agriculture utilize the resources of the AWRC Water Quality Laboratory in support of ongoing research requiring certified laboratory services. The AWRC Water Quality Laboratory is accredited for microbiological examination of drinking water by the Arkansas Department of Health, for surface water examination by the Arkansas Department of Environmental Quality, and for trace level drinking water examination by the Louisiana Department of Health.

Teaching Laboratory Equipment

11 Petrographic microscopes
18 Binocular microscopes
Mineral, rock, and thin section collections
Invertebrate paleontology collection

Field Equipment

Four 15-passenger vans for field trips and field work
Drill Rig capable of coring or augering 50 feet of soil and/or sediment
Pontoon boat for limnology and lacustrine research
Hydrogeology field vehicles
pH, conductivity hydrolab probes
Automated water samplers
Boat and motor used for sampling trees and dendrochonology research

Sensors and scanners for remote sesnsing and GIS research (CAST)

Field Camp

The Geology field camp was founded in 1982. Students practice field techniques and mapping in the Dillon, MT area and visit geological sites of interest en route to and from camp and in the Montana area. The camp draws students from other schools, both within the state (University of Arkansas at Little Rock and Arkansas Tech University) and outside the state (e.g. Mississippi State, University of Tulsa, Texas Christian University, Southern Methodist University, and University of Texas, San Antonio).

Supporting Facilities and Entities

Center for Advanced Spatial Technology (CAST)

The Center for Advanced Spatial Technology (CAST) was established in 1991 to apply computerized research methods to spatial data. The CAST laboratories have workstations, digitizers, photogrammetry hardware, GPS systems, and color printers and plotters.

ENDY PhD Program

This is an interdisciplinary program emphasizing humans and their environment. It is supported mainly by Anthropology and Geosciences (Geography and Geology) but also includes other disciplines such as Agronomy, Biology, History, and Rural Sociology. This is a complementary program that includes nearly 75% of our faculty who are already directing PhD students. However, many areas of the Geosciences do not integrate humans and their environment and do not fit into this program, and thus the need for a Geosciences PhD program exists as discussed previously in the Rationale for the Geosciences PhD program.

Environmental Scanning Electron Microscope *(Ferritor Hall)*

Available for fee-based use to researchers throughout the UA system.

Stable Isotope Laboratory *(Ferritor Hall)*

UAF Stable Isotope Laboratory has two mass spectrometers for stable isotope analysis. One mass spectrometer is a continuous flow system equipped with a trace gas pre-concentrator gas chromatograph, an elemental analyzer, and a high temperature conversion elemental analyzer. The second mass spectrometer is a dual inlet system with a tube cracker / multi-port extension and a micro-volume inlet for N_2 and CO_2. The lab has the capability to measure the C, N, O, or H isotope composition of trace gasses, solid, and liquid samples. This facility provides fee-based services to researchers throughout the UA system and is being used by Geosciencesfaculty and students.

X-Ray Diffractometer *(Engineering South)*

Available for fee-based use to researchers throughout the UA system and applicable to Geosciencesmineralogy research.

10. NEW PROGRAM COSTS – Expenditures for the first 3 years of program operation

New administrative costs:

New administrative costs are limited to the appointment of a Vice Chair. As the Department

expands in both numbers of graduate students and faculty in response to the doctoral program, administrative duties will grow significantly. The Vice Chair will have responsibility for the doctoral program.

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

The demographics of the Geosciences department is such that six faculty members (29% of the faculty) will be eligible to retire in 5 years or less and 2 additional faculty will be eligible for retirement in 10 years. The Department hired one new faculty member for academic year 2006-2007 to replace a faculty retirement at the end of spring semester 2006 (not included in the six impending retirements mentioned above). We request two full-time hires as part of this process. One will be at the junior level and the other at the senior level. Both would be geologists or physical geographers that have expertise in quantitative methods. The research emphases of one of the two would be basin analysis and sedimentation/stratigraphy with application to petroleum resources. We estimate the cost at $85K for 9-months for the senior hire and $60K for 9 months for the junior hire. Start-up costs would be on the order of $100K for each.

New library resources and costs:

No new library resources are necessary. Appendix II lists the 130 journals that are current holdings by Mullins library.

New/renovated facilities and costs:

The Department renovated space in 2005-2006 to accommodate a teaching laboratory for undergraduate General Geology, a seminar room, and faculty office space for the new assistant professor who arrives in fall 2006. In addition, the Department of Geosciences maintains office space for 10-12 graduate students in the newly renovated Old Geology building. Most of the students using the offices, however, are ENDY. In the long term, as the number of PhD students increases in Geosciences, other space will be required.

Additional laboratory space also is needed. Some of the existing faculty have no laboratory space and presently there are no labs for geophysics, geodesy, or stratigraphy. New faculty will also require lab space for their research programs. CAST will be vacating space in Ozark Hall when the new Center for Excellence building is completed and some of that space will revert to the Department of Geosciences.

New instructional equipment and costs: None.

Distance delivery costs (if applicable): None

Other new costs (graduate assistants, secretarial support, supplies, faculty development, faculty/students research, etc.)

The number of teaching assistantships is inadequate (Table 4) and the remuneration is substantially below nearly every cohort University (Tables 5 and 6). The average number of students in the 28-32 General Geology labs taught each semester has been 19.6 for the last 5 years. During 2005-2006, the labs had an average of 23 students, the highest in the last five years. These numbers are too high for effective teaching. In addition, because of the shortage of assistantships, most faculty teach the labs for their upper division undergraduate major courses. We propose to engage the PhD students in teaching the undergraduate labs. It will provide them with valuable teaching experience and allow the faculty more time for research and teaching of the additional courses needed at the PhD level. The present stipend for the Department of Geosciencesteaching research assistantships is lower than all but one of our cohort departments (Tables 5 and 6). It is difficult to attract quality students, particularly from outside of our own university with a stipend that is $3020 below the mean stipend for teaching MS/MA assistantships in geology and $2300 lower than that in Geography departments (2004 data). The ENDY PhD assistantships are $1,123 below the average PhD assistantships in Geology and $422 below the average teaching assistantship in Geography (2004 data). In addition, many of the other institutions require assistants to teach only 3 labs and we require teaching 4 labs as a standard half-time load.

Table 4. Total enrollment and average number of students in General Geology and Environmental Geology labs during the academic years 2000-2004.

Year Semester	Course	# students	# labs	Mean students/lab	Course	# students	#labs	Mean students/lab
2004 Spring	General Geology	605	28	21.6	Environ-mental	66	5	13.2
2003 Fall	General Geology	497	27	18.4	Environ-mental	65	4	16.3
2003 Spring	General Geology	513	31	16.6	Environ-mental	68	5	13.6
2002 Fall	General Geology	629	30	21.0	Environ-mental	72	4	18.0
2002 Spring	General Geology	598	31	19.3	Environ-mental	64	5	12.8
2001 Fall	General Geology	641	32	20.0	Environ-mental	66	4	16.5
2001 Spring	General Geology	596	31	19.2	Environ-mental	67	5	13.4
2000 Fall	General Geology	603	32	18.8	Environ-mental	62	4	15.5
2000 Spring	General Geology	633	31	20.4	Environ-mental	99	5	19.8

We request that the stipend for all Graduate Assistantships in Geosciences be increased to $14,000 per nine-month appointment and that 4 new Graduate Assistantships be available. These new positions will allow us to reduce laboratory class size in General Geology to the levels of a few years ago (Table 3) . The new positions also will assist with upper-level undergraduate core courses in the major, permitting faculty more time for research. Both the extant and the new Graduate Assistantships should also include funds to pay for tuition up to 21 hours per year. The teaching assistantships will be dedicated to recruitment of top-quality applicants into the proposed doctoral program in Geosciences and PhD students will be given top priority for all teaching assistantships in the department.

Table 5. Stipends and tuition waivers for Teaching and Research Assistantships for Masters degree and PhD degree Geography students at 14 of 22 cohort institutions for 2004 (Auburn and Clemson do not have programs. Kansas State, Oklahoma State, Texas Tech, the Universities of Florida, South Carolina and Texas did not provide information.). Stipend amounts increased at UAF for in 2005, but we assume increases also occurred at cohort institutions.

School	TA-MS	TA-PhD	Tuition	RA-MS	RA-PhD	Tuition
Florida State	$12,500	$12,500	paid	$12,500	$12,500	paid
Louisiana State	$7,500	$9,000	part paid	NA	NA	NA
Mississippi State	$9,000		paid	$13,500		paid
North Carolina State	$14,000	$14,000	paid	$14,000	$14,000	paid
Texas A&M	$11,700	$12,600	paid	$11,700	$12,600	no
Texas Tech	NA	NA	NA	NA	NA	NA
Univ. of Alabama	$8,600		paid	$8,600		paid
Univ. of Georgia	$11,997	$13,500	paid	NA	NA	NA
Univ. of Kansas	$11,300	$11,300	paid	NA	NA	NA
Univ. of Mississippi	$8,600	NA	paid	NAP	NAP	NAP
Univ. of Missouri	$8,600		paid	$9,600		paid
Univ. of North Carolina	$12,000	$12,000	paid, insur	$12,000	$12,000	paid
Univ. of Oklahoma	$11,000	$12,000	paid	NA	NA	NA
Univ. of Texas	$11,000	$12,200	paid	$17,226	$37,836	no
Mean	***$10,600***	***$12,122***		***$12,391***	***$17,787***	
Univ. of Arkansas	**$8,300**	**$10,000**	**paid**	**$8,300**	**$10,000**	**paid**

Table 6. Stipends and tuition waivers for Teaching and Research Assistantships for Masters degree and PhD degree Geology students at 21 of 22 cohort institutions for 2004 (Clemson does not have a program. University of South Carolina did not provide information). Stipend amounts increased at UAF in 2005, but we assume increases also occurred at cohort institutions.

School	TA-MS	TA-PhD	Tuition	RA-MS	RA-PhD	Tuition
Auburn	$11,875	NAP	paid	$11,875	NAP	no
Florida State	$12,500	$12,500	paid	$12,500	$12,500	paid
Kansas State	NA	NAP	NA	NA	NAP	NA
Louisiana State	$13,500	$15,000	paid	NA	NA	NA
Mississippi State	$9,000	NAP	paid	$13,500	NAP	paid
North Carolina State	$14,000	$14,000	paid	$14,000	$14,000	paid
Oklahoma State	NA	NA	NA	NA	NA	NA
Texas A&M	$11,475	$12,825	paid	$11,475	$12,825	no
Texas Tech	NA	NA	NA	NA	NA	NA
Univ. of Alabama	$10,269	NAP	paid	$10,269	NAP	paid
Univ. Florida	$11,000	$12,000	paid	$11,000	$12,000	paid
Univ. of Georgia	$11,997	$13,500	paid	NA	NA	paid
Univ. of Kansas	$14,000	$16,000	paid	$14,000	$16,000	paid
Univ. of Mississippi	$10,200	$13,000	paid	$9,000	$18,000	paid
Univ. of Missouri	$9,730	$15,000	paid	$11,500	$12,000	paid
Univ. of North Carolina	$11,000	$12,600	paid, insur	NA	NA	paid
Univ. of Oklahoma	$13,500	$14,500	paid	$13,500	$14,500	paid
Univ. of Tennessee	$11,000	$12,000	paid	$11,000	$12,000	paid
Univ. of Texas	$14,346	$15,453	paid	$14,346	$15,453	paid
Mean	***$11,720***	***$13,823***		***$12,353***	***$14,086***	
Univ. of Arkansas	**$8,300**	**$10,000**	**paid**	**$8,300**	**$10,000**	**paid**

The Department of Geosciences has a significant amount of equipment, both mechanical and electronic. Currently individual faculty members are responsible for the development, purchase and maintenance of the equipment they use. This requires a significant amount of time that diminishes the research productivity of the faculty and is an inefficient use of resources. We request future growth of the department include addition of an electronic technician competent to build and maintain the equipment in the department. In the short term this technician might be part-time, but we envision that as the research activities of the department increase, that the job responsibilities will increase and that a full time position will be necessary.

11. SOURCES OF FUNDING – Income for the first 3 years of program operation

Reallocation from which department, program, etc.

Emphasis within the department has been on undergraduate education and terminal masters programs. Future employment of graduates was assumed to be in industry or local, regional, or state governmental agencies. The high degree/faculty ratio for the Geosciences department compared to both the cohort institutions (Figures 5 and 6) and other mathematics and science departments of UAF (Figures 7 and 8) suggests that UAF Department of Geosciences is already extremely efficient for the existing B.S./B.A. and M.S./M.A. degrees. Though we are hopeful the proposed PhD program will attract additional modest resources primarily in the form of additional graduate assistantships, if these are not forthcoming, declines in masters degree production in lieu of increased focus on the PhD program are not likely to impact the number of students serviced by the department significantly

Tuition and fees (projected number of students multiplied by tuition/fees)

We anticipate 5-6 students per year and estimate tuition and fees at $269.99 per credit hour (2006-2007 tuition). Fulbright College assesses an additional $9.42 per credit hour (2006-2007 fees). The total of other student fees for graduate students is $28.85 per credit hour (2006-2007 fees). If we assume an average load of 9 credits per semester, the total will range between $13,872 and $16,646 [5-6 x 9 x ($269.99 + $9.42 + $28.85)] for the semester and $27,744 and $33,292 per year.

State revenues (projected number of students multiplied by state general revenues):

We anticipate 5-6 students per year and estimate state general reveunues at $5,775 per student per year for a total of $28,875-$34,650 in state revenues per year.

Other (grants, employers, special tuition rates, mandatory technology fees, program specific fees, etc.)

Currently Fulbright College provides the Department of Geosciences with 13 half-time Graduate Teaching Assistantships (Table 7). These assistantships are awarded on merit and are used to teach laboratories in the lower level classes. Students receive tuition payment for up to 15 hours each semester. The stipend was $8700 for nine months in 2005. In addition, five students are supported with half-time summer teaching assistantships.

Fulbright College provides the ENDY Program with nine half-time teaching assistantships of which three to six are assigned teaching duties in the Department of Geosciences (Table 5). Currently, five ENDY students have assistantships in Geosciences. The assistantships are awarded

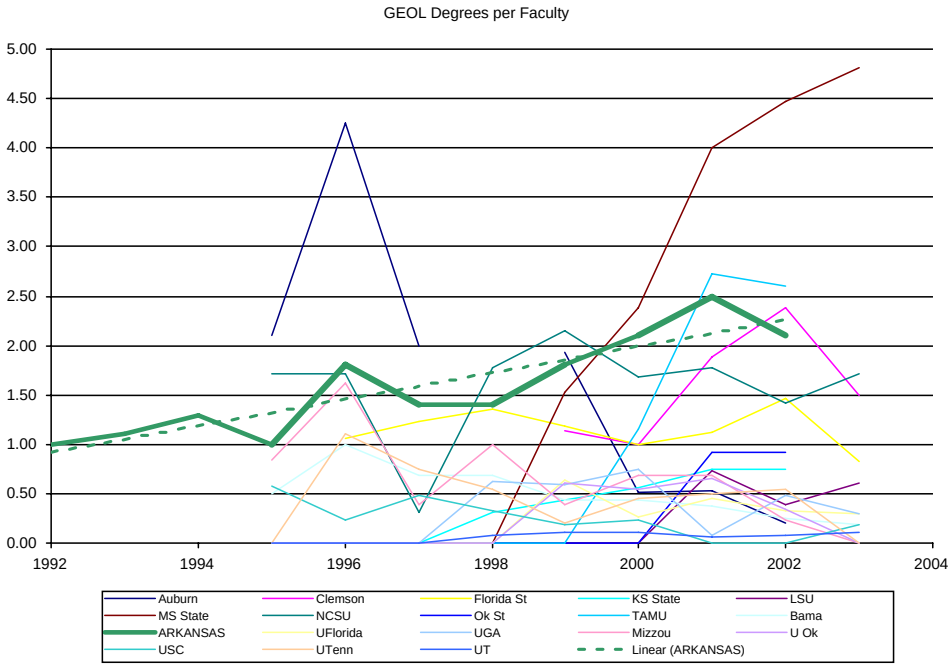


Figure 5. Number of Geology degrees per faculty for the University of Arkansas and cohort institutions.

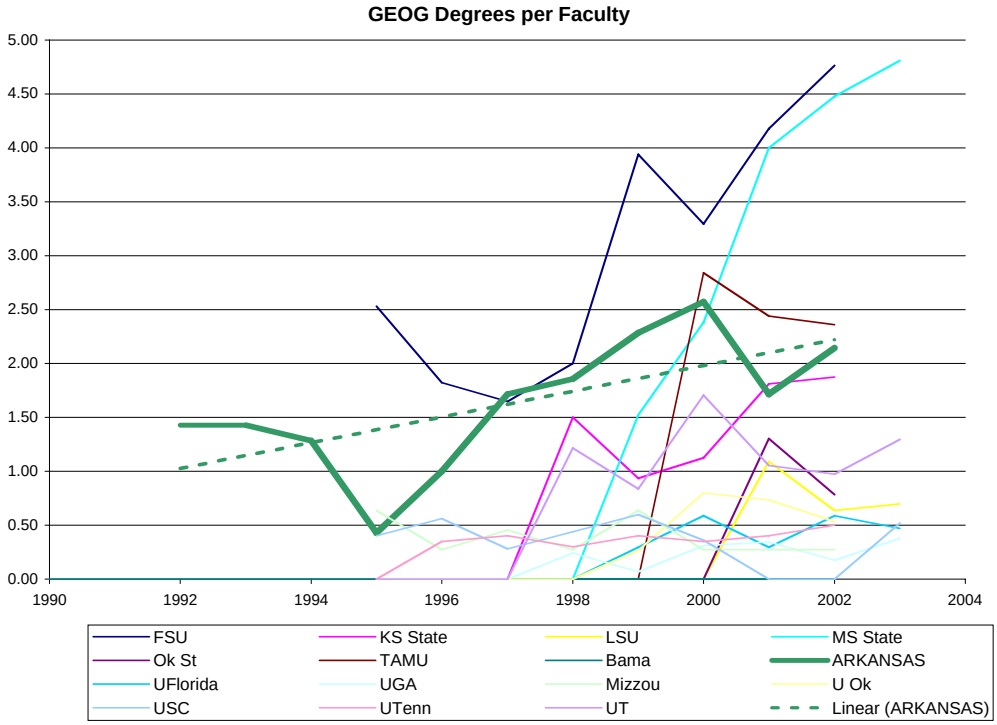


Figure 6. Number of Geography degrees per faculty for the University of Arkansas and cohort institutions.

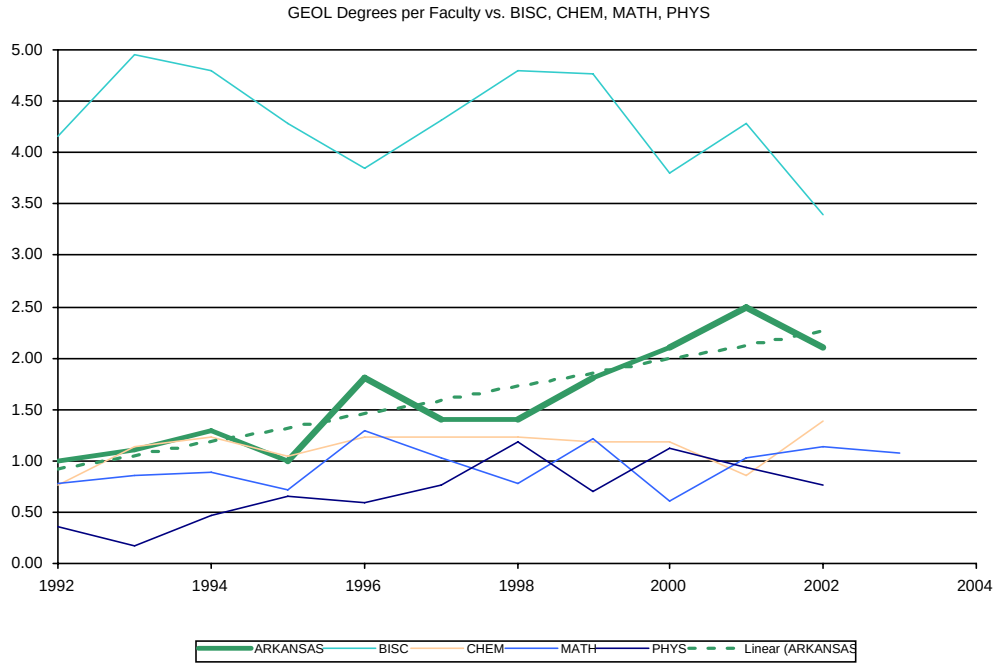


Figure 7. Number of Geology degrees per faculty compared to other departments at the University of Arkansas.

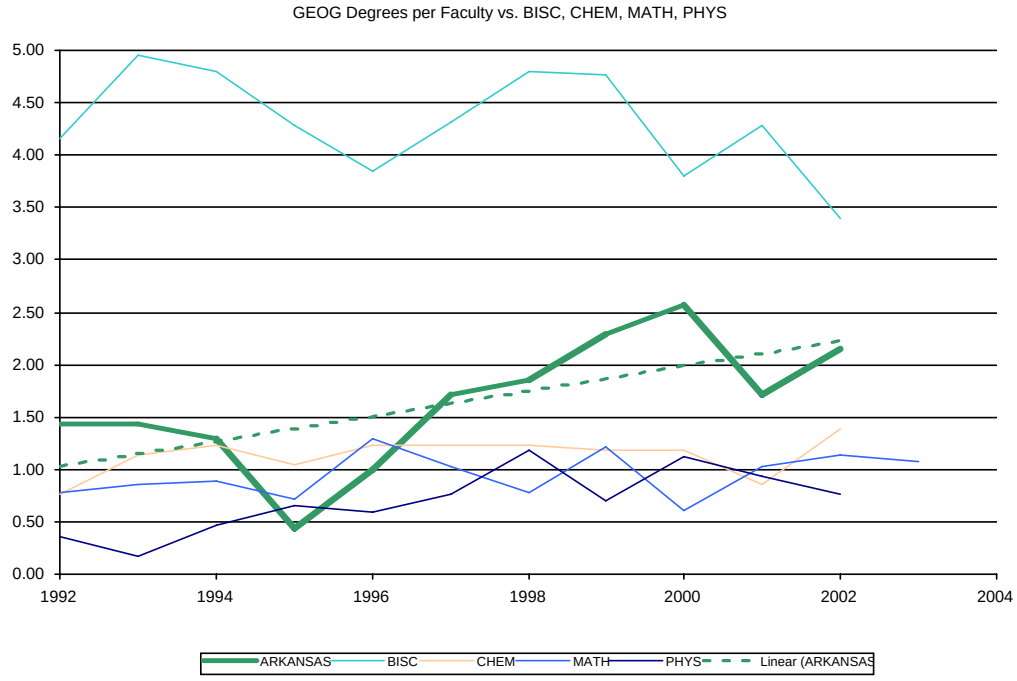


Figure 8. Number of Geography degrees per faculty compared to other departments at the University of Arkansas.

Table 7. Graduate student funding in Geosciences and ENDY with a focus on geosciences for 2004-2005.

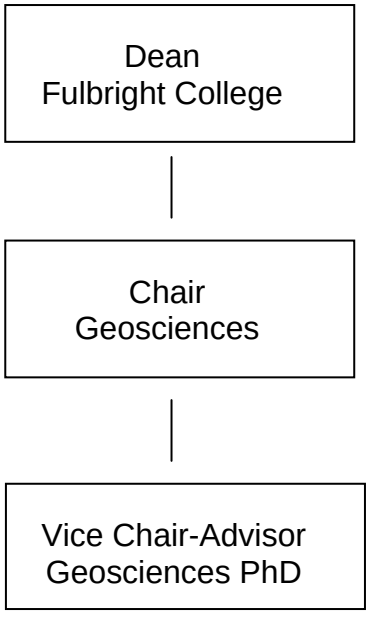
Program	Assistantship	Amount	Duties	Time Period	Number
Geosciences	Teaching	$8,300	teach labs/course	9 months	13
Geosciences	Teaching	$2,300	teach field camp	1.5 months	3
Geosciences	Teaching	$1,150	teach labs	1.5 months	2
Geosciences	Research	$8,300	lab/field work	9 months	10
ENDY (Geosciences)	Teaching	$10,000	teach labs/course	9 months	5
ENDY (Geosciences)	Research	$10,000	lab/field work	9 months	7

on merit and by discipline and are used to teach labs in the lower level classes and some courses in geography. These students receive tuition payments for up to 15 hours of classes each semester. The stipend was $11400 for nine months in 2005.

In addition to the teaching assistantships, the department had eight half-time Graduate Research Assistantships in 2004-2005. The number of these assistantships varies, depending on external funding of the faculty and are awarded at the discretion of the faculty who secured the funding. Masters students receive a tuition waiver and the same amount as TAs for nine months, PhD students receive a tuition waiver and the same amount as ENDY TAs for nine months. We anticipate these being increased to at least $14000, to be competitive with the teaching assistantships. Currently, the stipends are $11400 for nine months. ENDY PhD students in the geosciences also receive research assistantships. Currently there are seven ENDY students with half time research assistantships The total number of students in Geosciences(23) and ENDY (geosciences) (12) who had nine-month assistantships in 2004-2005 is 35 (Table 5). The PhD students also will be encouraged to solicit their own funding. This approach has been successful in the Environmental Dynamics program and currently four students have applied for and received partial funding for their dissertation research and four additional students have proposals pending.

12. ORGANIZATIONAL CHART REFLECTING NEW PROGRAM

Proposed program will be housed in (department/college): Geosciences/Fulbright



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13. SPECIALIZED REQUIREMENTS

None

14. BOARD OF TRUSTEES APPROVAL

15. SIMILAR PROGRAMS

List institutions offering program

Proposed doctoral program – list institutions in Arkansas, region, and nation

No institution in Arkansas currently offers a doctor of philosophy in geology, geography, or geosciences. All other states in the union offer the doctorate in one or more of the fields of geology, geography, or geosciences at their leading public four-year comprehensive state universities.

16. DESEGREGATION

State the total number of students, number of black students, and number of other minority students enrolled in related degree programs (if applicable)

The only relevant data that were available come from the American Geological Institute (http://www.agiweb.org). In Table A, the total number of doctorates received for 2000 by different gender and ethnic groups are listed. In Table B, the total number of undergraduate and graduate students enrolled in 2002 and 2003 are listed. Table B shows that rougly half of all geosciencesundergraduate majors attend graduate school.

Table A: GeosciencesDoctoral Degrees Granted 2000

Total:	342
Female:	93
Ethnic minority:	11
Black	1
Hispanic	2
Native American	0
Asian	8
Foreign	74

Table B: Total number of Geosciences(interdisciplinary) and Solid-Earth (geology, geophysics, and geochemistry) undergraduates and graduates enrolled in 2002 and 2003.

Year	Undergraduate		Graduate	
	Geosciences	Solid Earth	Geoscience	Solid Earth
2002	10576	18338	5152	8933
2003	10694	18543	5033	8728

17. INSTITUTIONAL AGREEMENTS/MEMORANDUM OF UNDERSTANDING (MOU)
Not applicable.

18. ADDITIONAL INFORMATION REQUESTED BY ADHE STAFF

APPENDIX I: FACULTY CURRICULUM VITAE

CURRICULUM VITA

Stephen K. Boss, Director
Environmental Dynamics Program
Department of Geosciences, Ozark Hall 113
University of Arkansas
Fayetteville, Arkansas 72701
(479) 575-6603 or 3355
sboss@uark.edu

EDUCATION

Ph.D.: University of North Carolina, Marine Sciences, 1994
M.S.: Utah State University, Geology, 1985
B.S.: Bemidji State University, Geology, 1981, Magna Cum Laude

WORK HISTORY

2002 – Present: Director, Environmental Dynamics Program
2002 – Present: Associate Professor, University of Arkansas Geosciences
1996 – 2002: Assistant Professor, University of Arkansas Geosciences
1994-1996: Post-Doctoral Researcher, Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University.

COURSES TAUGHT

General Geology, Earth System Science, Geophysics, Marine Geology, Environmental Dynamics

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $414,165 (PI)

FIVE SIGNIFICANT PUBLICATIONS

Boss, S.K., Hoffman, C.W., and Cooper, B., 2002, Influence of fluvial processes on the Quaternary geologic framework of the continental shelf, North Carolina, USA: *Marine Geology*, v.183, p.45-65.

Boss, S.K., 2000, Adventures in data analysis: The TAO array and the 1997-98 El Niño*: Mathematical Geology*, v.32, no.2, p.159-185.

Boss, S.K., 1996, Digital shaded relief image of a carbonate platform (northern Great Bahama Bank): Scenery seen and unseen: *Geology*, p.985-988.

Boss, S.K. and Rasmussen, K.A., 1995a, Misuse of Fischer plots as sea-level curves: *Geology,* v.23, p.221-224*.*

Odhiambo, B.K., and Boss, S.K., in press, Integrated echo sounder, GIS and GPS for sedimentation studies in reservoirs: Examples from two Arkansas lakes: submitted to *Journal of the American Water Resources Association.*

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Geophysical Union
American Quaternary Association
Geological Society of America
Sigma Xi – The Scientific Research Society

HONORS AND AWARDS

2001: Committee Appointment: Environmental Information for Naval Use, Ocean Studies Board, National Research Council, National Academies of Science, Washington, DC

2000: Preliminary nomination for the Webby Award ("The Oscars of the Internet") for Best Education Web Site from the International Academy of Digital Arts & Sciences.

1999: Nominated, Biggs Award for Excellence in Earth Science Teaching from the Geological Society of America.

1998: Summer Faculty Research Fellow, Office of Naval Research/American Society for Engineering Education

1996: Selected member: Scientific Review Board, San Salvador, Bahamas.

SYNERGISTIC ACTIVITIES

Associate Editor, Journal of Geoscience Education, official journal of the National Association of Geoscience Teachers (3-year appointment).

Appointed to Committee on Environmental Information for Naval Use, Ocean Studies Board, National Research Council, National Academies of Science, Washington, DC. Committee task is to develop comprehensive report assessing needs of U.S. Navy for environmental data collection and dissemination through 2010.

member of Scientific Review Board, Bahamian Field Station, San Salvador, Bahamas.

STUDENTS SUPERVISED, M.S., LAST FIVE YEARS

Dowell, J.C., 2004, Bedrock geology of Rogers quadrangle, Washington County, Arkansas: M.S. thesis, Department of Geosciences, University of Arkansas, expected completion May 2004.

Brown, B.J., 2000, Bathymetry and sedimentation patterns of Lake Fort Smith, Arkansas utilizing dual frequency sonar: M.S. thesis, Department of Geosciences, University of Arkansas, 68p.

Hansen, J., 1999, Bathymetry and empirical modeling of sedimentation in the Prairie Creek sub-basin of Beaver lake, northwest Arkansas: M.S. thesis, Department of Geosciences, University of Arkansas, 60p.

Hutchinson, C., 2004, Bedrock geology of Sonora quadrangle, Benton County, Arkansas: M.S. thesis, Department of Geosciences, University of Arkansas, expected completion May 2004

King, Jack, 2001, Bedrock Geology of West Fork Quadrangle, Washington County, Arkansas: M.S. Thesis, Department of Geosciences, University of Arkansas, 137p.

King, Maria Elena, 2001, Bedrock Geology of Fayetteville Quadrangle, Washington County, Arkansas: M.S. Thesis, Department of Geosciences, University of

Arkansas, 135p.

McDonald, Mantez, 2000, Empirical modeling of flood dynamics on the Red River of the North, North Dakota: M.S. thesis, Department of Geosciences, University of Arkansas, 91p.

May, Jack D., 2000, Bathymetry and seafloor types in the vicinity of Tanner Bank, southern California Continental Borderland: M.S. thesis, Department of Geosciences, University of Arkansas, 58p.

Merrifield, W., in progress, Seismic stratigraphy of the insular continental shelf between Rodanthe and Avon, North Carolina: M.S. thesis in progress, Department of Geosciences, University of Arkansas (expected completion December 2004).

Polly, Angela, 2001, Bathymetry, sedimentation, and chemistry of Lake Wedington, Washington County, Arkansas: M.S. thesis, Department of Geosciences, University of Arkansas, 75p.

Sullivan, B., 1999, Revised geologic map of War Eagle Quadrangle, Benton County, Arkansas: M.S. thesis, Department of Geosciences, University of Arkansas, 70p.

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

Fishel, D., in progress, Impacts of human recreation on water quality in Lake Wedington Recreation Area, Ozark National Forest, Arkansas: Ph.D. dissertation in Environmental Dynamics, Department of Geosciences, University of Arkansas (withdrew from ENDY program December 2003).

Neely, D.G., in progress, Submerged cultural resource inventory and historic change on the Arkansas River from Fort Smith to Toad Suck, Arkansas: Ph.D. dissertation in Environmental Dynamics, Department of Geosciences, University of Arkansas (withdrew from ENDY program May 2004).

Odhiambo, B.K, 2002, Watershed Physiography, bathymetry, sedimentation, and historical water quality of two Akransas lakes: Lee Creek Reservoir and Lake Shepherd Springs: Ph.D. dissertation in Environmental Dynamics, Department of Geosciences, University of Arkansas, 178p.

Pickup, B.E., in progress, Processes of shoreline change at Yellowstone Lake: Interplay of tectonics, sediment supply, and lake level: Ph.D. dissertation in Environmental Dynamics, University of Arkansas, (expected completion May 2006).

CURRICULUM VITA

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EDUCATION

Ph.D., University of Missouri, Columbia, Geology, 1973
M.A., University of Missouri, Columbia, Geology, 1968
A.B., University of Illinois, Urbana, Geology, 1965

WORK HISTORY

1999 – Present: Professor, Department of Geosciences, University of Arkansas
1990-1999: Research Hydrologist, U.S. Geological Survey, and Adjunct Professor, U. of Arkansas (Joint Appointment)
1976-1988: Adjunct Professor, Geology, Vanderbilt University, Nashville, TN.
1975 Adjunct Professor, University of Southern Mississippi (Univ. Center), Jackson, MS
1971-1990: Hydrologist, U.S. Geological Survey, Nashville, TN; Jackson, MS; and Denver, CO.
1964-1965: J.W. Mack and Assoc. Geophysical Consultants, Madison, WI.
1962-1966: Lab. Tech., Illinois State Geological Survey, Urbana, IL.

COURSES TAUGHT

Hydrogeology; Advanced Hydrogeology; Karst Hydrogeology; Field Hydrogeology; Geology for Engineers; General Geology; Environmental Justice; Geology of Our National Parks

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $488,131 (PI, Co-PI)

5 SIGNIFICANT PUBLICATIONS

Brahana, J.V., Hays, P.D., Kresse, T.M., Sauer, T.J., and Stanton, G.P., 1999, The Savoy Experimental Watershed—Early lessons for hydrogeologic modeling from a well-characterized karst research site: in Palmer, A.N., Palmer, M.V., and Sasowsky, I.D., editors, Karst Modeling: Special Publication 5, Karst Waters Institute, Charles Town, WV, p. 247-254.

Brahana, John Van, Eckstein, Yoram, Ongley, Lois K., Schneider, Robert, and Moore, John E., 1998, editors, Gambling with groundwater—Physical, chemical, and biological aspects of aquifer-stream relations: Proceedings Volume of the International Association of Hydrogeologists Congress XXVIII and the Annual Meeting of the American Institute of Hydrology, Las Vegas, 753 p.

Peterson, E.W., Davis, R.K., Brahana, J.V., and Orndorff, H.O., 2002, Movement of nitrate through regolith covered karst terrane, northwest Arkansas: Journal of Hydrology, v. 256, p. 35-47.

Sauer, T.J., Alexander, R.B., Brahana, J.V., and Smith, R.A., 2001, The importance and role of watersheds in the transport of nitrogen: in Follett, R.F., and Hatfield, J.L., eds., Nitrogen in the Environment: Sources, Problems, and Management: ch. 7, p. 147-181.

Dixon, Barnali, Scott, H.D., Brahana, J.V. and Dixon, J.C., 2004, A GIS-based approach to predict ground-water vulnerability using neuro-fuzzy techniques: Ground Water, 38 p., [in press]

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Geophysical Union
Registered Professional Geologist #2752, American Institute of Professional Geologists
Geological Society of America (Fellow)
International Association of Hydrogeology
International Mine Water Association
National Ground Water Association
National Speleological Society

HONORS AND AWARDS

Sigma Gamma Epsilon Outstanding Teacher - Geology Department - University of Arkansas 1992 and 1994
Special Achievement Award - U. S. Geological Survey 1993
Quality Increase - U.S. Geological Survey 1994
Superior Service Award - U.S. Geological Survey 1994
Special Act Service Award - U.S. Geological Survey 1996
STAR Award – U.S. Geological Survey 1998
Scientist Emeritus -- U.S. Geological Survey 1999
Baum Teaching Grant Award--University of Arkansas 2002

SYNERGISTIC ACTIVITIES

Proposal and Technical Reviewer for U.S. Geological Survey, National Science Foundation, and many journals

STUDENTS SUPERVISED, M.S., LAST FIVE YEARS

Said Al-Rashidy, 1999, Hydrogeologic Controls of Ground-Water Flow and Transport in the Shallow Mantled Karst Aquifer, Copperhead Spring, Basin 1, Savoy Experimental Watershed

Jerry Martin, 1999, Control on Groundwater Flow and Quality in the Boone-St. Joe Aquifer, Big Spring Basin. North-Central Benton County, Arkansas

E. C. Bartholmey, 2001, Hydrogeology and Structural Control of the Stroud Spring Basin, Benton County, Arkansas

Ethan Reese-Whiting, M.S., 2003, Numerical Simulation of Ground-Water Flow in the Cave Springs Area, Northwestern Arkansas

Matthew Edmonds, M.S., 2004 Projected, Characterization of Flow and Transport of Ground Water in the Prairie Grove area, Northwest Arkansas

Paul R. Little, M.S., 2004 Projected, Development of a Conceptual Model of Ground Water Flow and Chemical Evolution in Basin 2, Savoy Experimental Watershed, Arkansas

Keri Walker Cooper, M.S., 2004 Projected, Geochemical Processes and Water-Quality Evolution in Coal Mines in the Greenwood Area, West-Central Arkansas

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

Curtis J. Varnell, Ph.D., 2004 Projected, Hydrogeology of Flow and Geochemistry of Water in an Abandoned Coal Mine, and Feasibility of Using This Water As a Public Supply Source.

Gary Hanson, Ph.D., 2005 Projected, Environmental Changes Resulting From Human Activities Preserved in Lacustrine Sediments of Wallace Lake, Louisiana—Pre Impoundment (Circa 1930) to Present.

CURRICULUM VITA

Sonja Hausmann
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Ozark Hall 113, University of Arkansas
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EDUCATION

Ph.D., University of Bern, Paleolimnology, 2001
Diploma, Technical University, Munich, Biology, 1997

WORK HISTORY

2006-Present: Assistant Professor, University of Arkansas, Geosciences
2002-2006: Post-Doctoral Researcher, Laval University, Quebe, Canada
1997-2001: Research Associate, University of Bern, Switzerland
1996-1997: Research Assistant, EAWAG, Zurich, Switzerland

COURSES TAUGHT

Conservation of Natural Resources; Numerical Methods in Paleoecology; Geomorphology

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $350,000 (Co-PI)

5 SIGNIFICANT PUBLICATIONS

Hausmann, S. and F. Kienast. 2005. Optimisation of transfer functions by homogenization of environmental variables: a validated case study for Greifensee in central Europe, *Paleogeography, Paleoclimatology, Paleoecology*, in press.

Heiri, O., A. F. Lotter, S. Hausmann, and F. Kienast. 2003. A chironomid-based Holocene summer air temperature reconstruction from the Swiss Alps, *The Holocene*, 13(4), 477-484.

Ohlendorf, C., M. Sturm, and S. Hausmann. 2003. Lake sediment signatures of climate and human induced environmental changes in the central Swiss Alps (Sagistalsee 1935 m asl), *Journal of Paleolimnology,* 30(3), 297-3006.

Hausmann, S., A. F. Lotter, J. F. N. Leeuwen, M. Sturm, C. Ohlendorf, and G. Lemcke. 2002. Climate alters grazing regimes: a quantitative multi-proxy, high resolution study of varved sediments from a small Swiss alpine lake, *The Holocene*, 12(3), 279-289.

Hausmann, S. and A. F. Lotter. 2001. Numerical *Cyclotella comensis* taxonomoy and its importance for quantitative temperature reconstruction, *Freshwater Biology*, 46 (10), 1323-1333.

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Geophysical Union
ArcticNet
Association Quebecoise pour l'etude du Quaternaire (AQQUA)
Centre d'etudes nordiques
International Diatom Society
PAGES

HONORS AND AWARDS

Post-doctoral Fellowship, Deutsche Akademie der Naturforsher, Germany
Fellowship for prospective researchers, Swiss National Science Foundation
Karolina Rudi scholarship

SYNERGISTIC ACTIVITIES

Reviewer for many journals

CURRICULUM VITA

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EDUCATION

Ph.D., Ohio State University, Geodetic Science and Surveying, 2004
M.S., Ohio State University, Geodetic Science and Surveying, 2000
B.S., United States Air Force Academy, 1989, Honors Graduate

WORK HISTORY

2004-Present: Assistant Professor, University of Arkansas Geosciences
2002-Present: Research Associate, Center for Advanced Spatial Technologies, University of Arkansas
2001-Present: Photogrammetric and GIS Consultant, Spatial Integrated Systems, Rockville, Maryand
2000-2002: GIS Research Scientist, Wellsco, Inc. Paragould, Arkansas
1998-2000: Photogrammetric Engineer, National Air and Space Intelligence Center, Dayton, Ohio.
1997-1999: Research Assistant, Center for Mapping, Ohio State University
1989-2001: Scientific Analyst, United States Air Force and Air Force Reserve, National Air and Space Intelligence Center, Dayton, Ohio

COURSES TAUGHT

Introduction to the Global Positioning System, University of Arkansas
Quantitative Techniques in Geosciences, University of Arkansas
Adjustment Computations I, Ohio State University
Adjustment Computations II, Ohio State University
Adjustment Computations for Surveyors, Ohio State University

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $1,506,000 (PI, Co-PI, Team Leader)

5 SIGNIFICANT PUBLICATIONS

Schaffrin, B., Cothren, J. 2003., Hierarchical data fusion with photogrammetric applications, Brazilian Journal of Cartography, No. 55/02, pp. 25-34.

Schaffrin, B., Cothren, J., 1998. *Towards Optimizing Hierarchical Data Revisions.* Proc. of the 9th Symposium on GIS: Between Vision and Applications, Stuttgart, Germany, pp. 515-521.

Cothren, J., Limp, F., 2004. Key Earth Imaging Technology Developments. *Earth Imaging Magazine, Sep 2004*.

Cothren, J., Limp, F., 2004. 3D Applications at the Center for Advanced Spatial Technologies. *Point of Beginning, May 2004*.

Cothren, J., Limp, F., 2003 It's a 3D World - Emerging photogrammetry technologies make it easier than ever to deliver geospatial solutions. *GeoWorld, Jan 2003*

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Society of Photogrammetry and Remote Sensing, *National Board Member*
International Society of Photogrammetry and Remote Sensing

HONORS AND AWARDS

University Fellow, Ohio State University, 1998.

SYNERGISTIC ACTIVITIES

Participant in National Consortium for Rural Geospatial Innovations in America. Provide technical assistance for Northwest Arkansas Regional Planning Commission.

STUDENTS SUPERVISED, M.A., LAST FIVE YEARS

Angie Smith

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

Husam Atta, in progress, Earthquake Assessment in Wadi Araba-Jordan Transform Utilizing Tectonic Geomorphology, Remote Sensing, and Geographical Information Systems (GIS)
Mohammmad Salem

CURRICULUM VITA

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fdavidso@uark.edu

EDUCATION

Ph.D.: University of Nebraska-Lincoln, Geography1991
M.A.: University of Nebraska-Lincoln, Geography, 1987
B.A.: Newcastle Upon Tyne Polytechnic, Geography, 1985 with high honors

WORK HISTORY

1992-Present: Assistant & Associate Professor, University of Arkansas
1996-1997: Visiting Research Fellow, Lucy Cavendish College, Cambridge
1990-1992: Research Associate, Illinois Institute for Rural Affairs
1990-1992: Instructor, Department of Geography, Western Illinois University
1985-1990: Graduate Assistant and Instructor, Department of Geography, University of Nebraska-Lincoln

COURSES TAUGHT

Human Geography; Physical Geography; Economic Geography; Emerging Nations; Developed Nations; Conservation and Natural Resources; Map Design; Geography of North America; Geography of Europe; Urban Geography; Political Geography; Humanities Honors II: The Equilibrium of Cultures; Humanities Honors III: The Birth of the Modern; European Studies Colloquium: Various topics; Readings in the Geography of War and Conflict; Readings in Regional and Urban Development; Readings in West European Political Geography; Readings in American Public Lands; Geography Field Course

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $153,000 (Co-PI)

5 SIGNIFICANT PUBLICATIONS

Fiona M Davidson, Shelley, F.M., Archer J.C, O'Lear, S., Webster G. and Brunn S.E. (2005) Global Political Geography New Jersey: Guilford Press

Fiona M. Davidson (1998) "A New Europe? The European Union and the Regions: the case of Scotland" in **Teaching Political Geography** F.M. Davidson, J.I. Leib,

F.M. Shelley and G.R. Webster (eds.) NCGE Pathways Series #19 pp. 25-30
Fiona M. Davidson (1997) “Integration and Disintegration: A Political Geography of the European Union” *Journal of Geography* 96 #2 pp. 69-75
Fiona M. Davidson, Shelley F.M., Archer J.C.. and Brunn S.E. (1996) **America's Political Geography** New Jersey: Guilford Press
Fiona M. Davidson (1996) "The Fall and Rise of the SNP since 1983 : Analysis of A Regional Party" *Scottish Geographical Magazine* 112 #1 pp.11-19

MEMBERSHIP IN SCHOLARLY SOCIETIES

Association of American Geographers
Institute of British Geographers
Gamma Theta Upsilon
Sigma Xi
Arkansas Geographic Society

HONORS AND AWARDS

Fulbright College Master Teacher 2003-2004
University of Arkansas Outstanding Mentor 2004
Department of Geosciences Outstanding Teacher 2003-2004

SYNERGISTIC ACTIVITIES

Editorial Board Southwestern Geographer
Executive Board Political Geography Specialty Group
Reviewer University of Nebraska Press, University of Arkansas Press and numerous journals

STUDENTS SUPERVISED, M.A., LAST FIVE YEARS

Al-Hediaf, Mohamed M.A. (2003) Desertification in the Al-Qassim Region of Saudi Arabia
Alkaabi, Saeed M.A. (2002) Immigration and Population Growth problems in the UAE
Fahkroo, Fahad M.A. (2002) Problems of urban growth and transportation in Qatar: a geographical analysis
Alneaimi, Mohamed M.A. (2000) Causes and consequences of Population growth in the UAE, 1975-1995
Barrett, Scott M.A. (1999) Whiteness through the Eyes of Privileged Venezuelans; perceptions of color, race and class among Venezuelan students in the United States
Hill, Brandon M.A. (1999) Political culture, corporate policy and gay partner rights; a geographical analysis.

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

Mohamed Alneaimi, (2002) Ph.D. Analysis of Population growth and Water Management in the United Arab Emirates 1970-2000 – Using GIS and Remote Sensing

Judy Rogers Analysis of the Spatial Clustering of Disease – Prairie Grove, Arkansas anticipated 2004

CURRICULUM VITA

Ralph K. Davis
Arkansas Water Resources Center
Ozark Hall 112, University of Arkansas
Fayetteville, Arkansas 72701
(479) 575-4515
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EDUCATION

Ph.D.: University of Nebraska-Lincoln, 1992, Hydrogeology
M.S.: University of Nebraska-Lincoln, 1986, Hydrogeology
B.S.: University of Nebraska-Lincoln, 1981, Major-Geology, Minor-Geography

WORK HISTORY

2001-Present: Director, Arkansas Water Resources Center
Associate Professor Geosciences
2000-2001: Associate Professor, University of Arkansas Geosciences
1994-2000: Assistant Professor, University of Arkansas Geology
1992-1994: Assistant Professor, University of South Dakota, Earth Sciences & Physics
1990-1992: Graduate Research Assistant, University of Nebraska - Geology.
1989-1990: Graduate Teaching Assistant, University of Nebraska - Geology
1983-1989: Manager, Big Bend Groundwater Management District # 5, Stafford, KS

COURSES TAUGHT

General Geology I, Physical Geology Lab, Environmental Geology, Fundamentals of Hydrogeology, Environmental Site Assessment, Applied Field Methods in Hydrogeology, Water Resource Issues, Hydrogeologic Modeling, Geology For Engineers

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $871,755

FIVE SIGNIFICANT PUBLICATIONS

Peterson, E.W., R.K. Davis, J.V. Brahana and H.A. Orndorff, 2002, Movement of Nitrate Through Regolith Covered Karst. Journal of Hydrology, v. 256, pp. 35-47.

McGinnis, S. and R.K. Davis, 2001, Domestic Well Water Quality Within Tribal Lands of Eastern Nebraska. Environmental Geology, v. 41, n. 3-4 Pp. 321-329.

Peterson, E.W., R.K. Davis and J.V. Brahana, 2000, The Use of Regression Analysis to Predict Nitrate-Nitrogen Concentrations in Springs of Northwest Arkansas. In:

Groundwater Flow and Contaminant Transport in Carbonate Aquifers, I.D. Sasowsky and C.M. Wicks, editors. AA Balkema, Rotterdam. pp. 43-63.

Peterson, E.W., R.K. Davis and H.A. Orndorff, 2000, 17-b Estradiol as an Indicator of Animal Waste Contamination in Mantled Karst Aquifers. Journal of Environmental Quality, v. 29, n. 3, pp. 826-834.

Marshall, D., J.V. Brahana and R.K.Davis, 1998, Resuspension of Viable Sediment-Bound Enteric Pathogens in Shallow Karst Aquifers. In: Gambling With Groundwater-Physical, Chemical, and Biological Aspects of Aquifer-Stream Relations, Editors; J.V. Brahana, Y. Eckstein, L.K. Ongley, R. Schneider and J.E. Moore. International Association of Hydrogeologists/American Association of Hydrogeologists, Proceedings Volume, pp. 179-186.

MEMBERSHIP IN SCHOLARLY SOCIETIES

Member, National Ground Water Association
Ground Water Scientists and Engineers
Member, Geological Society of America
Member, American Geophysical Union
Member, Sigma Xi, The Scientific Research Society

HONORS & AWARDS

Elected Fellow in the Geological Society of America 2003

SYNERGISTIC ACTIVITIES

Reviewer for National Science Foundation, and for several journals
Significant service to the Geological Society of America Hydrogeology Division including technical program chair for the Division 1998 and current secretary/treasurer of the division.

STUDENTS SUPERVISED, M.S., LAST FIVE YEARS

R. Monk, 1998; H. Orndorff, 1999, E. Peterson, 2000, S. Hamilton, 2001, K. Whitsett, 2002, C. Cooper, 2002, M. McCullom-Rhoden, 2002

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

S. McGinnis, 2002

CURRICULUM VITA

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Fayetteville, Arkansas 72701
(501) 575-5808
jcdixon@uark.edu

EDUCATION

Ph.D., University of Colorado, Institute of Arctic and Alpine Research, 1983
M.A., University of Adelaide, South Australia, 1979
B.A. (1st Class Honors), University of New South Wales, 1975

WORK HISTORY

1981–Present: Instructor; Assistant, Associate, Full Professor, University of Arkansas

COURSES TAUGHT

Oceanography, Natural Regions of North America, Principles of Landscape Evolution
Quaternary Environments, Research Methods, History of Geography

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $491,799 (C0-PI)

FIVE SIGNIFICANT PUBLICATIONS

Dixon, J.C., Thorn, C.E., Darmody, R.G., Campbell, S.W. 2002. Post glacial rock weathering processes on a
roche moutonnee in the Riksgransen area (68N), northern Norway. *Norsk Geografisk Tidsskrift,* 56, 257-264.

Thorn, C.E., Darmody, R.G., Dixon, J.C., Schlyter, P. 2002. Weathering rates of buried machine-polished
rock disks, Karkevagge, Swedish Lapland. *Earth Surface processes and Landforms*, 27, 831-845.

Dixon, J.C., Thorn, C.E., Darmody, R.G., Campbell, S.W. 2002. Weathering rinds and rock coatings from an
Arctic alpine environment, northern Scandinavia. *Bulletin of the Geological Society of America*, 114, 226-238.

Pope, G.A., Dorn, R.I., Dixon, J.C. 1995. A new conceptual model for the understanding of geographical
variations in weathering. *Annals of the Association of American Geographers*, 85, 38-64.

Dixon, J.C. and Young, R.W. 1981. Character and origin of deep arenaceous weathering mantles on the

Bega batholith, southeasterm Australia. *Catena*, 8, 97-109.

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Geophysical Union
Geological Society of America
Association of American Geographers
Sigma Xi

HONORS AND AWARDS

Arkansas Geographic Alliance Distinguished Faculty Award
National Council for Geographic Education Distinguished Teaching Award

SYNERGISTIC ACTIVITIES

Associate Editor, *Physical Geography*
Reviewer for National Science Foundation, many journals

STUDENTS SUPERVISED, M.A., LAST FIVE YEARS

Chris Landgraf, 2004. Evaluating the standard GIS wetland prioritization methodology (SGWPM) at finer resolution: An example from Belvoir, VA.

Fiona Trewby, 2003. The effect of landuse/landcover change on the water quality of the Okavango River, Namibia.

Mohammad Al-Hedaif, 2003. the desertification of the Al-Qassim Region, Saudi Arabia.

Katherine Fausett, 2002. Human-induced microclimate variability within the Urn tomb of Petra, Jordan.

Molly Reif, 2002. Prioritizing wetlands for acquisition: An analysis of the lower White River wetland planning area in the Arkansas Delta.

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

B. Dixon 2000. Application of neuro-fuzzy techniques to predict ground water vulnerability in northwest Arkansas

M. E. Garner. 2001. Effects of anthropogenic activities upon land cover change in Johnson County, Arkansas.

S.W. Campbell. 2002. Landscape geochemistry in Karkevagge, Swedish Lapland.

D.H. Holt. 2002. Did extreme climate conditions stimulate the migrations of the Germanic tribes in the 3rd and 4th centuries AD?

CURRICULUM VITA

Thomas O. Graff, Department Chair
Department of Geosciences, OZAR-113
University of Arkansas
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479-575-3159

EDUCATION

Ph.D., University of Kansas, Geography, 1973
M.A., Western Illinois University, 1970
B.S., Western Illinois University, 1968

WORK HISTORY

1973 – 1980 Assistant Professor, University of Arkansas
1980 – present Associate Professor, University of Arkansas
1989 – 1993 Chair Geography
1998, Chair Geography
1999 – 2004 Chair Geosciences

COURSES TAUGHT

Human Geography, World Regional Geography, Geography of Anglo America, Developed Nations, Emerging Nations, Quantitative Techniques

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $210,000 (Co-PI)

5 SIGNIFICANT PUBLICATIONS

Graff, T. O. and R. F. Wiseman, 1979. Changing Concentrations of Older Americans. *Geographical Review*. 68: 379-393.

Graff, T.O. and C. R. Britton, 1982. The Role of Older American in Arkansas' Changing Population Patterns. *Arkansas Business and Economic Review*. 15: 1-8.

Graff, T. O. and R. F. Wiseman, 1990. Changing Patterns of Retirement Counties Since 1965. *Geographical Review.* 80: 239-251.

Graff, T. O. and Dub Ashton, 1994. Spatial Diffusion of Wal-Mart: Contagious and Reverse Hierarchical Elements. *The Professional Geographer*. 46: 19-29.

Graff, T.O., 1998. The Locations of Wal-Mart and Kmart Supercenters: Contrasting Corporate Strategies. *The Professional Geographer*. 50: 46-57.

MEMBERSHIP IN SCHOLARLY SOCIETIES

Association of American Geographers
American Geographical Society

HONORS AND AWARDS

None

SYNERGISTIC ACTIVITIES

Board Member: Rural GIS Consortium
Reviewer for several journals

STUDENTS SPERVISED, M.A., LAST 5 YEARS)

Tucker, Phillip. S., 2002**.** A study of regional competition with Wal-Mart in retail food sales in Northwest Arkansas

CURRICULUM VITA

Margaret J. Guccione
Department of Geosciences
Ozark Hall 113, University of Arkansas
Fayetteville, Arkansas 72701
(479) 575-3354 or -3355
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EDUCATION

Ph.D.: University of Colorado, Boulder, CO, Geology, 1982
M.S.: Miami University, Oxford, OH, Geology, 1972
B.S.: St. Joseph's College, Rensselaer, IN, Geology, 1969 *cum laude*

WORK HISTORY

2001-Present: Professor, University of Arkansas, Geosciences
1995-2001: Associate Professor, University of Arkansas, Geology
1979-1995: Adjunct faculty, University of Arkansas, Geology

COURSES TAUGHT

General Geology I, Honors General Geology, Honors General Geology Laboratory, General Geology II, Earth Science, Geomorphology, Seminar on Technical Communication, Quaternary Environments, Seminar on Fluvial Geomorphology and Sedimentation, Clay Mineralogy, Mineral Weathering and Diagenesis, Geology of Arkansas, Field Camp, Geology Field Trip.

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $405,892 (PI)

FIVE SIGNIFICANT PUBLICATIONS

Guccione, M.J., Mueller, K., Champion, J., Shepherd, S., and Odhiambo, B., 2002, Stream response to repeated co-seismic folding, Tiptonville dome, western Tennessee, Geomorphology, v. 43, p. 313-349.

Guccione, M.J., Van Arsdale, R.B., and Hehr, L.H., 2000, Origin and age of the Manila high and associated Big Lake "Sunklands", New Madrid Seismic Zone, northeastern Arkansas, Geological Society of America Bulletin, v. 112, p.579-590.

Blum, M.D., Guccione, M.J., Wysocki, D.A., Robnett, P.C., Rutledge, E.M., 2000, Late Pleistocene evolution of the Lower Mississippi valley, Southern Missouri to Arkansas, Geological Society of America Bulletin, v. 112, p. 221-235.

Mueller, K,. Champion, J., Guccione, M., Kelson, K., 1999, Fault slip rates in the modern New Madrid seismic zone, Science, v. 286, p. 1135-1138

Guccione, M.J., 1993, Grain-size distribution of overbank sediment and its use to locate channel positions, Special Publications of the International Association of Sedimentologists, v. 17, p. 185-194.

MEMBERSHIP IN SCHOLARLY SOCIETIES

Geological Society of America
American Quaternary Association
Association for Women Geoscientists

HONORS AND AWARDS

Fellow, Geological society of America
Fellow, St. Joseph's College

SYNERGISTIC ACTIVITIES

Treasurer, American Quaternary Association
Reviewer for National Science Foundation, many journals

STUDENTS SUPERVISED, M.S., LAST FIVE YEARS

Dennis, John, PhD, in progress, The Red River (Arkansas and Texas) and its impact on archeological sites

Horn, John, M.S. in progress, Geomorphology, sedimentology, and tectonic deformation of the abandoned Mississippi River meander belt 3 and the Tyronza/Dead Timber distributary, near Marked Tree, Arkansas

Scheffer,Aimee, M.S. in progress, Depositional history of the floodplain in the vicinity of the confluence of the Mississippi and Missouri rivers, Missouri

McVey, Kevin, M.S. in progress, Response of tributary streams to aggradation and incision of the Mississippi River

Timothy D. FitzGerald, M.S. in progress, Response of Mississippi River tributaries to Wisconsin glaciation and deglaciation, Lower Mississippi Valley, northern Mississippi and northeastern Louisiana

Curtis L. Nunn, M.S., 2003, Paleochannel piercing-point analysis of the Missouri Boothell lineament, New Madrid seismic zone

Stephanie Shepherd, M.S., 2001, Characterization and timing of Neck Meander cutoff, Mississippi River, Tiptonville, Tennessee

Carlson, M.S., 2000, Lacustrine sedimentation and fluvial architecture beneath Reelfoot Lake, Tennessee

Minnie Burford, M.S., 1999, Geomorphology and Sedimentation of the Left Hand Chute of the Little River near Whistleville, Arkansas

CURRICULUM VITA

Phillip D. Hays
USGS Visiting Scientist
Department of Geosciences, Ozark Hall 113
University of Arkansas
Fayetteville, Arkansas 72701
(479) 575-7343
pdhays@usgs.gov or pdhays@uark.edu

EDUCATION

Ph.D.: Geology, Texas A&M University, 1992.

M.S.: Geology, Texas A&M University, 1986.

B.S.: Geology, University of Arkansas, 1984.

WORK HISTORY

2000–present, Hydrologist, U.S. Geological Survey,
Visiting Scientist/liaison to USDA Natural Resources Conservation Service National Water Management Center, Little Rock, Arkansas

July 2000 – present, Adjunct Professor, 25% time commitment, USDA Natural Resources
Conservation Service/U.S. Geological Survey Visiting Scientist with the University of Arkansas Department of Geosciences, Fayetteville, Arkansas

July 1992 – July 2000, Hydrologist, U.S. Geological Survey, Little Rock, Arkansas. District
Ground-Water Specialist.

July 1994 – August 2000, Adjunct Professor, University of Arkansas, Summer Field Hydrogeology Course, Savoy Watershed Isotope Applications Liaison.

January – April 2004, U.S. Department of State, Embassy Science Fellow, Suriname Mercury and Gold Mining Pollution Abatement Program

September 1999 – February 2000, Office of Ground Water, Mississippi Delta Region 2000

May 1989- September 1989, ARCO Geoscience Research Group, Research Geologist, Plano, Texas.

June 1986 - September 1988, Sun Exploration and Production, Staff Geologist, Abilene, Texas.

COURSES TAUGHT

Stable Isotope Geology, Digital Simulation of Ground-Water Flow, University of Arkansas/USGS Field Hydrogeology course, Field Geology, Engineering Geology.

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $387,000 (PI plus Co-PI)

FIVE SIGNIFICANT PUBLICATIONS

Phillip D. Hays and Richard W. Bell (2004-2005) The Thermal Waters of Hot Springs National

Park—Water Chemistry Status and Potential Water-Quality Effects of Cold-Water Recharge: U.S. Geological Survey Water Resources Investigation Report (under review)

Margaret Guccione, Phillip D. Hays, 2003, Use of stable isotopes in an alluvial environment

to reconstruct Mississippi River watershed climate and local vegetation history near Lula, Mississippi, USA: Holocene, in review.

O'Neill, Brandy R., Walter L. Manger, Phillip D. Hays, 2003, Growth and Diagenesis of Middle

Jurassic Belemnite Rostra from northeastern Utah, Insights using cathodoluminescence: Berliner Paläobiologische Abhandlungen, 12 pages, in press.

Phillip D. Hays and Ethan L. Grossman, 1991, Oxygen isotopes as indicators of continental

paleoclimate: Geology, v. 19, p. 441-445.

Phillip D. Hays, William D. James, and Thomas T. Tieh, 1994, The role of Neutron Activation

Analysis in studies of organic diagenesis of rocks: Journal of Radioanalytical and Nuclear Chemistry, v. 180, p 15-23.

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Geophysical Union
Geological Society of America
National Ground Water Association

HONORS AND AWARDS

2004 U.S. Department of State Embassy Science Fellow

SYNERGISTIC ACTIVITIES

Technical reviewer for the Korean Institute of Geology and Mines
UA Stable Isotope Laboratory Steering Committee member

STUDENTS SUPERVISED, M.S., LAST FIVE YEARS

Erik Pollack, Chris Hobza, , Dana Austin, Dan Giles

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

Sherri DeFauw, Jozef Laincz

CURRICULUM VITA

John G. Hehr
Associate Dean
Fulbright College of Arts and Sciences
Old Main 525
University of Arkansas
Fayetteville, AR 72701
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EDUCATION

Ph.D., Michigan State University, 1971
M.A., Western Michigan University, 1967
B.S., Ohio University, 1963

POSITIONS HELD

1998-Present: Project Director, NSF EPSCoR
1988-Present: Associate Dean, Fulbright College
1978-1987: Chairperson, Department of Geography
1977-Present: Assistant, Associate, Professor, University of Arkansas
1971-1977: Assistant Professor, University of Miami

COURSES TAUGHT

Physical Geography, Climatology, Meteorology, Conservation of Natural Resources

GRANT FUNDING OVER LAST 5 YEARS

TOTAL: $13,277,315 (PI)

5 SIGNIFICANT PUBLICATIONS

D.W. Stahle, M.K. Cleaveland, J.G. Hehr, K.R. Briffa. 1990.

1990 Long Tree-Rings. Nature. 348: 590

D.W. Stahle, M.K. Cleaveland, J.G. Hehr. 1988.

North Carolina Climate Changes Reconstructed from

Tree-Rings: A.D. 372 to 1985. Science 240: 1517-1519

M.K. Cleaveland, J.G.Hehr, D.W.Stahle. 1988. Long-term

Reconstruction and Analysis of White River Streamflow.

Arkansas Water Resources Research Center.

Publication No. 135. p.41

D.W. Stahle, M.K. Cleaveland, J.G. Hehr. 1985.

A 450-Year Drought Reconstruction for Arkansas, USA.

Nature. 316: 530-532

D.W. Stahle, J.G. Hehr. 1984. Dendroclimatic Relationships of

Post Oak Across a Precipitation Gradient in the Southcentral United States. Annals. Association of American Geographers.

74: 561-573

MEMBERSHIP IN SCHOLARLY SOCIETIES

Sigma Xi

HONORS AND AWARDS

SYNERGISTIC ACTIVITIES

Director, NSF EPSCoR for Arkansas

STUDENTS SUPERVISED, M.A., LAST 5 YEARS

None in the last 5 years

CURRICULUM VITA

Pamela E. Jansma
Department of Geosciences, Ozark Hall 113
University of Arkansas
Fayetteville, Arkansas 72701
(479) 575-4748
pjansma@uark.edu

EDUCATION

Ph.D., Northwestern University, Evanston, IL, 1988
M.S., Northwestern University, Evanston, IL, 1984
B.S., with distinction, Stanford University, Stanford, CA, 1980

WORK HISTORY

2004-present Professor and Chair, Department of Geosciences, Univ. of Arkansas
2000-2004: Associate Professor, Department of Geosciences, Univ. of Arkansas
2000 : Associate Dean for Research and Academic Affairs, College of Arts and Sciences, University of Puerto Rico, Mayagüez
1996-1998: Associate Director, Department of Geology, University of Puerto Rico, Mayagüez
1995-2000: Associate Professor, Department of Geology, University of Puerto Rico, Mayagüez
1988-1990: National Research Council Post-Doctoral Fellow, Resident Research Associate, Jet Propulsion Laboratory, Pasadena, California

COURSES TAUGHT

Structural Geology, Intro. Remote Sensing, Adv. Remote Sensing, Tectonics, Caribbean Geology, Adv. Structural Analysis, Environmental Geology

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $1,575,000 (P.I. or Co-P.I.)

5 SIGNIFICANT PUBLICATIONS

Jansma, P. and G. Mattioli, GPS results from Puerto Rico and the Virgin Islands: constraints on tectonic setting and rates of active faulting. *Geol. Soc. Amer. Spec. Paper* (in press).

Mann, P., E. Calais, J. Ruegg, C. DeMets, P. Jansma, and G. Mattioli. 2002. Oblique collision in the northeastern Caribbean from GPS measurements and geological observations. *Tectonics 21(6)*: 1057, doi:10.1029/2001TC001304.

Jansma, P., G. Mattioli, and A. Matias. 2001. SLICER laser altimetry in the eastern Caribbean. *Surveys in Geophysics 22*: 561-579.

Jansma, P., A. Lopez, G. Mattioli, C. DeMets, T. Dixon, P. Mann, and E. Calais. 2000.

Neotectonics of Puerto Rico and the Virgin Islands, northeastern Caribbean, from GPS geodesy, *Tectonics 19*: 1021-1037.

DeMets, C., P. Jansma, G. Mattioli, T. Dixon, F. Farina, R. Bilham, E. Calais and P. Mann, 2000. GPS geodetic constraints on Caribbean-North America plate motion: Implications for plate rigidity and oblique plate boundary convergence. *Geophys. Res. Lett. 27*: 437-440.

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Association for the Advancement of Science
American Geophysical Union
Geological Society of America
Association of Women Geoscientists
American Society of Photogrammetry & Remote Sensing
Sigma Xi

HONORS AND AWARDS

1994-1998: Scholarly Productivity Award, University of Puerto Rico
1997 : Professor of the Year, Student Geological Society, Puerto Rico
1993-1994: NASA/ASEE Certificate of Recognition for research
1992 : NASA Group Achievement Award, Magellan Science Group

SYNERGISTIC ACTIVITIES

NSF-EAR: panelist for Earthscope facilities and for Earthscope science
NASA-ESE: panelist for Solid Earth and Natural Hazards program
Reviewer for NSF, NASA,, and DoD proposals; AGU and GSA journals

STUDENTS SUPERVISED, M.A., LAST FIVE YEARS

Anita Stone, expected 2005, Subsidence in eastern Arkansas from GPS geodesy
Shane Matson, expected 2004, Kinematics of the Lesser Antilles subduction zone from GPS geodesy
Henry L. Turner, III, 2003, Slip partitioning during oblique convergence: A GPS study of Nicaragua
Alberto Lopez, 2000, Models of microplate behavior in the northeastern Caribbean as constrained by GPS geodesy
Audeliz Matias, 2000, Cross-calibration of SLICER laser altimetry and GPS observations in Puerto Rico

CURRICULUM VITA

Ronald H. Konig
Department of Geosciences, Ozark Hall 113
University of Arkansas
Fayetteville, Arkansas 72701
(479) 575-3411 or -3159
rkonig@uark.edu

EDUCATION

Ph.D.: Cornell University, Ithica, NY, Geology, 1959
M.S.: Cornell University, Ithica, NY, Geology, 1956
B.S.: Clemson University, Forestry, 1972, with high honors
B.S.: St. Lawrence University, Geology, 1954

WORK HISTORY

1980-Present: Professor, University of Arkansas Geosciences (Geology)
1971-1980: Professor and Department Chair, University of Arkansas Geology
1967-1971: Associate Professor of Geology, University of Arkansas
1959-1967: Assistant Professor, University of Arkansas

COURSES TAUGHT

General Geology, Mineralogy, Geology for Engineers, Igneous and Metamorphic Rocks, Structural Geology, Field Geology, Map and Aerial Photography, Optical Mineralogy, Ore Deposits, Industrial Mineral Deposits, Graduate Seminar, Igneous Petrology, Advance Structural Geology

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: None in the past 5 years

FIVE SIGNIFICANT PUBLICATIONS

Konig, R.H., 1961; Geology of the Plainfield Quadrangle, Vermont: Vt. Geol. Survey Bull. no. 16, 86 pp.

Chinn, A. L. and Konig, R. H., l973; Stress Inferred from Calcite Twin Lamellae in Relation to Structure of Northwest Arkansas: Geol. Soc. of America Bull., v. 84, p. 3731-3736.

Wagner, G. H, Konig, R. H., and Steele, K. F., 1978; Stream Sediment Geochemical Investigation in Arkansas: Jour. of Geochemical Exploration, v. 9, p. 63-74.

Wagner, G. H., Konig, R. H., and Jones, M. D., 1979; Base Metals and Other minor elements in Manganese Deposits of Arkansas: Chemical Geology, v. 27, p. 309-

327.
Konig, R. H., 1981; Geologic Study of Manganese Deposits in the Batesvelle, Arkansas Mining District, Final Report: U. S. Burea of Mines, 155 pp.

MEMBERSHIP IN SCHOLARLY SOCIETIES

Geological Society of America
Society of Economic Geology
AIME

HONORS AND AWARDS

Fellow, Geological Society of America
Fellow, Society of Economic Geology

SYNERGISTIC ACTIVITIES

STUDENTS SUPERVISED, M.A., LAST FIVE YEARS

None in the past 5 years

CURRICULUM VITA

Walter L. Manger
Department of Geosciences
113 Ozark Hall, University of Arkansas
Fayetteville, Arkansas 72701
wmanger@uark.edu

EDUCATION

Ph.D.: University of Iowa, Geology, 1971
M.S.: University of Iowa, Geology,1969
B.A. College of Wooster, 1966

WORK HISTORY

1981 to present: Professor, University of Arkansas Geology Department
1994: Visiting professor, University of Oklahoma Geology Department
1984-1992: Chairman of Geology, University of Arkansas
1977-1981: Associate Professor, University of Arkansas Geology Department
1972-1984: Geology Curator, University of Arkansas
1972-1977, Assistant Professor, University of Arkansas Geology Department
1971-1972: Assistant Professor, Northeastern University Geology Department

COURSES TAUGHT

General Geology, Invertebrate Paleontology, Stratigraphic Principles and Practice, Geology Fieldtrip, Sedimentary Rocks, Historical Geology, Extinctions and Life History

GRANT FUNDING OVER LAST 5 YEARS: $35,5000

FIVE SIGNIFICANT PUBLICATIONS

Manger, W., O'Neill, B. R. and Hays, P.D. (2003) "Growth and Diagenesis of MiddleJurassic Belemnite Rostra from Northeastern Utah: Insights Using Cathodoluminescence. Berliner Paläobiologishe Abhandlungen, Band 3, p. 241-251.

Manger, W., Stephen, D.A. and Baker, C. (2002) "Ontogeny and Heterochrony in the Middle Carboniferous ammonoid *Arkanites relictus* (Quinn, McCaleb and Webb) from northern Arkansas. Journal of Paleontology 76(5):810-821

Manger, W. and Work, D. M. (2002) "M*asonoceras*, a new karagandoceratid ammonoid from the Lower Mississippian (Lower Osagean) of Kentucky. Journal of Paleontology 76(3):574-577.

Manger W. and Titus, A.L. (2001) "Mid-Carboniferous Ammonoid Biostratigraphy, southern Nye County, Nevada: Implications of the first North American *Homoceras*. Journal of Paleontology, Memoir 55: 31pp.

Manger, W and Shelby, P.R. (2000) "Natural Gas Production from the Boone Formation(Lower Mississippian), northwestern Arkansas". Oklahoma Geological Survey Circular 101:163-169.

MEMBERSHIP in SCHOLARLY SOCIETIES

Memberships: Fort Smith Geological Society, Geological Society of America (Fellow 1985), International Paleontological Association, National Association of Geoscience Teachers, National Groundwater Association, Ohio Academy of Science, Paleontological Society

SYNERGISTIC ACTIVITIES

Professional Geologist Registration - #1601 - State of Arkansas
Expert Witness Credentials - Arkansas Oil and Gas Commission - Docket 88-80
Expert Witness Credentials - Arkansas Department of Environmental Quality
Special Publications Editor - Paleontological Society, 1997-1999
Associate Editor - Geological Society of America, Bulletin, 1990-1996
Titular Membership in Subcommission on Carboniferous Stratigraphy, 1992-1997; North American Commission on Stratigraphic Nomenclature, 2000-present
Management Board - SEPM, 1987-1990
Secretary - Subcommission on Carboniferous Stratigraphy, 1984-1987
Nominating Committee - Paleontological Society, 1975-1978
President - Midcontinent Section SEPM, 1990; Midcontinent Section PS, 1998, 2000

STUDENTS SUPERVISED LAST FIVE YEARS

Brandy R. O'Neill, M.A. 2003. Cathodoluminescence and Isotopic studies with Jurassic Belemnoid Rostra: Insights into their geochemistry, paleontology, and petrography

Claiborne B.B. Morton, M.A. 2002. Reservoir Potential of the Upper Jackfork Sandstone (Pennsylvanian), western Ouachita Mountains, Arkansas as an Analogue to the Potato Hills Region, eastern Oklahoma

Combs, Jason E., M.A. 2001. Lithostratigraphy and Sandstone Petrography of the Atoka Formation, northwestern Arkansas

Chandler, Sandra L., M.A. 2001. Olistoliths in the Lower Mississippian Boone Formation, Washington County, Arkansas

CURRICULUM VITA

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Department of Geosciences
113 Ozark Hall, University of Arkansas
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EDUCATION

Ph.D.:Northwestern University, Geological Sciences, 1987
M.S.: Northwestern University, Geological Sciences, 1982
B.A.: University of Rochester, Geology, 1980

WORK HISTORY

2002-Present: Associate/Full Professor of Geosciences, Department of Geosciences
University of Arkansas, Fayetteville, AR
2001-2002: Program Director, Petrology and Geochemistry Program, Division of Earth Sciences, National Science Foundation, Arlington, VA
1992-2002: Assistant, Associate, Professor of Geology, Department of Geology, University of Puerto Rico, Mayagüez, PR
1992-1994: Visiting Associate, Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA
1990-1991: Research Geologist, Petroleum Geochemistry Group, Exploration Research, ARCO Oil & Gas Company, Plano Research Center, TX
1989-1990: Associate Scientist, Division of Geological & Planetary Sciences, California Institute of Technology, Pasadena, CA
1988-1989: Research Fellow, Department of Geology & Geophysics, University of California, Berkeley, CA
1988-1989 Consultant, Gemological Institute of America, Santa Monica, CA
1986-1988: Weizmann Research Fellow, Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA

COURSES TAUGHT

Volcanic Processes and Hazards, Applications of GPS Geodesy in Geosciences, Petrology of Igneous and Metamorphic Rocks, Crystal Chemistry and Mineralogy, Introduction to the Instrumental Analysis of Solid Materials, Advanced Geochemistry, Cartography and Geodesy in Geology, Planetary Geology, and Introduction to Physical Geology

GRANT FUNDING OVER LAST FIVE YEARS: $1.51M (UARK), $2.78M (TOTAL)

FIVE SIGNIFICANT PUBLICATIONS

Mattioli, G. S., T. H. Dixon, F. Farina, E. Howell, P. Jansma and A. L. Smith, 1998, GPS measurement of surface deformation around Soufriere Hills volcano, Montserrat from October 1995 to July 1996, *Geophysical Research Letters*, **25**, 3417-3420.

Hooper, D. M. and G. S. Mattioli, 2001, Kinematic modeling of pyroclastic flows produced by gravitational dome collapse at Soufriere Hills volcano, Montserrat, *Natural Hazards,* **23**, 65-86.

Mann, P., E. Calais, J. Ruegg, C. DeMets, P. Jansma, and G. Mattioli, 2002, Oblique collision in the northeastern Caribbean from GPS measurements and geological observations, *Tectonics*, **21 (6),** 1057, doi: 10.1029/2001TC001304.

Norton, G.E., Watts, R.B., Voight, B., Mattioli, G., Herd, R.A., Young, S.R., Aspinall, W.P., Bonadonna, C., Baptie, B., Edmonds, M., Harford, C.L., Jolly, A.D., Loughlin, S.C., Luckett, R., and R.S.J. Sparks, 2002, Pyroclastic flow and explosive activity of the lava dome of Soufriere Hills volcano, Montserrat, during a period of virtually no magma extrusion (march 1998 to November 1999), in *The Eruption of Soufiere Hills Volcano, from 1995 to 1999*, *Geological Society of London, Memoirs,* **21**, 467-481.

Calais, E., Y. Mazabraud, B. Mercier de Lepinay, P. Mann, G. Mattioli, and P. Jansma, 2002, Strain partitioning and fault slip rates in the northeastern Carribean from GPS measurements, *Geophysical Research Letters*, 29 (18), 1856, doi: 10.1029/2002G1015397.

MEMBERSHIP IN SCHOLARY SOCIETIES

American Geophysical Union, Geological & Mineralogical Societies of America, Sigma Xi

HONORS AND AWARDS

1996: Professor of the Year - Student Geological Society, Department of Geology, University of Puerto Rico, Mayagüez

1994-2000: Scholarly Productivity Award - Office of the President, UPR (4 years)

1991: Outstanding Paper Award - ARCO Exploration Technology Conference

1986-1988: Dr. Chaim Weizmann Research Fellowship in Geochemistry, California Institute of Technology, Pasadena, CA

1986: Finalist for Best Student Paper Award - American Geophysical Union Fall 1986 Meeting, San Francisco, CA

1981-1982: Penrose Grant for Young Investigators, Geological Society of America

SYNERGISTIC ACTIVITIES

2003-Present: University of Arkansas Representative to UNAVCO, Inc.

2000: United States Geological Survey Peer Review Panel
National Earthquake Hazards Reduction Program – Central District

1998-1999: National Aeronautics and Space Administration Peer Review Panel Member for Solid Earth and Natural Hazards Program (2 yrs.)

1995-2001: Group Leader, Earth System Studies, NASA Tropical Center for Earth and Space Studies, University of Puerto Rico, Mayagüez, PR

1995-1997: Associate Director, NASA-EPSCoR Tropical Atmospheric Science Center, University of Puerto Rico, Mayagüez, PR

1995-Present: Member, International Science Team, Montserrat Volcano Observatory

1994-1995: National Science Foundation Peer Review Panel Member for the Instrumentation and Laboratory Improvement Program (2 yrs.)

STUDENTS SUPERVISED, LAST FIVE YEARS

Undergraduate Research: Monica M. Aponte, Carlos Budet, Madelline Caraballo-Rivera, Rosaida Ortiz, Travis Atwood, Kristin Fitzgibbon

Audeliz Matias-Izquierdo: “Application of Fast-Static and Kinematic GPS geodesy for ground control of synoptic DEMs and ground elevations from airborne laser altimetry,” M.S., August, 2000, UPRM

Lizzette A. Rodriguez-Iglesias: “A petrological, volcanological, and GPS geodetic investigation of dome growth and surface deformation at the Soufriere Hills Volcano, Montserrat, B.W.I.,” M.S., May, 2001, UPRM

Dominike Merle: “The White Wall – Sugar Loaf mixed volcanic-volcaniclastic-carbonate sequence in St. Eustatius: Evidence for the emergence of an island arc volcano,” M.S., December, 2001, UPRM

Hector Rodriguez: “Kinematics of St. Kitts and Nevis islands, northern Lesser Antilles, relative to the stable Caribbean plate from GPS geodesy,” M.S., May, 2002, UPRM

Henry L. Turner: “Forearc deformation in Nicaragua from GPS geodesy,” M.S. August, 2003, UARK

CURRICULUM VITA

Thomas R. Paradise, Professor
Department of Geosciences, Ozark Hall 113
King Fahd Center for Middle East & Islamic Studies, Old Main 201
University of Arkansas, Fayetteville, Arkansas 72701
(501) 575-3159
paradise@uark.edu

EDUCATION

Ph.D.	Arizona State University, Geography & Gemorphology, 1993
M.A.	Georgia State University, Physical Geography & Cartography, 1990
GG, FGA	Gemological Sciences, Los Angeles (GG: 1980), London (FGA: 1982)
B.S.	University of Nevada at Reno, Geology & Mining (cum laude), 1980

WORK HISTORY

2000-Present: Professor, University of Arkansas
(Geosciences, Middle East Studies)
1993-2000: Assistant-Associate Professor, University of Hawaii, Hilo
(Geography & Environmental Studies, Geology)
1990-1993: Teaching Associate, Arizona State University
(Geography Department - Cartography, GIS, Geology)
1980-1990: Gemologist & Certified Appraiser (Christie's, Sotheby's, Butterfields)

COURSES TAUGHT *(LAST 5 YEARS)*

Introductory and Advanced Computer Cartography (application & theory), Hazards, Disasters & Risk, Geography of the Middle East, Research and Field Methods, Cultural Heritage Management, Geography of Emerging Nations, Geomorphology, Stone Deterioration and Conservation Seminars (applications & theory), American Federal Public Land Policy, Coastal Geomorphology

GRANT FUNDING (*LAST 5 YEARS)*: $414,000 (total: PI and Co-PI)

FIVE SIGNIFICANT PUBLICATIONS

Paradise, T.R. 2004. "Weathering of sandstone architecture in Petra, Jordan: influences and rates" GSA Special Edition on Weathering & Architecture (ed: Alice Turkington)

Pope, G.P., Meierding, T.C., Paradise, T.R., 2003. "Geomorphic Approach to Weathering Studies in Cultural Resource Management (CRM)", Geomorphology 47:211-225

Paradise, T.R. 2002. “Sandstone Weathering and Aspect in Petra, Jordan”, Zeitscrift für Geomorphologie 46:1-17.
Paradise, T.R. 1998. "Limestone Variability and Weathering, Great Temple of Amman" in Physical Geography 19:134-147.
Paradise, T.R. 1997. "Sandstone Weathering from Lichen Overgrowth, Red Mountain, Arizona" Geografiska Annaler (Stockholm) 79(3):177-184.
Paradise, T.R. 1995. "Sandstone Weathering Thresholds in Petra, Jordan" in Physical Geography 16:205-222.

SCHOLARLY SOCIETIES MEMBERSHIP

ICOMOS *(International Council on Monuments & Sites)*
ASMOSIA *(Association for the Study of Marble & Other Stones in Antiquity)*
ICCROM (International Center for Study of Preservation & Restoration of Cultural Property

HONORS & AWARDS

Fulbright Senior Scholar Award for Middle East Research, University of Jordan 1998-2000
Hawaii & Pacific Booksellers Award: BOOK of the YEAR 1999: ATLAS of HAWAII
London Times Newspaper (full page article) on personal Petra Research
Regent's Award in Teaching Excellence, University of Hawaii at Hilo, 1997
Teacher of the Year Award, Arizona State University, 1993
Hammond Academic Scholarship, Mackay School of Mines, Reno, Nevada 1976-1980

SYNERGISTIC ACTIVITIES

Reviewer (Agencies): NSF, ACOR, National Geographic Society, Getty Foundation, British Archaeological Institute
Reviewer (Publications): Physical Geography, American Journal of Archaeology, Geografiska Annaler, Professional Geographer, AAG Annals, Journal of Conservation Studies, Hazards
Architectural Deterioration and Arid Lands Advisor to the United Nations, USIA, NSF, USAID
National Public Radio interviews with Todd *Feinburg “Natural and Cultural Issues in Iraq”*
American Museum of Natural History (NYC) Advisor to major International exhibition: *“Petra: timeless land magnificent architecture”* (JoAnn Gutin coordinator)
National Weekly Radio and Magazine of Italy Interview (2004)*“Science & Cultural Heritage Issues” (one hour radio interview)*
Public Broadcasting (PBS-Las Vegas) Advisor and Commentator for PBS Series “*Great Valleys of the World: Petra, Jordan”* (2002-2003)
Expert witness research and testimony (stone building materials, assessment & evaluation)

National (AAG) Conference, Session, Fieldtrip Organizer: HI-1999, GA-1993, NC-1996, TX-1997

Creator and Coordinator of the Environmental Studies Program, University of Hawaii, Hilo

Cartographer & Cartographic Editor: McGraw-Hill, Prentice-Hall, Dushkin, Facts on File Publishers, University of Hawaii and Arkansas Presses

STUDENTS SUPERVISED - M.A. *(LAST 5 YEARS)*

Masters theses directed and completed:

Mary Sue Passe-Smith (2004) *"GIS Analyses in Arkansas Tornado Distribution:1950-2000*

David Adcock (2004) *"Storm Shelter Access and Tornado Related Deaths, Oklahoma1999"*

Mick Frus (2003) *"Earthquake Risk Perception and Analysis in Agadir, Morocco"*

Mohammed Salem (2003) *"Synoptic Cartographic & Cultural Heritage Management, Petra,Jordan"*

Abdulla al-Kamali (2002): "*Cartographic Analysis of Spatial Crime Data in Qatar: 1980-2000"*

Masters theses directed and projected:

Stephanie Kirkland (2005) " Analysis of Foreign Attitudes toward the influence of Islam on the Tourist Experience: case studies in Tunisia"

Shane Hughes (2005) "Spatial Assessment of Perception of the US Military presence in Anatolia"

Thomas McGuire (2005) *"Assessing Environmental Perception amongst Arab-Americans"*

Paxton Roberts (2005) *"GIS Assessment of American Terrorism Networks"*

STUDENTS SUPERVISED - Ph.D. *(LAST 5 YEARS)*

Salem Thawaba, (PhD 2005 Projected) *"Perception Analysis and GIS in Urban Modeling: a case study from Fayetteville, Arkansas"*

CURRICULUM VITA

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Tree–Ring Laboratory, Department of Geosciences
Ozark Hall 113, University of Arkansas
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(479) 575–3703
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http://www.uark.edu/dendro, http://www.uark.edu/xtimber
http://www.uark.edu/blueoak

EDUCATION

Ph.D. :Arizona State University, Geography, 1990
M.A.: University of Arkansas, Archaeology, 1978
B.A.: University of Arizona, Anthropology, 1973

WORK HISTORY

1980–present: Director, Tree–Ring Laboratory, University of Arkansas
1998-present: Professor, Department of Geosciences, University of Arkansas

COURSES TAUGHT

Environmental Geology, Global Change, Dendrochronology and Crossdating (special problems laboratory practicum), Conservation of Natural Resources

CURRENT RESEARCH GRANTS OVER THE LAST 5 YEARS, TOTAL: 578,000 (Co-PI)

National Science Foundation, CALFED Ecosystem Restoration Program, US Army Corps of Engineers, Nature Conservancy, US Forest Service, McGee Foundation

FIVE SIGNIFICANT PUBLICATIONS

Stahle, D.W., and M.K. Cleaveland, 1992. Reconstruction and analysis of spring rainfall over the Southeastern U.S. for the past 1000 years. Bulletin of the American Meteorological Society, 73:1947–1961.

Stahle, D.W., M.K. Cleaveland, D.B. Blanton, M.D. Therrell, and D.A. Gay, 1998. The Lost Colony and Jamestown Droughts. Science 280, 564-567.

Stahle, D.W., M.D. Therrell, M.K. Cleaveland, D.R. Cayan, M.D. Dettinger, and N. Knowles, 2001. Ancient blue oak reveal human impact on San Francisco Bay salinity. Eos 82 (12) 141, 144-145.

Therrell, M.D., D.W. Stahle, M.K. Cleaveland, and J. Villanueva-Diaz, 2002. Warm season

tree growth and precipitation over Mexico. Journal of Geophysical Research 107(D14):ACL 6-1 to 6-8.

Stahle, D.W., F.K. Fye, and M.D. Therrell, 2004. Interannual to decadal climate and streamflow variability estimated from tree rings. The Quaternary Period in the United States, edited by A. Gillespie, S.C. Porter, and B. Atwater. Elsevier, Developments in Quaternary Science, pp. 491-504.

PROFESSIONAL SOCIETIES

American Geophysical Union, American Meteorological Society, Association of American Geographers, Tree-Ring Society

SYNERGISTIC ACTIVITIES

Contributed many tree-ring chronologies now available from the National Geophysical Data Center, Boulder, Colorado

Team leader at the last recent North and South American Dendrochronology Fieldweeks (Mendoza, Argentina; Saltillo, Mexico; Rapide-Danseur, Quebec; Valdivia, Chile; Missoula, Montana). See the climate reconstruction exercise prepared with M.K. Cleaveland for these fieldcamps at www.uark.edu/dendro/temp/recon_exercise

Our laboratory serves as a cooperative training facility in Dendroclimatology for the Treelines Project of the Inter-American Institute for Global Change Research, and we have hosted several colleagues from Bolivia and Mexico in the last four years.

Proposed the conservation management of the important populations of Douglas-fir and Montezuma baldcypress in central Mexico www.uark.edu/dendro/cuauhtemoc.pdf

Established the Ancient Cross Timbers Consortium to promote the research, education, and conservation potential of the old-growth forest remnants still found widely across the ecotone between the eastern woodlands and the southern Great Plains. The Consortium is organizing a network of research natural areas in the old-growth Cross Timbers on federal, state, and private property (www.uark.edu/xtimber).

STUDENTS SUPERVISED LAST FIVE YEARS

Masters: A. Bayard (MA 2003), A. Dunne (MS 2001), D. Griffin (MA)

Ph.D. D. Burnett (Ph.D.), K. Clements Peppers (Ph.D.), F. Fye (Ph.D. 2003), L. Fye (Ph.D.), M.D. Therrell (Ph.D. 2003).
S. Clark (Oklahoma State University, Ph.D. 2003)

CURRICULUM VITA

Kenneth F. Steele
Department of Geosciences,
Ozark Hall 113, University of Arkansas
Fayetteville, Arkansas 72701
(479) 575-7937
ksteele@uark.edu

EDUCATION

Ph.D.: University of North Carolina, Chapel Hill, Geology, 1971
B.S.: University of North Carolina, Chapel Hill, Chemistry, 1966

WORK HISTORY

1983–Present: Professor, University of Arkansas, Geosciences
1988–2001: Director of Arkansas Water Resources Center, University of Arkansas
1979-1981: Coordinator of Advising, College of Arts and Sciences, University of Arkansas
1971 – 1983: Instructor, Assistant Professor, Associate Professor,

COURSES TAUGHT

General Geology, Geochemistry, Hydrochemical Methods

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: $773,600 as PI

FIVE SIGNIFICANT PUBLICATIONS

Steele, K. F., Davis, R.K, and Kresse, T.M., 2003. Spatial and temporal nitrate concentration variability within the Mississippi River Valley alluvial aquifer on a small scale at selected Arkansas, USA Sites, “in” Proceedings of the 7th International Water Association International Conference on Diffuse Pollution and Basin Management (ed., Michael Bruen), Excel Print, Boyne House, Co. Meath, Ireland, p. 7-33 to 7-38.

Steele, Kenneth, Vendrell, Paul, Nelson, Marc, Roggio, Robin, and McNew, Ronald, 2001, Pastureland Impacts On Water Quality Of Two Small Streams, Ozark Region, USA, *in* Globalization and Water Resources: The Changing Value of Water, David Moody and Faye Anderson, eds., American Water Resources Association, Middleburg, VA, 7 p.

Wheeler, Garland L., Steele, Kenneth F., Lawson, Edwin R., 2000, Water and nutrient movement in small, forested watersheds in the Boston Mountains, Forest Science, Vol. 46, p. 335-343.

Lin, H.S., H.D. Scott, K.F. Steele and H.I. Inyang, 1999, Agricultural chemicals in the alluvial aquifer of a typical county of the Arkansas Delta, Environmental Monitoring and Assessment, Vol. 58, p. 151-172.

Steele, Kenneth F., 1995, Animal Wastes and the Land-Water Interface (editor): CRC/Lewis Publishers, Boca Raton, FL, 589 p.

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Geophysical Union
American Institute of Hydrology
American Water Resources Association
Association of Exploration Geochemistry
Arkansas Environmental Federation
International Association of Hydrology
International Association of Geochemistry and Cosmochemistry
National Ground Water Association
Society of Environmental Geochemistry and Health

HONORS AND AWARDS

Outstanding Teacher Award, Alpha Delta Pi, Fall 2001
Award for Outstanding Services to the National Institutes of Water Resources, 2001
Award for Outstanding Services to American Water Resources Association, 1993
American Institute of Hydrology Registered Professional Hydrogeologist
Registered Professional Geologist, Arkansas Board of Registration of Professional Geologists

SYNERGISTIC ACTIVITIES, LAST FIVE YEARS

Reviewer for National Science Foundation, U.S. Department of Agriculture (SBIR), United Kingdom, Natural Environment Research Council, Wisconsin Water Resources Institute
Panelist twice for each U.S. EPA (Graduate Student STAR) and U.S. Department of Agriculture (CSREES)
Reviewer for journals (Ground Water, Journal of Environmental Quality)
Member and past Chair and Vice-Chair of the Arkansas Board of Registration of Professional Geologists

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

Burmshik Kim, in progress, Geochemical Evolution of Ground Water in the Alluvial and Sparta Aquifers in Eastern Arkansas.

CURRICULUM VITA

Jason A. Tullis
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7 Ozark Hall, University of Arkansas
Fayetteville, Arkansas 72701
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jatullis@cast.uark.edu

EDUCATION

Ph.D., Univ. of South Carolina, Geography: GIS/Remote Sensing, Geocomputation, Biogeography, 2003
M.S., Univ. of South Carolina, Geography: GIS/Remote Sensing, Machine Learning, Urban Ecology, 2001
B.S., Brigham Young Univ., Geography: GIS, Physical; Minor Botany, 1999

WORK HISTORY

2004-present: Assistant Professor, Geosciences, Univ. of Arkansas
2001-2004: GIS/Remote Sensing Design Analyst; Program Manager, *NASA Affiliated Research Center*; Instructor, *Principles of Remote Sensing*, Geography, Univ. of South Carolina
1999-2001: Research Assistant, *NASA Affiliated Research Center & South Carolina Geographic Alliance*, Geography, Univ. of South Carolina
1997-1999: GIS Intern / GIS Technician, *Uinta National Forest*, U.S. Forest Service

COURSES TAUGHT

Principles of Remote Sensing (lecture and lab section), *Digital Techniques of Remote Sensing* (lab section), *Introduction to Raster GIS* (current semester)

GRANT FUNDING OVER LAST 5 YEARS, TOTAL: n/a; proposals in review: Arkansas Soil & Water Conservation Commission ($46,411), U.S. Forest Service ($48,000)

5 SIGNIFICANT PUBLICATIONS

Hodgson, M.E., J.R. Jensen, J.A. Tullis, K.D. Riordan and C.M. Archer, 2003, "Synergistic Use of LIDAR and Color Aerial Photography for Mapping Urban Parcel Imperviousness", *Photogrammetric Engineering and Remote Sensing* 69(9):973-980.

Tullis, J.A. and J.R. Jensen, 2003, "Expert System House Detection in High Spatial Resolution Imagery Using Size, Shape, and Context", *Geocarto International* 18(1):5-15.

Hodgson, M.E., J.R. Jensen, G.T. Raber, J.A. Tullis, B.A. Davis, G. Thompson and K. Schuckman, "An Evaluation of LIDAR-derived Elevation and Terrain Slope in

Leaf-off Conditions", *Photogrammetric Engineering and Remote Sensing*, in press.

Jensen, J.R., J.A. Tullis, & Xueqiao Huang, 2005, "Information Extraction Using Artificial Intelligence", *Introductory Digital Image Processing* (J.R. Jensen), 3rd Ed., Upper Saddle River, NJ: Prentice Hall, 526 pages.

Jensen, J.R., M.E. Hodgson, J.A. Tullis and G.T. Raber, "Remote Sensing of Impervious Surfaces and Building Infrastructure", *Using Geospatial Technologies in Urban Environments* (R.R. Jensen, J. Gatrell and D.D. McLane, editors), New York, NY: Springer-Verlag, Inc., in press.

MEMBERSHIP IN SCHOLARLY SOCIETIES

American Society for Photogrammetry and Remote Sensing
Association of American Geographers

HONORS AND AWARDS

USDA Certificate of Merit, 1997
Graduate Research Assistantship, 1999-2001
Received more than $15,000 in travel grants, 1999-present
Invited to discuss remote sensing on 30 minute radio program, *Timber Talk*, on KZHE, Magnolia, Arkansas, 2005

SYNERGISTIC ACTIVITIES

Affiliate, *Center for Advanced Spatial Technologies*, University of Arkansas
Journal Reviewer, *Computers*, *Environment and Urban Systems*; *GIScience and Remote Sensing*
Course Creation Fellow*, Institute for Advanced Education in Geospatial Sciences (IAEGS)*, University of Mississippi
Coordinator, *NASA Affiliated Research Center (ARC)*, University of South Carolina
Participant, *NASA REASoN*, University of South Carolina

STUDENTS SUPERVISED, M.S., LAST FIVE YEARS

Supervised five M.S. students in their thesis-related research (2001-present)

STUDENTS SUPERVISED, Ph.D., LAST FIVE YEARS

Supervised five Ph.D. students in their dissertation-related research (2001-present)

CURRICULUM VITA

Doy L. Zachry
Department of Geosciences
Ozark Hall 113, University of Arkansas
Fayetteville, Arkansas 72701
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EDUCATION

Ph.D.: University of Texas, Austin, TX, Geology, 1969
M.S.: University of Arkansas, Fayetteville, AR, Geology, 1964
B.S.: University of Arkansas Fayetteville, AR, Geology, 1962

WORK HISTORY

1999 - present: Professor, University of Arkansas, Geosciences
1992 - 1999: Professor and Chair, University of Arkansas, Geology
1987 - 1992: Professor, University of Arkansas, Geology
1976 - 1987: Associate Professor, University of Arkansas, Geology
1969 - 1976 Assistant Professor, University of Arkansas, Geology

COURSES TAUGHT

General Geology I (Physical Geology), General Geology II (Historical Geology), Mineralogy, Stratigraphy and Sedimentation, Sedimentary Petrology, Petroleum Geology, Advanced Petroleum Geology, Geology Field Course, Geology Field Trip.

GRANT FUNDING TOTAL: $51,500 (CoPI)

FIVE SIGNIFICANT PUBLICATIONS

Zachry, Doy L., and Margaret Guccione, 1999, Geologic history of the southeastern United States and its effect on soils in the region; in Water and chemical transport in soils of the southeastern United States, H. Don Scott, ed., Arkansas Agriculture Experiment Station, Special Report 197, 19 p.

Folkert, Susan, and Doy Zachry, 2003, Petrology of the Fort Pillow Sandstone (Eocene), Crowley's Ridge, Arkansas, Geological Society of America, South Central Section.

Zachry, Doy L., 1999, Sedimentologic and depositional history of a lower Atoka Sandstone/Shale succession, northwestern Arkansas; Abstracts with Program, Geological Society of America, 1999 Annual Meeting, Denver, Colorado, p. 284. Abstracts with Program, p.24, Memphis, TN

Zachry, Doy L., 1999, Sedimentologic and depositional history of a lower Atoka Sandstone/Shale succession, northwestern Arkansas; Abstracts with Program,

Geological Society of America, 1999 Annual Meeting, Denver, Colorado, p. 284.
Zachry, Doy L., and Walter Manger, 1998, Morrowan reservoir units in the southern Boston Mountains, western Arkansas; Fort Smith Geological Society Annual Field Guide No. 15, 35 pp.

MEMBERSHIP IN SCHOLARLY SOCIETIES

Geological Society of America
Society for Sedimentary Geology
American Association of Petroleum Geologists

HONORS AND AWARDS

Fellow, Geological Society of America

SYNERGISTIC ACTIVITIES

Chair: South-Central Section Meeting, Geological Society of America, Fayetteville Arkansas.

STUDENTS SUPERVISED, M.S., LAST FIVE YEARS

Sloan James, 1999, Structure and stratigraphy of the Arkoma Basin of western Arkansas
Cooper, Richard Cheston, 2000, Stratigraphy and structural geology of the Natural Dam and Evansville quadrangles, northwestern Arkansas and eastern Oklahoma
Anderson, Eric Lars, 2001, Bedrock and structural geology and tectonic development of the Strickler and Rudy Northeast Quadrangles, Washington and Crawford Counties, northwest Arkansas
Hacker, Melody, 2002**,** Reconstruction of depositional environments of the Lower Carpenter and Glassy intervals of the Middle Atoka formation (Pennsylvanian), in the Arkoma Basic, Arkansas
Wenger, Robert, 2002**,** Sequence stratigraphy and depositional systems of the Tackett Sandstone, Middle Atoka Formation, Arkoma Basin, Arkansas
Robnett, Rebecca, 2003, Provenance of Upper Middle Miocene reservoir sands: Northeastern Gulf of Mexico
Cortez, Erica, 2004, Statigraphic framework and sequence stratigraphy of the Tackette sandstone, Middle Atoka Formation, Arkoma basin, Arkansas.
Myers, Jackie, 2004, Stratigraphic relationship of shelf and basin deposits, Tackette sandstone, Arkoma basin, Arkansas.
Lockhart, Dwight, 2004, Stratigraphy and structural geology or the Cattle Gulch Quadrangle, southwest Montana
Price, Adam, 2004, Late Mississippian tectonism on the northern Arkansas structural platform, an early pulse of the Ouachita orogeny.
Morgan, Kevin, in progress, Middle Atoka stratigraphic framework, northern Arkoma basin, Arkansas.
Lloyd, J.D., in progress, Natural gas reservoirs in Paleozoic shale units
Androes, Dixie, in progress, Anomalous quartz cement in an Eocene sandstone unit.

Long, William, in progress, Fault mechanics along the Mulberry fault, northwest Arkansas

Woolsey, Jamie, in progress, Shelf-slope relationships along the northern margin of the Arkoma basin

APPENDIX II: LIBRARY RESOURCES

P-1

Title	Call #	Print / (fiche) Holdings	Electronic Holdings - subscriptions	Electronic Holdings - databases	Publisher / (package)
AAPG Bulletin	TN860.A3	v.58- 1974-			American Association of Petroleum Geologists
Abstracts With Programs - Geological Society of America	QE1.G19	v.2- 1970-			Geological Society of America
ACSM Bulletin	TA501 .A6352	no.75-81,83-192,194- 1981-			American Congress on Surveying and Mapping
Advances in Geoecology	QE1 .C371	no.27- 1994-			Catena Verlag
Advances in Geophysics	QC801.A283	v.1- 1952-			Academic Press
American Geographical Society Collection Special Publication	G1.A5	no.1- 1990-			American Geographical Society Collection of the Golda Meir Library, The University of Wisconsin-Milwaukee
American Journal of Science	Q1.A5	v.119- 1880- / 1880-1910 (fiche)		Eb-c(1994-), P-c(1989-)	J.D. & E.S. Dana
American Mineralogist	QE351.A7	v.1- 1916-		Eb-c(1993-), P-c(1989-)	Mineralogical Society of America
American Paleontologist	QE701.A43	Current 2 yrs.			Paleontological Research Institution
Annales de Geographie	G1 .A6	v.75- 1966-			A. Colin
Annals of Regional Science	HN1 .A5	v.1- 1967-	Sp-f(1997-)	Eb-f(Dec 1967- recent 12 months unavlbl), P-f(2/1/2002 - recent 1 year unavlbl)	Springer-Verlag (ESIG)

Annals of the Association of American Geographers	G3 .A7	v.1- 1911-	J-f(v.1- 1911-), Bl-f(Current & previous vol. only)	Eb-f(Jan 1911- recent 12 mo unavlbl)	Association of American Geographers
Australian Geographer	DU80 .A86	v.11-15,19- 1969-1983,1988-	Me-f(1999-)	Eb-f(May 1997- recent 6 mo unavlbl), P-f(3/1/1998 - 11/1/2000)	Geographical Society of New South Wales
Australian Geographical Studies (title change to Geographical Research, 2005-)	DU97 .A943	v.10-21,26-42 1972-1983,1988-Nov. 2004	Bl-f(Current & previous vol. only)	Eb-f(May 1998- recent 12 mo unavlbl)	Institute of Australian Geographers
BEADS: Journal of the Society of Bead Researchers	NK3650.B43	v.12/13- 2000/2001-			Ottawa : The Society
Boreas	QE696.B73	v.1- 1972-	Me-f(v.28- 1999-)	Eb-f(May 1999- recent 12 mo unavlbl)	Universitetsforlaget
Bulletin of Canadian Petroleum Geology	TN860.B84	v.25- 1977-			Canadian Society of Petroleum Geologists
Bulletin of the American Meteorological Society	QC851 .A6	v.18- 1937-	Allen press-f(v.51- 1976-)	Eb-f(Jul 1996-), P-f(07/01/97-)	American Meteorological Society
Bulletin of the Seismological Society of America	QE531 .S3	v.1- 1911- / scattered fiche holdings			Seismological Society of America
Bulletin of the Society of Cartographers	GA101 .S62 A3	v.24- 1990-			The Society
Bulletin of Volcanology	QE521.5.B8	v.48- 1986-	Sp-f(v.58- 1996-)	Eb-c(May 2003-)	Springer International (ESIG)
Bulletin/Oklahoma Geological Survey	QE153.A2	v.1-15,17- 1908-1912,1914-			The Survey

Bulletins of American Paleontology	QE701.B8	no.75-77,80-230,233- 1935-			Paleontological Research Institution
Canadian geographer. Géographe canadien	G1 .C28	v.1-12,15- 1950-1968,1971-	Bl-f(Current & previous vol. Only)	Eb-f(Sep 2003-), P-f(1/1/1995 -)	University of Toronto Press
Canadian Geographic	G1 .C3	v.97- 1978-		Eb-f(May 1994-), P-f(07/01/94-)	Royal Canadian Geographic Society
Canadian Journal of Earth Sciences	QE1.C17	v.1- 1964-		Eb-f(Jan 2001- recent 6 mo unavlbl), P-f(01/01/97-recent180 days unavlbl)	National Research Council Canada
Cartographic Journal	GA101 .C33	v.1- 1964-	In-f(v.40 Jun 2003-)	Eb-f(v.40 Jun 2003-)	British Cartographic Society
Cartographica	GA101 .C34	v.18- 1981-2001, 2004-		Eb-f(Mar 1997- recent 6 mo unavlbl)	University of Toronto Press
Cartography	GA101 .C32	v.7- 1969-			Australian Institute of Cartographers
Cartography and Geographic Information Science	GA101 .A49	v.17- 1990-	In-f(v.30 2003-)		American Congress on Surveying and Mapping
Catena	QE1 .C37	v.2-58 1975-2004	Sc-f(v.34 no.3/4-1999-)		Catena Verlag
Chemical Geology	QE515.C43	v.1-213 1966-2004	Sc-f(2000-)		Elsevier (Science Direct)
Circular - Oklahoma Geological Survey	QE153.A3	no.2-4,6-19,21-72,74-			Oklahoma Geological Survey
Clays and Clay Minerals	TN941 .C557	v.16- 1968-	In-f (v.50 2002-)		Clay Minerals Society
Climate Dynamics	QC981.7.D94 C5	v.1- 1986-	Sp-f(v.12 no.2 1995-)	Eb-f(Dec 2004-)	Springer-International (ESIG)
Climatic Change	QC981.8.C5 C54	v.1- 1977-	Sp-f(v.35- 1997-)	Eb-c(1996-), P-c(1993-)	Reidel Pub. Co. (Springer)

Current Geographical Publications / The American Geographical	Z6009.A47	REF-INDEX: v.1-66 1938-2003	University of Wisconsin--Milwaukee. Library(1985-)		New York : The Society
Current Research in the Pleistocene	E61.C96	v.2-5,7,19- 1985-1988,1990,2002-			Center for the Study of Early Man, University of Maine at Orono
Dendrochronologia			Sc-f(v.20- 2002-)		Instituto Italiano Di Dendrochronologia
Earth Surface Processes and Landforms: The Journal of the British Geomorphological Research Group	GB400.E2	v.6-27 1981-2002	Wi-f(1997-)		Wiley (GWLA)
Economic Geography	HF1021 .E4	v.1- 1925-	J-f(v.1- 1925-), Boyd Printing-f(v. 76- 2000-)	P-f(01/01/94-)	Clark University
Economic Geology and the (Bulletin of the Society of Economic Geologists)	QE1.E15	v.38- 1943-			Society of Economic Geologists
Environment & Planning A	HT166 .E55	v.11- 1979-	2001-	Eb-c(1993-), P-c(1989-)	Pion Ltd.
Environmental Geology	QE1.E57	v.21- 1993- STORAGE B: v.1-5 1975-1983/1984	Sp-f(v.28 1996-)		Springer-Verlag (ESIG)
Geochemistry, Geophysics, Geosystems: G3	QE514		AGU-f(v.6-1999-)		AGU and the Geochemical Society
Geografiska annaler. Series A, Physical geography	G25 .G4 Ser. A	v.48- 1966-	Bl-f(Current & previous vol. Only)	Eb-f(Mar 1998- recent 12 mo unavlbl)	Blackwell/Svenska sallskapet for anthropologi och geografi (not ESIG)
Geografiska annaler. Series B, Human geography	G25 .G4 Ser. B	v.48- 1966-	Bl-f(Current & previous vol. Only)	Eb-f(Mar 1998- recent 12 mo unavlbl)	Blackwell/Svenska sallskapet for anthropologi och geografi (not ESIG)

Geographers: Biobibliographical Studies	G67. G4	v.1-2,5- 1977-			Mansell
Geographical Analysis	G70 G43	v.1- 1969-	Muse-f(v.34-2002-)	Eb-f(Jan 2003-)	Ohio State University Press
Geographical Journal	G7 .R91	v.1-24,27- 1893-1904,1906-	Bl-f(Current & previous vol. Only)	Eb-f(Mar 2001-), P-f(3/1/1994 -)	Royal Geographical Society
Geographical Review	G1 .G35	v.2- 1916- / v.1-4 1916-1917 (fiche)	J-f(v.1-1916-most recent 5 years not available)	Eb-f(Jan 1990-), P-f(01/01/94-)	American Geographical Society
Geographical: The Royal Geographical Society Magazine	G1 .G343	v.69- 1997-		P-c(1989-)	Campion Interactive Pub.
Geographie Physique et Quarternaire	G1	v.56- 2002-	v.51 (1997)-		Presses de l'Université de Montréal
Geography: Journal of the Geographical Association	G1 .G46	v.78- 1993- / v.70-77 1985-1992 (fiche)		Eb-c(1993-), P-c(1991-)	The Association
Geological Magazine	QE1.G15	v.61-62,64- 1924-1924,1927-	Cambridge-f(1997-)	Eb-c(1994-), P-c(1993-)	Cambridge University Press
Geological Society of America (GSA) Bulletin	QE1.G2	v.72- 1961- / v.90-91,105-108, 1979-1980,1993-1996 (fiche)		Eb-c(1993-), P-c(1989-)	Geological Society of America
Geology	QE1.G528	v.1- 1973-		Eb-c(1993-), P-c(1989-)	Geological Society of America
Geomorphology	GB400 .G46	v.1-63 1987-2004	Sc-f(v.26 no.4-1999-)		Elsevier (Science Direct)
Geophysical Research Letters		v.1-17 1974-1990	AGU-f(v.3-2004-) [add-on]		American Geophysical Union
Geophysics	QE500.G4	v.33- 1968-	1936-		Society of Exploration Geophysicists
Geotectonics	QE500.G4512	v.5-29,31- 1971-			American Geophysical Union

Geotimes	QE1.G56	v.1- 1956-		P-c(1991-)	American Geological Institute
GSA Today: A Publication of the Geological Society of America	QE1.G87	Current 2 yrs.	YES		Geological Society of America
Guide Book/Oklahoma Geological Survey	QE153.A37	no.1-4,6-7,9- 1953-			The Survey
Holocene	QE699 .H62	v.1- 1991-	In-f(v.8- 1998-)	Eb-f(Feb 1998-)	E. Arnold
International journal of applied earth observation and geoinformation : ITC journal	TA593.I674	1977-1998, v.1-6 1999-2005	Sc-f(2000-)		The Netherlands : International Institute for Aerial Survey and Earth Sciences
International Journal of Climatology: Journal of the Royal Meteorological Society	QC980 .J68	v.11- 1991- / v9-11 1989-1991 (fiche)	Wi-f(1997-)		Wiley (GWLA)
International Journal of Geographical Information Science	G70.2 .I59	v.4- 1990-	Me-f(1997-)	Eb-f(Jul 1998- recent 12 mo unavlbl)	Taylor & Francis
International Journal of Remote Sensing	G70.4.I56	v.2- 1981-	Me-f(1997-)	Eb-f(Jan 1998- recent 12 mo unavlbl)	Taylor & Francis
ISPRS Journal of Photogrammetry and Remote Sensing: Offical Publication of the International Society for Photogrammetry and Remote Sensing	TA593.A2 P48	v.44- 1989-	Sc-f(2000-)		Elsevier (Science Direct)
Journal of Applied Geophysics	TN1.A1 G4	v.29- 1992-	Sc-f(2000-)		Elsevier (Science Direct)
Journal of Foraminiferal Research	QL368.F6.J6	v.1- 1971-			Cushman Foundation for Foraminiferal Research
Journal of Geochemical Exploration	TN270.A1 J68	v.1- 1972-	Sc-f(2000-)		Elsevier (Science Direct)

Journal of Geography	G1 .J87	v.20 no.5,v.21 no.1,v.22 no.6- 1921- / v.1-23 1902-1924 (fiche)			National Council for Geographic Education
Journal of Geology	QE1.J8	v.1- 1893-	University of Chicago Press - f(1999-)	Eb-f(Jan 1994- recent 12 mo unavlbl), P-f(07/01/02-)	University of Chicago Press
Journal of Geoscience Education	QE40.J6	v.44- 1996-			National Association of Geoscience Teachers
Journal of Glaciology	GB2401.J68	v.1- 1947-			British Glaciological Society
Journal of Historical Geography	G141 .J68	v.1- 1975-	Sc-f(2000-)	Eb-c(1993-), P-c(1991-)	Elsevier (Science Direct)
Journal of Paleontology	QE701.J6	v.1- 1927-	Bi-f(v.74- 2000-)	P-f(09/01/97-), Eb-c(1993-)	Society of Economic Paleontologists and Mineralogists
Journal of Petroleum Geology	TN870.5.J68	v.1- 1978-			Scientific Press
Journal of Petrology	QE420.J68	v.1- 1960-2003	Oxford University Press - f(1997-)		Oxford University Press
Journal of Sedimentary Research	QE420.J695	v.66- 1996-			Society for Sedimentary Geology
Journal of Spatial Science	G70.212 .J68	2004-			Spatial Sciences Institute Australia : Mapping Sciences Institute Australia
Journal of Structural Geology	QE601.J6	v.1- 1979-	Sc-f(2000-)		Elsevier (Science Direct)
Journal of the Geological Society London	QE1.G4	v.127- 1971-	In-f(v.136- 1979-)	P-f(11/1/97-), Eb-c(1993-)	The Geological Society of London (GSL)
JPT: Journal of Petroleum Technology: Official Publication of the Society of Petroleum Engineers of AIME	TN860.J68	v.31- 1979-	Society of Petroleum Engineers-f(2003-)		The Society

Leading Edge	TN269.G414	v.17- 1998-	Society of Exploration Geophysicists-f(1982-)		Society of Exploration Geophysicists
Lethaia	QE701.L5	v.1- 1968-	Me-f(2000-)	Eb-f(Aug 2000- recent 12 mo unavlbl)	Taylor & Francis
Lithos	QE1.L47	v.1- 1968-2004	Sc-f(v.46- 1999-)		Science Direct
Marine Geology	QE39.M3	v.1-4,6-213 1964-1966,1967-2004	Sc-f(v.34- 2000-)		Elsevier (Science Direct)
Memoir/Geological Society of America	QE1.G283	v.1- 1934- / no.140,143,145,149,154,171 (fiche)			The Society
Micropaleontology	QE701.M527	v.22-1976- (fiche only)	Bi-f(v.48- 2002-)		Micro paleontology Project Inc.
MINABS Online / Mineralogical Abstracts	QE351 / QE351.M35	v.14- 1960-2004. "MINABS Online" 2004-	Mineralogical Society-c(1982-)		Mineralogical Society of Great Britain and Mineralogical Society of America
Mineralogical Magazine	QE351.M3	v.41-1977-	In-f(1998-)		Mineralogical Society
Mountain Research and Development	GB500 .M68	v.1- 1981-	Bi-f(v.20- 2000-)		International Mountain Society
Oceanus	GC1 .O35	v.27- 1984- / v.1-26 1952-1983 (fiche)	Woods Hole Oceanographic Institution(v.39 no.2- 1996-)	P-f(10/1/96-1/1/00), Eb-c(1993-)	Woods Hole Oceanographic Institution
Oil and Gas Producing Industry in your State	HD9564.I55	1984-1988/1989, 1995/1996-			Hart Publications
Oklahoma Geology Notes	TN1.H6	v.16- 1956			Oklahoma Geological Survey

Palaeontology	QE701.P482	v.1- 1957-	Bl-f(v.42- 1999-)	Eb-f(Feb 1999- recent 12 mo unavlbl)	Palaeontological Association / Blackwell (not in STM)
Palaeontology Newsletter	QE701.P152	Current 2 yrs.	Palaeontological Association-f(1995-)		Palaeontological Association
Paleobiology	QE701.P17	v.1- 1975-	Bi-f(v.26- 2000-)		Paleontological Society
Paleoceanography	QE39.5.P25		AGU-f(v.19- 2004-) [add-on]		American Geophysical Union
Paleontological Journal	QE701.P545	v.1- 1967-			Scripta Pub. Co.
Perspective/ National Council for Geographic Education	G72 .P47	v.18 no.2- 1989-			The Council
Photogrammetric Engineering and Remote Sensing	TA593.A2 P5	v.38- 1972-			American Society of Photogrammetry
Physical Geography	G1 .P48	v.1- 1980-	In-f(v.23- 2002-)		V.H. Winston & Sons
Physics and Chemistry of the Earth	QE501.P535	v.1-26 1956-2001	Sc-f(2000-)		Elsevier (Science Direct)
Polar Geography	G575 .P58	v.1-3 1977-1979, v.19- 1995-	In-f(v.26- 2000-)		V.H. Winston & Sons
Political Geography	JC319 .P59	v.11-23 1992-2004	Sc-f(v.18- 1999-)		Butterworth-Heinemann
Proceedings of the Yorkshire Geological Society	QE1.Y6	v.38- 1970-			The Society
Professional Geographer: The Journal of the Association of American Geographers	G3 .P7	v.1-14,17- 1949-1962,1965-	Bl-f(Current & previous vol. Only), In-f(1997-)	Eb-f(Feb 1984- recent 12 mo unavlbl), P-c(1989-)	The Association
Progress in Physical Geography	G1 .P686	v.1- 1977-	In-f(1998-)	Eb-f(Mar 1998-), P-f(9/1/04-)	E. Arnold
Quarterly Journal of Engineering Geology and Hydrogeology	TA705.Q3	v.33- 2000-	In-f(1999-)		Geological Society of London

Quarterly Journal of Royal Meteorological Society	QC851 .R778	v.48,78-90,93,109-1922,1952-1964,1967,1983-			Royal Meteorological Society
Quaternaire : bulletin de l'Association française pour l'étude du quaternaire : international journal of the French Quaternary Association	QE696 .Q29	v.13- 2002-			Maison de la géologie
Quaternary Research	QE696.Q35	v.1-62 1970-2004	Sc-f(v.51- 1999-)		Academic Press (Science Direct)
Radio science	QC851 .R3	v.1-32 1966-1997	AGU -f(v.39-2004-) [add-on]		American Geophysical Union
Remote Sensing of Environment	QE33.R44	v.1-93 1969-2004	Sc-f(v.67- 1999-)		Elsevier (Science Direct)
Report of Investigations/Bureau of Economic Geology, The University of Texas at Austing	QE167.T42	v.1-5,7-25,31-37,41-43,46,53-57,59-61,63-65 1946-1970, v.67-69,72-1970-			The Bureau
Reviews in Mineralogy & Geochemistry	QE351.M44	v.39- 2000-			Mineralogical Society of America
Reviews of Geophysics	QC801 .R463	v.1-7 1963-1969, v.23-28 1985-1990	AGU -f(v.42-2004-) [add-on]		American Geophysical Union
Rocky Mountain Geology	QE181 .C6	v.33- 1998-	none	none	University of Wyoming
Scottish Geographical Journal	G1 .S43	v.115- 1999-		Eb-f(Mar 1999- recent 12 mo unavlbl)	Royal Scottish Geographical Society
Sedimentary Geology	QE420.S4	v.1-172 1967-2004	Sc-f(2000-)		Elsevier (Science Direct)

Sedimentology	QE471.S4	v.1- 1962-		Bl-f(v.45:1-Jan 98-), Eb-f(Mar 1962-recent 12 mo unavlbl)	Blackwell Scientific Publishers (ESIG)
Shale Shaker	QE153.S27	v.12-35 no.1,v.35 no.3-1961-			Oklahoma City Geological Society
Southeastern Geographer	G1 .S62	Lacks v.10 no.2 v.1- 1961-	Muse-f(v.44 May 2004-)	P-f(5/1/2004 -)	Association of American Geographers
Southeastern Geology	QE78.5.S6	v.16- 1974- / v.1-15 1959-1973 (fiche)			Duke University
Special Papers/Geological Society of America	Variously classed	Variously classed			The Society
Studies in Speleology	GB601.A1 S8	v.1- 1964-			London
Surveying and Land Information Science: Journal of American Congress on Surveying and Mapping	TA501 .A6436	v.62- 2002-			The Congress
Tectonics	QE601.T392	v.1-23 1982-2004	AGU-f-(v.23-2004-)	P-c(1992-)	American Geophysical Union, European Geophysical Society
Tellus. Series A, Dynamic Meteorology and Oceanography	QC801 .T42	v.35- 1983-		Bl-f(v.54- Jan 2002-), Eb-f(Aug 2002 -)	Swedish Geophysical Society (Blackwell/STM)
Tellus. Series B, Chemical and Physical Meteorology	QC801 .T423	v.35- 1983-		Bl-f(v.54- Jan 2002-), Eb-f(Aug 2002 -)	Swedish Geophysical Society
Transactions - Institute of British Geographers	G1 .I67	Lacks v.1 no.3,v.3 no.1, & v.4 no.2 v.1- 1976-	In-f(1994-), Bl-f(Current & previous vol. Only)		Institute of British Geographers
Transactions/Gulf-Coast Association of Geological Societies	QE1.G9	v.3- 1953-			The Association

Tree-Ring Research	QK477 .T7	v.32-56 1972-2000, v.57-2001-			Tree-Ring Society
Vadose Zone Journal	S590		Soil Science Society of America-f(2002-)		Soil Science Society of America
Water Well Journal	TD405.W3	v.31- 1977-			Water Well Journal Pub. Co.
Weather	QC851 .W4	v.1- 1946-			Royal Meteorological Society
Weather Log	QC851 .W41	1973-			Royal Meteorological Society
Weatherwise	QC851 .W42	vol. 32-33 incomplete, v.1-10,12-13,15-16,18- 1948-1957,1959-1960,1962-1963,1965- / v.1-16 1948-1963 (Microfilm)		Eb-f(Jun 1990-), P-f(02/01/88-)	Heldref Publications, etc.
Zeitschrift für Geomorphologie. Annals of geomorphology. Annales de géomorphologie	G1 .Z47	v.1- 1957-			Gebruder Borntraeger
Zeitschrift für Geomorphologie. Supplementband	GB400 .Z4	v.1- 1960-			Borntraeger
Zitteliana	QE701.Z5	no.1- 1969-			Komissionsverlag Geiselberger

Legend	
AGU	American Geophysical Union
Bi	Bione
Bl	Blackwell

Ca	Catchword
Eb	EbscoHost
GB	GeoBase
GR	GeoRef
In	Ingenta
Kl	Kluwer
L	Lexis/Nexis
Me	Metapress
P	Proquest
Sc	ScienceDirect
Sp	Springer
*	2004 price
f	Full-text available
c	Citation only

ATTACHMENT 1I
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
University Course and Programs Committee	Date	Board of Trustees Approval/Notification Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval/Notification 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 **2007-2008**

Current Name _____

College, School, Division **ARSC** Department Code **JOUR**

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

☐ Interdisciplinary Program CIP Code **09.0401**
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: We are adding a prerequisite to JOUR 1033 (Fundamentals of Journalism) of scoring a minimum of 75 percent on a Grammar-Spelling-Punctuation test.

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 course change being requested is to establish a prerequisite to JOUR 1033 so that students must score 75 percent or better on a widely used journalistic grammar skills test before they are allowed to register for the course. Students would have three chances to pass the exam and tutoring will be available for those who need to take the exam more than once.

The change addresses a specific problem affecting the course as it is now taught. About 120 students per semester take the course and they have widely varying skills in grammar. Many of them have not had grammar since the fifth grade; some have come directly from AP English courses. The change will insure that the students have a more consistent level of skills, so that the course does not have to concentrate on remedial grammar instruction, and it will help students identify weaknesses in their own skills so that they can work to improve them before repeating the exam.

This change will affect the following programs: Agricultural Communications (ACOM), Agricultural Education (AGED), Combined Journalism/English and Journalism/Political Science. JOUR 1033 is required for those programs. Administrators of those programs have been notified.

SECTION VII: Catalog Text and Format

Insert the current catalog text, with proposed changes identified in Section V inserted and tracked in Microsoft Word. Be sure that all proposed changes are inserted and tracked. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate.

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 on JOUR 1033 from the Requirements for a B.A. degree in Journalism:

Requirements for a B.A. degree in Journalism: A minimum of 33 semester hours in journalism, including JOUR 1023, JOUR 1033, and JOUR 3633. Note that a minimum grade of 'C' is required in all journalism courses that serve as prerequisites for advanced journalism courses. In certain courses a minimum grade of 'B' is required. Also required is ENGL 2013. Students must select a sequence when they enter the department. Specific courses in addition to the journalism courses are required only for the advertising/public relations sequence. The requirements for each sequence are as follows:

Proposed Catalog Text

Requirements for a B.A. degree in Journalism: A minimum of 33 semester hours in journalism, including JOUR 1023, JOUR 1033, and JOUR 3633. Note that all students intending to register for JOUR 1033 must first take a Grammar-Spelling-Punctuation (GSP) text and make a grade of at least 75 percent. Contact the Journalism Department office for information on scheduling the GSP test. Note that a minimum grade of 'C' is required in all journalism courses that serve as prerequisites for advanced journalism courses. In certain courses a minimum grade of 'B' is required. Also required is ENGL 2013. Students must select a sequence when they enter the department. Specific courses in addition to the journalism courses are required only for the advertising/public relations sequence. The requirements for each sequence are as follows:

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 1J
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
University Course and Programs Committee	Date	Board of Trustees Approval/Notification Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval/Notification 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 **2007**

Current Name **Major in Music, Bachelor of Music--Theory or Composition Major**

College, School, Division **ARSC** Department Code **MUSC**

Current Code (6 digit Alpha) **MUSCBM** 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: For students in the degrees Bachelor of Music in Theory or Composition, add the requirement that they must receive a grade of 'B' or higher in MUTH 2603, 3603, and 3613. Ref. p. 176 of 2006-2007 catalog of studies, left column, under "Theory or Composition Major": Following "Ensemble: 8 hours (see adviser for ensemble selections)." add "Students majoring in Theory or Composition must receive a grade of 'B' or higher in MUTH 2603, MUTH 3603, and MUTH 3613."

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 change will assure that students in Theory and Composition meet certain grade standards throughout their programs.

SECTION VII: Catalog Text and Format

Insert the current catalog text, with proposed changes identified in Section V inserted and tracked in Microsoft Word. Be sure that all proposed changes are inserted and tracked. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate.

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:

Theory or Composition Major: MUAP 110v/310v (major-level applied 16 hours), MUAC 1221, MUAC 1231, MUAC 2221, MUAC 2231 (unless waived), MUPD 3811 or MUPD 3861, MUTH 4612, Ensemble: 8 hours (see adviser for ensemble selections) Composition: MUTH 164V, MUTH 364V (14), MUAP 4201; electives (may be non-music) . . .

Proposed Catalog Text:
Theory or Composition Major: MUAP 110v/310v (major-level applied 16 hours), MUAC 1221, MUAC 1231, MUAC 2221, MUAC 2231 (unless waived), MUPD 3811 or MUPD 3861, MUTH 4612, Ensemble: 8 hours (see adviser for ensemble selections). Students majoring in Theory or Composition must receive a grade of 'B' or higher in MUTH 2603, MUTH 3603, and MUTH 3613. Composition: MUTH 164V, MUTH 364V (14), MUAP 4201; electives (may be non-music) . . .

SECTION VIII: Action Recorded by Registrar's Office

PROGRAM INVENTORY/DARS

PGRM _____ SUBJ _____ CIP _____ CRTS _____

DGRE _____ PGCT _____ OFFC&CRTY VALID _____

REPORTING CODES

1622.20A p/vcaa 2/23/06

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 1K
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
University Course and Programs Committee	Date	Board of Trustees Approval/Notification Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval/Notification 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 **2007**

Current Name **Bachelor's of Arts Degree in Philosophy**

College, School, Division **ARSC** Department Code **PHIL**

Current Code (6 digit Alpha) **PHILBA** 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: We are proposing two changes: (i) the number of hours in philosophy required for the BA in philosophy will be increased by three (from 30 to 33); and (ii) all majors will be required either to complete PHIL 3983 "Philosophy Capstone Course" or write and successfully defend an honors thesis

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.)

We are adding the capstone course requirement for two primary reasons. First, it will provide our senior majors more "hands on" training in philosophical thinking and writing. Second, we can use it as a means of gaining information that will help us better evaluate to what degree our program objectives are being met and learning outcomes are being achieved. The content of the course will focus on significant works in central areas of philosophy. The format of the course will be much like a graduate seminar with students doing some combination of in-class presentations, short writing assignments, and research essay writing. We are also adding three credits to the degree program because we do not want the impact of the capstone course requirement to include a reduction in the number of courses in the history of philosophy and areas of contemporary philosophy our students take. Finally, we are allowing honor students to opt out of the capstone requirement since there would be a certain redundancy in requiring them to take the capstone course and write a thesis.

SECTION VII: Catalog Text and Format

Insert the current catalog text, with proposed changes identified in Section V inserted and tracked in Microsoft Word. Be sure that all proposed changes are inserted and tracked. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate.

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

Requirements for a Major in Philosophy: 30 semester hours in philosophy to include PHIL 2203 or PHIL 4253, and PHIL 4003, PHIL 4033, and six hours to be chosen from PHIL 4013, PHIL 4023, PHIL 4043, PHIL 4063, PHIL 4073, and PHIL 4083.

Suggested revised copy:

Requirements for a Major in Philosophy: 33 semester hours in philosophy to include PHIL 2203 or PHIL 4253; PHIL 4003 and PHIL 4033; six hours to be chosen from PHIL 4013, PHIL 4023, PHIL 4043, PHIL 4063, PHIL 4073, and PHIL 4083; and PHIL 3983 or a successfully defended honors thesis in philosophy.

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 1L
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
University Course and Programs Committee	Date	Board of Trustees Approval/Notification Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval/Notification 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 **2007**

Current Name **Bachelor of Arts in Psychology**

College, School, Division **ARSC** Department Code **PSYC**

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

☐ Interdisciplinary Program CIP Code **42.0101**
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: We are changing the requirements for the major to make them more flexible for both faculty and students, and provide appropriate training for our graduates. The changes include the following:

Increase the number of credit hours required for the major from 30 to 33. This change will increase the number actual hours in content courses which a student must take in our department.

Addition of a new course, Advanced Seminar.(PSYC 428V)

Delete 8 specific "Research in ... " classes, and replace them with a single, variable topics research class (PSYC 328V)

Combine two overlapping courses in Developmental Psychology (PSYC 3033, Infancy & Early Childhood, and PSYC 3093, Childhood & Adolescense) into one course (PSYC 3093, Developmental Psychology).

Change the prerequisites for some of the classes.

Make minor editorial changes in some course descriptions to make them more accurate and uniform.
Increase the GPA and grade requirements for graduation.
Addition of a class (PSYC 207V), which is designed for students to gain laboratory experience in the lab of a faculty member.
Change the number and title of PSYC 306V Special Readings and Projects to PSYC 206V Directed Readings.

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.)

These changes have several goals. 1) The current program requires all students to take an advanced research course, which is not necessarily appropriate for students seeking employment with a BA degree. In addition, because the advanced research classes required limited enrollment, we were having difficulty ensuring that all students could take them in a timely manner. Addition of the Advanced Seminar option will allow students to fulfill the senior writing requirement in a more appropriate manner, and complete the major in a timely manner. 2) Replacing the 8 specific research classes with a single variable-credit class will increase our flexibility in offering advanced research courses and allow us to offer courses that match the expertise of our available faculty. 3) Combining some courses will eliminate overlap and should allow us to offer more advanced-level and honors courses. 4) Overall the changes will make it easier for students to complete the major, and for the faculty to offer a wider variety of advanced and elective courses.

These changes should have minimal effect on other degree programs. Some programs in the College of Education require some of our courses, specifically PSYC 3093 and PSYC 4183. The changes to 4183 should have minimal impact on other programs, as this class is one of several options for fulfilling the requirement. The new content for PSYC 3093 is an expansion of the previous content, and should still meet the goals of the College of Education, which requires a course covering development in childhood and adolescence. No programs or program components will be eliminated with this change.

SECTION VII: Catalog Text and Format

Insert the current catalog text, with proposed changes identified in Section V inserted and tracked in Microsoft Word. Be sure that all proposed changes are inserted and tracked. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate.

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

Requirements for B.A. degree with a Major in Psychology: Minimum of 30 semester hours to include PSYC 2003, PSYC 2013, PSYC 3073, minimum of one course chosen from PSYC 3083, PSYC 3183, PSYC 3283, PSYC 3383, PSYC 3483, PSYC 3583, PSYC 3683, PSYC 3783, six hours chosen from PSYC 3103, PSYC 4073, PSYC 4123, PSYC 4143, PSYC 4183, PSYC 4193, and six hours chosen from PSYC 3013, PSYC 3023, PSYC 3033 (or PSYC 3093), PSYC 4053, PSYC 4063, and remaining hours as free electives chosen from any psychology course in this catalog. A 2.00 cumulative grade-point average on all work completed in the Department of Psychology (including a grade of "C" or higher in PSYC 3083, PSYC 3183, PSYC 3283, PSYC 3383, PSYC 3483, PSYC 3583, PSYC 3683, or PSYC 3783) will be required for graduation with a B.A. degree.

Students who want to pursue graduate training in psychology are advised to begin preparations early in their undergraduate careers. Grade-point average, scores on the Graduate Record Examinations, effective communications skills, preparation in the natural sciences and mathematics, and research experience (e.g., honors project, independent readings) are the major criteria considered by admissions committees.
Students with applied, paraprofessional, or human-service interests who plan to enter the job market with a B.A. in psychology are strongly encouraged to take relevant courses in anthropology, sociology, social work, human development and family studies, and education. Students interested in business applications of psychology (e.g., marketing, management) are similarly encouraged to take related courses in the Sam M. Walton College of Business, minors are also available in several areas of business. For more information concerning psychology as a major or careers in psychology and related fields, please contact the Psychology Advising Coordinator, Memorial Hall, room 203.

Writing Requirement: Students majoring in psychology will satisfy the Fulbright College writing requirement by successful completion of PSYC 3083, PSYC 3183, PSYC 3283, PSYC 3383, PSYC 3483, PSYC 3583, PSYC 3683, or PSYC 3783, each of which requires a final research paper.
Requirements for departmental honors in Psychology: The Departmental Honors Program in Psychology provides upper-division undergraduate students with an opportunity to formally participate in scholarly psychology activities. Honors candidates carry out independent study and research under the guidance of the psychology faculty and participate in special honors classes, seminars, and colloquia. Outstanding student achievement will be recognized by awarding the distinction "Psychology Scholar Cum Laude" at graduation. In addition to satisfying the general college honors requirements, honors candidates in psychology are required to complete and orally defend an honors thesis based upon the independent study carried out in PSYC 399VH. PSYC 399VH may be taken for 1 to 6 hours of credit each semester and repeated for a maximum of 12 hours. Nine hours are ordinarily needed to complete the research project and to prepare the honors thesis.

Honors candidates in psychology are encouraged to enroll in as many honors classes, seminars, and colloquia as possible. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate's program of honors studies.

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Poposed Catalog Copy
Minimum of 33 semester hours. Courses to include: PSYC 2003, PSYC 2013, and PSYC 3073; six hours chosen from PSYC 3013, PSYC 3023, PSYC 3093, PSYC 4053, or PSYC 4063; six hours chosen from PSYC 3103, PSYC 4073, PSYC 4123, PSYC 4183 or PSYC 4193; three hours chosen from PSYC 328V or PSYC 428V; the remaining nine hours are free electives and may be chosen from any psychology course in this catalog, with no more than a total of six hours in 206V, 207V, and 399V combined. A grade of "C" or better is required in all psychology courses used to satisfy the 33 hours of the major. In addition, a 2.00 cumulative grade-point average is required on all work completed in the Department of Psychology.

Students who want to pursue graduate training in psychology are advised to begin preparations early in their undergraduate careers. Grade-point average, scores on the Graduate Record Examinations, effective communications skills, preparation in the natural sciences and mathematics, and research experience (e.g., honors project, independent readings) are the major criteria considered by admissions committees. To gain this research experience students are strongly encouraged to take the advanced research course, PSYC 328V. Students with applied, paraprofessional, or human-service interests who plan to enter the job market with a B.A. in psychology are strongly encouraged to take relevant courses in other areas of interest, including, but not limited to, anthropology, sociology, social work, human development and family studies, education, and business administration.

Students interested in business applications of psychology (e.g., marketing, management) are similarly encouraged to take related courses in the Sam M. Walton College of Business; minors are also available in several areas of business. For more information concerning psychology as a major or careers in psychology and related fields, please contact the Psychology Advising Coordinator, Memorial Hall, room 203.

Writing Requirement: Students majoring in psychology will satisfy the Fulbright College writing requirement by successful completion (a grade of at least a "C") in either PSYC 328V, or PSYC 428V, each of which requires a final research paper written in APA style.

Requirements for Graduation with Honors in Psychology: Both the four-year and Departmental Honors Programs in Psychology provide undergraduate students with an opportunity to formally participate in scholarly psychology activities. Honors candidates carry out independent study and research under the guidance of the psychology faculty and participate in special honors classes, seminars, and colloquia. In addition to satisfying the general college honors requirements, honors candidates in psychology are required to complete and orally defend an honors thesis based upon the independent study carried out in PSYC 399VH. In order to successfully complete the required thesis, students should choose an honor's advisor as early as possible. An advisor should be selected, and an Honors Agreement Form completed by the first semester in a student's junior year. Information on the requirements and details about the Honors program are available from the Psychology Department advising office. Students must register for and complete a minium of 6 hours of PSYC 399VH. PSYC 399VH may be taken for 1 to 6 hours of credit each semester and repeated for a maximum of 12 hours. Nine hours are ordinarily needed to complete the research project and to prepare the honors thesis. Honors candidates in psychology are encouraged to enroll in as many honors classes, seminars, and colloquia as possible or as required by the honor's program in which they are enrolled. Students graduating with honors can graduate with one of three levels of honors: cum Laude, Magna cum Laude or Summa cum Laude. The level of honors is determined by the Honors Council, and is based upon the whole of the candidate's program of honors studies.

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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 1M
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
University Course and Programs Committee	Date	Board of Trustees Approval/Notification Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval/Notification 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 **2007**

Current Name **Minor in Psychology**

College, School, Division **ARSC** Department Code **PSYC**

Current Code (6 digit Alpha) **PSYC-M** Proposed Code (6 digit Alpha) _____
Prior approval from the Office of the Registrar is required.

☐ Interdisciplinary Program CIP Code **42.0101**
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:
Increase the GPA and grade requirements for the minor.
Addition of a class (PSYC 207V), which is designed for students to gain laboratory experience in the lab of a faculty member.
Change the number and title of PSYC 306V Special Readings and Projects to PSYC 206V Directed Readings.

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.)

Catalog copy must be changed to reflect our request to change PSYC 306V to PSYC 206V, and the addition of the new course PSYC 207V. 2) The grade/gpa requirements for the minor are to ensure that students receiving a minor will have achieved a minimum standard in their PSYC classes, similar to that of what will be required of our majors.

SECTION VII: Catalog Text and Format

Insert the current catalog text, with proposed changes identified in Section V inserted and tracked in Microsoft Word. Be sure that all proposed changes are inserted and tracked. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate.

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:

Requirements for a Minor in Psychology: Minimum of 18 hours including PSYC 2003, PSYC 2013, and PSYC 3073. A maximum of three hours of 306V can be counted toward meeting the minor requirement. A student must notify the department of his or her intent to minor.

Poposed Catalog Copy

Requirements for a Minor in Psychology: Minimum of 18 hours including PSYC 2003, PSYC 2013, and PSYC 3073. A maximum of three hours of PSYC 206V and/or PSYC 207V can be counted toward meeting the minor requirement. A grade of "C" or better is required in all psychology courses used to satisfy the 18 hours of the minor. In addition, a 2.00 cumulative grade-point average is required on all work completed in the Department of Psychology. A student must notify the department of his or her intent to minor.

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-Oct-06

TABLE ONE
Fulbright College of Arts and Sciences

Department of Art

ARTHFA - Changes in Honors Program - Attachment 1A
Course requirement changes for the four year honors program as specified in Section V of the attachment.

Department of Biological Sciences

BIOLBS - Change course requirements - Attachment 1B
Disallow BIOL 2013/2011 from counting toward the requirement of two elective lab courses at the 2000 level or higher as specified in Section V of the attachment.

BIOLMA - Eliminate the degree - Attachments 1C and 1D
Eliminate the degree program as specified in Section V of Attachment 1C.

Department of English

ENGLMA - Add new concentration - Attachments 1E and 1F
Add new concentration in Rhetoric, Composition, and Literacy as specified in Section V of Attachment 1E.

Department of Geosciences

GEOSPH - Add new degree program - Attachments 1G and 1H
Add new Ph D program in Geosiences as specified in Section VI of Attachment 1G.

Fulbright College of Arts and Sciences (Continued)

The Walter J. Lemke Department of Journalism

JOURBA - Adding prerequisite requirement for JOUR 1033 - Attachment 1I
Course is required by several other degree programs. The change is specified in Section V of the attachment.

Department of Music

MUSCBM - Adding graduation requirement - Attachment 1J
Students must receive a grade of 'B' or higher in MUTH 2603, 3603, and 3613 as specified in Section V of the attachment.

Department of Philosophy

PHILBA - Change of graduation requirements - Attachment 1K
Changes of graduation requirements are specified in Section V of the attachmen

Department of Psychology

PSYCBA - Change in degree requirements - Attachment 1L
Several changes are proposed and listed in Section V of the attachment.

PSYC-M - Change in requirements for the minor - Attachment 1M
Several changes are proposed and listed in Section V of the attachment.

TABLE TWO
College of Education and Health Professions

Department of Curriculum and Instruction

ELEDBS - Change in degree requirements - Attachment 2A
Several changes are proposed and listed in Section V of the attachment.

MLEDBS - Eliminate program - Attachment 2B
Eliminate the BSE in Middle Level Education as specified in the attachment.

ATTACHMENT 2A
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 **2007**

Current Name **Elementary Education Option II**

College, School, Division **EDUC** Department Code **CIED**

Current Code (6 digit Alpha) **ELEDBS** 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 proposed changes will result in students receiving an Associate of Arts in Teaching, P-4, from NWACC as the pre-requisite for entering into the BSE degree completion program, which is the Elementary Education Option II program. Specific changes include requiring western civiliation; reducing the number of fine arts hours from 6 to 3; eliminating the requirement for a first responder course; requiring four hour physical science course rather than a specific course; and adding an ESL elective. U of A core requirements are met with the proposed program.

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.)

Students do not currently have to complete an AAT in Early Childhood education to enter the U of A BSE degree completion program; they only have to complete specific pre-requisite courses. Requiring students to complete the AAT in Early Childhood Education will result in their having a completed degree after two years at NWACC in case they choose not to enter the BSE program or if they are ineligible to enter the BSE program. It will also enable them to qualify for financial aid that requires students to be enrolled in a specific degree program. The program can be modified to require the AAT with minimum changes in pre-requisites to enter the BSE 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 Program

Bachelor of Science in Education in Elementary Education, Option II (in conjunction with NWACC)

This is a four-year plus one half summer sequenced BSE degree completion program offered in conjunction with NWACC. Classes for the senior year are blocked and must be taken together. The senior year is site-based student teaching four days of the week with one day for classes. The first two years of classes are primarily from those already available at NWACC. The junior and senior year classes include 11 courses to be included with others selected from those currently offered by the University. Classes include an early childhood preschool/kindergarten course (3 hrs) with a one hour practicum; a student teaching class (3 hrs.), a senior project class (3 hrs.), a senior seminar (3 hrs.), a researh & readings course (3 hrs.), behavior management class (3 hrs.) curriculum development and design class (3 hrs.); three new methods classes (9 hrs.) for a total of 31 hours. The total proposed program will be 129 hours that will include four academic years plus a summer session prior to the senior year.

Admission Requirements:
Successful completion of prerequisites.

Establish a minimum 2.5 GPA
Passing scores on all parts of PRAXIS I
"C" or higher in the following courses or their equivalent:
ENGL 1013, ENGL 1023, ENGL 2003 or exempt, COMM 1313, MATH 1203 or higher, ETEC 2001, ETEC 2002L, CIED 1002, CIED 1011

Pre-Requisites

English 1013 Composition I
English 1023 Composition II
Math 1204 College Algebra
Biology 1544 Principles of Biology/lab
AHSC 1023 First Responder
CIED 1002 Introduction to Education
CIED 1001 Practicum
Geology 1114 General Geology
Math 2213 Math Structures I
Math 2223 Math Structures II
CHED 1003 Foundations & Theories in Early Childhood Education
PSYC 2003 General Psychology
PHYS 1024 Physics and Human Affairs
HIST 2003 or 2013 U.S. History
ARHS 1003 Art Appreciation
CHED 2003 Child Development
ENGL 2213 or 2223 World Literature
ETEC 2003 Educational Technology & lab
GEOG 1123 Human Geography
Art 1033 Intro to Art Studio
Communications 1313 Fundamentals of Communication
Political Science 2003 American national Government

U of A Courses

CIED 3023 Survey of Exceptionalities
CIED 3033 Classroom Learning Theory
ARED 3603 Public School Art
CIED 3003 Early Childhood Education
CIED 3001 Practicum
CIED 3103 Children's Literature
CIED 3123 Mathematics Methods
CIED 3113 Emergent & Developmental Literacy
CIED 3143 Teaching Science
CIED 3133 Integrated Social Studies
CIED 4101 Practicum
MUED 3813/381L Music for ELED Majors
CIED 4323 Instructional Design for Teachers
CIED 4253 Curriculum Design for Teachers
CIED 4173 Student Teaching
CIED 4123 Classroom Management
CIED 4133 Research, Measurement, & Readings
CIED 5933 Second Language Methodologies
CIED 4163 Senior Project
CIED 4003 Elementary Seminar
HIST 3383 Arkansas History

Total 129 Hours

Proposed Program

Bachelor of Science in Education in Elementary Education, Option II (in conjunction with NWACC)

This is a four-year plus one half summer sequenced BSE degree completion program offered in conjunction with NWACC. Classes for the senior year are blocked and must be taken together. The senior year is site-based student teaching four days of the week with one day for classes. The first two years of classes are primarily from those already available at NWACC and are required courses for the Associate of Arts in Teaching degree, early childhood emphasis. The junior year classes can be completed at the discretion of the student; senior classes must be completed in on year due to the full-time internship required during the senior year. The total program includes 127 hours that will include four academic years plus a summer session prior to the senior year.

Admission Requirements:
Successful completion of prerequisites.
Establish a minimum 2.5 GPA
Passing scores on all parts of PRAXIS I
"C" or higher in the following courses or their equivalent:
ENGL 1013, ENGL 1023, ENGL 2003 or exempt, COMM 1313, MATH 1203 or higher, ETEC 2001, ETEC 2002L, CIED 1002, CIED 1011

Pre-Requisites (these courses lead to an AAT degree from NWACC):
English 1013 Composition I
English 1023 Composition II
Math 1204 College Algebra
Biology 1544 Principles of Biology/lab
CIED 1002 Introduction to Education
CIED 1001 Practicum
COMM 1313 Fundamentals of Communication
Math 2213 Math Structures I
Math 2223 Math Structures II
CHED 1003 Foundations & Theories in Early Childhood Education
PSYC 2003 General Psychology
HIST 2053 History of Arkansas
4-hour physical science course with lab (PHYS 1034 or PHSC 2004 required for AAT)
HLSC 1002 Wellness Concepts
ARHS 1003 Art Appreciation
HIST 2003 or 2013 U.S. History
PLSC 2003 American Government
CHED 2033 Child Development
ENGL 2213 or 2223 World Literature
ETEC 2003 Educational Technology & lab
GEOG 1123 Human Geography
Electives (6 hours) (WCIV 1003 or 1013 Wesern Civilization required for AAT)

U of A Courses
CIED 3023 Survey of Exceptionalities
CIED 3033 Classroom Learning Theory
ARED 3603 Public School Art
CIED 3003 Early Childhood Education
CIED 3001 Practicum
CIED 3103 Children's Literature
CIED 3123 Mathematics Methods
CIED 3113 Emergent & Developmental Literacy
CIED 3143 Teaching Science
CIED 3133 Integrated Social Studies
CIED 4101 Practicum
CIED 3263 Language Development for Educators
CIED 4143 Curriculum Design
CIED 4173 Student Teaching (two semesters)
CIED 4153 Classroom Management
CIED 4133 Research, Measurement, & Readings
CIED 4163 Senior Project

CIED 4003 Elementary Seminar
ESL electives (6 hours)

Total 127 Hours

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 2B
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
University Course and Programs Committee	Date	Board of Trustees Approval/Notification Date	
Graduate Council Chair	Date	Arkansas Higher Education Coordinating Board Approval/Notification 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 **2007**

Current Name **MLED**

College, School, Division **EDUC** Department Code **CIED**

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

☐ Interdisciplinary Program CIP Code **13.1203**
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 **3915/MLEDBS** Effective Catalog Year **2007**

No new students admitted to program after Term: Spring Year: 2007
Allow students in program to complete under this program until Term: Spring Year: 2010

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.)

The proposal to eliminate the B.S.E. in Middle Level Education is based upon recent events and educational policies regarding middle level education in the state, the Department of Curriculum and Instruction and the College of Educatioon and Health Professions. When the program was proposed in 2000, the state licensure system had been revised with a specific area for middle level. Since that time, there have been other revisions to the licensure system including grades five and six endorsement that is available to those with Pre-K-4 and 7-12 license (secondary and elementary can add middle level to their licensure with additional coursework and/or praxis tests). With this endorsement the only grade levels unique to Middle Level licensure, grades 4-8, have been eliminated thereby decreasing the viability of this degree for those interested in working with this age student. In addition, nontraditional/alternative licensure opportunities are increasing. These realities/developments have affected enrollment in our program which has implications for our continuance on campus given the new (university and college) directives for increased numbers in programs as opposed to decreased numbers. (Currently there are78 undergraduate middle level majors with 26 who have 44 or less hours and 52 who have 45 or more hours.) Presently, the B.S.E. degree is the entrance degree for the Masters of Arts in Teaching (M.A.T.) program which is the licensing degree for University of Arkansas. We are proposing that both programs be deleted. There are generally 20-25 students in our senior classes, from which very few (24 to 36%) apply for the M.A.T. program. With such low numbers in the Middle Level M.A.T. Program (currently 9), summer methods courses must be combined with secondary sections and graduate students who may or may not have middle level credentials teach courses in the fall and spring semesters because there are only three middle level faculty members. These realities affect the quality and continuance of our program. For these reasons, we have decided to discontinue the program.

SECTION VII: Catalog Text and Format

Insert the current catalog text, with proposed changes identified in Section V inserted and tracked in Microsoft Word. Be sure that all proposed changes are inserted and tracked. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate.

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.

_____

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 _____

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