

Date Submitted: 09/25/18 9:53 pm

Viewing: **CHEDBS-STEM : Childhood Education: STEM Concentration**

Last approved: 03/30/18 3:12 pm

Last edit: 10/12/18 4:02 pm

Changes proposed by: hkindall

Catalog Pages Using
this Program

[Childhood Education B.S.E. with STEM Concentration](#)

[Childhood Education \(CHED\)](#)

Submitter: 7456 User ID: lkulcza Phone:

Program Status: Active

Academic Level: Undergraduate

Type of proposal: Major/Field of Study

Select a reason for this modification

Revising an Existing Educator Preparation Program-Major Revision(s)--(Cover Sheet, Section C)

Are you adding a concentration?

No

Are you adding a track?

No

Are you adding a focused study?

No

Effective Catalog Year: Fall 2019

College/School Code

College of Education and Health Professions(EDUC)

Department Code

In Workflow

1. EDUC Dean Initial
2. Director of Program Assessment and Review
3. Registrar Initial
4. University Teacher Education Board
5. Institutional Research
6. CIED Chair
7. EDUC Curriculum Committee
8. EDUC Faculty
9. EDUC Dean
10. Global Campus
11. Provost Review
12. University Course and Program Committee
13. Faculty Senate
14. Provost Final
15. ADE Licensure Approval
16. Provost's Office-- Documentation sent to System Office
17. Higher Learning Commission
18. Board of Trustees
19. ADHE Final
20. ADE Final
21. Provost's Office-- Notification of Approval
22. Registrar Final
23. Catalog Editor Final

Department of Curriculum and Instruction(CIED)

Program Code CHEDBS-STEM
Degree Bachelor of Science in Education
CIP Code

Approval Path

1. 09/21/18 9:28 am
Ketevan
Mamiseishvili
(kmamisei):
Approved for EDUC
Dean Initial
2. 09/24/18 5:21 pm
Alice Griffin
(agriffin): Rollback
to Initiator
3. 09/26/18 9:17 am
Ketevan
Mamiseishvili
(kmamisei):
Approved for EDUC
Dean Initial
4. 09/27/18 8:55 am
Alice Griffin
(agriffin): Approved
for Director of
Program
Assessment and
Review
5. 09/28/18 1:58 pm
Lisa Kulczak
(lkulcza): Approved
for Registrar Initial
6. 09/28/18 2:07 pm
Jennifer Beasley
(jgbeasle):
Approved for
University Teacher
Education Board
7. 09/28/18 2:07 pm
Gary Gunderman
(ggunderm):
Approved for

- Institutional
Research
8. 09/28/18 3:15 pm
Cheryl Murphy
(cmurphy):
Approved for CIED
Chair
 9. 10/08/18 10:38 am
Ketevan
Mamiseishvili
(kmamisei):
Approved for EDUC
Curriculum
Committee
 10. 10/08/18 10:39 am
Ketevan
Mamiseishvili
(kmamisei):
Approved for EDUC
Faculty
 11. 10/08/18 10:40 am
Ketevan
Mamiseishvili
(kmamisei):
Approved for EDUC
Dean
 12. 10/08/18 4:16 pm
Miran Kang (kang):
Approved for Global
Campus
 13. 10/10/18 10:10 am
Terry Martin
(tmartin): Approved
for Provost Review
 14. 10/29/18 10:14 am
Alice Griffin
(agriffin): Approved
for University
Course and Program
Committee

History

1. Jun 9, 2015 by Lisa Kulczak (lkulcza)
2. Apr 15, 2016 by Lisa Kulczak (lkulcza)
3. Mar 1, 2017 by Denise Bignar (dbignar)
4. Mar 1, 2017 by Charlie Alison (calison)
5. Mar 30, 2018 by Gina Daugherty (gdaugher)

13.1202 - Elementary Education and Teaching.

Program Title

Childhood Education: STEM Concentration

Program Delivery

Method

On Campus

Is this program interdisciplinary?

No

Does this proposal impact any courses from another College/School?

No

What are the total hours needed to complete the program? **124 NA**

Program Requirements and Description

Requirements

STEM Concentration (STEM)

Pre- Elementary Education (PELED) requirements †

University Core (State Minimum Core)

35

Specifically required for CHED program

ENGL 1013	Composition I (ACTS Equivalency = ENGL 1013)
ENGL 1023	Composition II (ACTS Equivalency = ENGL 1023)
MATH 1203	College Algebra (ACTS Equivalency = MATH 1103)
BIOL 1543	Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture)
& BIOL 1541L	and Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)
GEOS 1113	General Geology (ACTS Equivalency = GEOL 1114 Lecture)
& GEOS 1111L	and General Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)
HIST 2003	History of the American People to 1877 (ACTS Equivalency = HIST 2113)
GEOS 1123	Human Geography (ACTS Equivalency = GEOG 1113)
or ANTH 1023	Introduction to Cultural Anthropology (ACTS Equivalency = ANTH 2013)
HIST 2013	History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)
HIST 1113	Institutions and Ideas of World Civilizations I (ACTS Equivalency = HIST 1113)
or HIST 1123	Institutions and Ideas of World Civilizations II (ACTS Equivalency = HIST 1123)
ARHS 1003	Basic Course in the Arts: Art Lecture (ACTS Equivalency = ARTA 1003)
or MLIT 1003	Experiencing Music (ACTS Equivalency = MUSC 1003)
COMM 1233	Media, Community and Citizenship
or WLIT 1113	World Literature I (ACTS Equivalency = ENGL 2113)
or PHIL 2003	Introduction to Philosophy (ACTS Equivalency = PHIL 1103)
or PHIL 2103	Introduction to Ethics (ACTS Equivalency = PHIL 1003)
or PHIL 2203	Logic (ACTS Equivalency = PHIL 1003)
or PHIL 3103	Ethics and the Professions

Additional PELED requirements

28

CIED 1013	Introduction to Education
CIED 2943	Course CIED 2943 Not Found
COMM 1313	Public Speaking (ACTS Equivalency = SPCH 1003)
or COMM 2323	Interpersonal Communication
ENSC 1003	Environmental Science
& ENSC 1001L	and Environmental Science Laboratory
HIST 3383	Arkansas and the Southwest (or any 3 hour Arkansas history course)
MATH 2213	Survey of Mathematical Structures I
MATH 2223	Survey of Mathematical Structures II
MLIT 1003	Experiencing Music (ACTS Equivalency = MUSC 1003)
PLSC 2003	American National Government (ACTS Equivalency = PLSC 2003)
STAT 2303	Principles of Statistics (ACTS Equivalency = MATH 2103) (or any 3hr Statistics course)

Childhood Education major requirements

49

To be completed following admission to CHED program

3 hour MATH Elective (consult adviser)

3 hour Elective (Linguistics or Phonology focus recommended) †

ENGL 2003	Advanced Composition
PHYS 1034	Physics for Elementary Education Majors
or ASTR 2003/2001L	Survey of the Universe (ACTS Equivalency = PHSC 1204 Lecture)
or STEM 4104	Astronomy for Educators
ECON 3053	Economics for Elementary Teachers
or ECON 2143	Basic Economics: Theory and Practice
CIED 3013	Development and Learning Theories in the K-6 Classroom †
CIED 3023	Survey of Exceptionalities †
CIED 3053	The Emerging Adolescent †
CIED 3103	Children and Adolescent Literature †
CIED 3113	Emergent and Developmental Literacy †
CIED 3123	Mathematics Methods in the K-6 Classroom †
CIED 3133	Integrated Social Studies for the K-6 Classroom †
CIED 3143	Teaching Science in the Elementary Grades †
CIED 3262	Language Development for the Educator †
CIED 4113	Integrated Communication Skills for the K-6 Classroom †
CIED 3453	Course CIED 3453 Not Found †
CIED 4153	Classroom Management in the Elementary Grades †
CIED 4363	Disciplinary Literacy in the K-6 Classroom †
CIED 4183	Course CIED 4183 Not Found †
CIED 4533	Course CIED 4533 Not Found †

STEM Concentration requirements

12

General Elective

CIED 4423	Teaching English as a Second Language †
STEM 4033	Introduction to STEM Education †
STEM 5023	Creativity and Innovation in STEM †
STEM 4043	Course STEM 4043 Not Found

Total Hours

124

8-Semester Plan

Childhood Education B.S.E. (STEM concentration)

Eight-Semester Plan

Because this program requires admission to progress, it does not qualify for the university's Eight-Semester Degree Program; however, students who qualify to finish a degree in four years can follow the suggested order of classes below.

First Year

Units
Fall/Spring

~~[ENGL 1013](#) Composition I (ACTS Equivalency = ENGL 1013)~~

2

ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013)	3
MATH 1203 College Algebra (ACTS Equivalency = MATH 1103)	3
BIOL 1543 Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture)	4
& BIOL 1541L Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)	
ARHS 1003 Basic Course in the Arts: Art Lecture (ACTS Equivalency = ARTA 1003)	3 -
HIST 2003 History of the American People to 1877 (ACTS Equivalency = HIST 2113)	3 -
CIED 1013 Introduction to Education	3
COMM 1233 Media, Community and Citizenship	3
or WLIT 1113 World Literature I (ACTS Equivalency = ENGL 2113)	
or PHIL 2003 Introduction to Philosophy (ACTS Equivalency = PHIL 1103)	
or PHIL 2103 Introduction to Ethics (ACTS Equivalency = PHIL 1003)	
or PHIL 2203 Logic (ACTS Equivalency = PHIL 1003)	
or PHIL 3103 Ethics and the Professions	
ENGL 1023 Composition II (ACTS Equivalency = ENGL 1023)	3
STAT 2303 Principles of Statistics (ACTS Equivalency = MATH 2103) (or any 3-hr Statistics course)	- 3
COMM 1313 Public Speaking (ACTS Equivalency = SPCH 1003)	- 3
or COMM 2323 Interpersonal Communication	
CIED 1013 Introduction to Education	- 3
HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)	- 3
HIST 2003 History of the American People to 1877 (ACTS Equivalency = HIST 2113)	3
HIST 1113 Institutions and Ideas of World Civilizations I (ACTS Equivalency = HIST 1113)	3
or HIST 1123 Institutions and Ideas of World Civilizations II (ACTS Equivalency = HIST 1123)	
GEOS 1113 General Geology (ACTS Equivalency = GEOL 1114 Lecture)	4
& GEOS 1111L General Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)	
MATH 2213 Survey of Mathematical Structures I	3
Year Total:	16 16

Second Year	Units
	FallSpring
PHYS 1034 Physics for Elementary Education Majors	4 -
or ASTR 2003 and ASTR 2001L	
or STEM 4104 Astronomy for Educators	
COMM 1233 Media, Community and Citizenship	3 -
or PHIL 2003 Introduction to Philosophy (ACTS Equivalency = PHIL 1103)	
or PHIL 2103 Introduction to Ethics (ACTS Equivalency = PHIL 1003)	
or PHIL 2203 Logic (ACTS Equivalency = PHIL 1003)	
or PHIL 3103 Ethics and the Professions	
or WLIT 1113 World Literature I (ACTS Equivalency = ENGL 2113)	
MATH 2213 Survey of Mathematical Structures I	3 -
PLSC 2003 American National Government (ACTS Equivalency = PLSC 2003)	3 -
MLIT 1003 Experiencing Music (ACTS Equivalency = MUSC 1003)	3 -

ARHS 1003 Basic Course in the Arts: Art Lecture (ACTS Equivalency = ARTA 1003)	3
or MLIT 1003 Experiencing Music (ACTS Equivalency = MUSC 1003)	
MATH 2223 Survey of Mathematical Structures II	3
HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)	3
GEOS 1123 Human Geography (ACTS Equivalency = GEOG 1113)	3
or ANTH 1023 Introduction to Cultural Anthropology (ACTS Equivalency = ANTH 2013)	
COMM 1313 Public Speaking (ACTS Equivalency = SPCH 1003)	3
or COMM 2323 Interpersonal Communication	
HIST 1113 Institutions and Ideas of World Civilizations I (ACTS Equivalency = HIST 1113)	- 3
GEOS 1113 General Geology (ACTS Equivalency = GEOL 1114 Lecture)	- 4
& GEOS 1111L General Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)	
MATH 2223 Survey of Mathematical Structures II	- 3
or ANTH 1023 Introduction to Cultural Anthropology (ACTS Equivalency = ANTH 2013)	
GEOS 1123 Human Geography (ACTS Equivalency = GEOG 1113)	- 3
or ANTH 1023 Introduction to Cultural Anthropology (ACTS Equivalency = ANTH 2013)	
Select one of the following:	3
HIST 3383 Arkansas and the Southwest	
Any 3-hour Arkansas History course	
ENSC 1003 Environmental Science	4
& ENSC 1001L Environmental Science Laboratory	
PLSC 2003 American National Government (ACTS Equivalency = PLSC 2003)	3
CIED 2943 Course CIED 2943 Not Found	3
STAT 2303 Principles of Statistics (ACTS Equivalency = MATH 2103) (or any 3 hour statistics course)	3
Year Total:	15 16

Third Year	Units
	FallSpring
CIED 3013 Development and Learning Theories in the K-6 Classroom	3
ENGL 2003 Advanced Composition	3
CIED 3103 Children and Adolescent Literature	3 -
CIED 3262 Language Development for the Educator	2 -
Elective (Linguistics or Phonology focus recommended)	3
CIED 3113 Emergent and Developmental Literacy	3
PHYS 1034 Physics for Elementary Education Majors	4
or ASTR 2003/2001L Survey of the Universe (ACTS Equivalency = PHSC 1204 Lecture)	
or STEM 4104 Astronomy for Educators	
CIED 3113 Emergent and Developmental Literacy	- 3
CIED 3453 Course CIED 3453 Not Found	3
CIED 3053 The Emerging Adolescent	3
ENSC 1003 Environmental Science	- 3
CIED 3023 Survey of Exceptionalities	3

Math Elective	3
<u>ECON 3053</u> Economics for Elementary Teachers	3
or <u>ECON 2143</u> Basic Economics: Theory and Practice	
Year Total:	16 15
Fourth Year	Units
	FallSpring
<u>CIED 3123</u> Mathematics Methods in the K-6 Classroom	3
CIED 4113 Integrated Communication Skills for the K-6 Classroom	3 -
CIED 4183 Course CIED 4183 Not Found	3
<u>STEM 4033</u> Introduction to STEM Education	3
<u>CIED 3133</u> Integrated Social Studies for the K-6 Classroom	3
<u>CIED 4423</u> Teaching English as a Second Language	3
<u>CIED 4153</u> Classroom Management in the Elementary Grades	3
CIED 4363 Disciplinary Literacy in the K-6 Classroom	- 3
CIED 4533 Course CIED 4533 Not Found	3
<u>CIED 3143</u> Teaching Science in the Elementary Grades	3
CIED 3023 Survey of Exceptionalities	- 3
STEM 5023 Creativity and Innovation in STEM	- 3
STEM 4043 Course STEM 4043 Not Found	3
General Elective	3
Year Total:	15 15
Total Units in Sequence:	124

Are Similar Programs available in the area?

No

Estimated Student na

Demand for Program

Scheduled Program na

Review Date

Program Goals and

Objectives

Program Goals and Objectives

The program goals are based on the principles that educators must: master knowledge-bases appropriate to their discipline; access and use knowledge; generate knowledge; use and model best practices; approach learning as developmental and life-long; be skillful in interpersonal relations; practice on the basis of professional standards and ethical conduct; and honor diversity. na

Learning Outcomes

Learning Outcomes

Student Learning Outcomes (based on the CAEP accreditation standards, COEHP conceptual framework, and Danielson’s Framework for Teaching)

- 1. Knowledgeable about Content and Pedagogy: Candidates will possess general knowledge, content knowledge, pedagogical knowledge, and professional knowledge to be effective pre-service educators. They must know how to access, use and generate knowledge. In order to be current, they must be inquiring and up to date on new knowledge in their content, pedagogy, and school systems.**
- 2. Skillful in Practice: Candidates will be skillful in the pedagogy required to be an effective pre-service educator as demonstrated through planning, implementing, and modeling best practices including best technology practices.**
- 3. Supportive in Developing the Whole Student: Candidates will create a caring learning environment for all students. This will include being caring, supportive, and responsive to the diverse backgrounds students bring to the classroom and school. The ability to communicate and collaborate with groups of colleagues and others who contribute to the student’s education such as families and communities is also essential.**
- 4. Professional in Actions: Candidates will inquire and seek to improve their practice through participation in professional communities. This involves staying current with educational research and working with appropriate professional organizations to better their profession. The candidates will demonstrate ethical behavior in all aspects of their multi-faceted career.**

na

Description and justification of the request

Description of specific change	Justification for this change
Remove CIED 3262, Language Development for the Educator	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.

Description of specific change	Justification for this change
Remove CIED 3103, Children's and Adolescent Literature	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Remove CIED 4113, Integrated Communication Skills for the K-6 Classroom	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Remove CIED 4363, Disciplinary Literacy in the K-6 Classroom	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Change MLIT 1003 AND ARHS 1003 to EITHER MLIT 1003 OR ARHS 1003	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Change STAT 2303, Principles of Statistics to STAT 2303 OR any 3-hour statistics course	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.

Description of specific change	Justification for this change
Change 3-hour general elective to a 3-hour linguistics or phonology-focused elective (a list of suggested courses will be given to program advisors)	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Add ENSC 1001L, Environmental Science Lab	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Add CIED 2943, Foundations of Language and Literacy (NEW COURSE)	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Add CIED 3453, Developmental Literacy (NEW COURSE)	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Add CIED 4183, Instruction and Assessment in Writing (NEW COURSE)	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.

Description of specific change	Justification for this change
Add CIED 4533, Reading Comprehension through Children and Adolescent Literature (NEW COURSE)	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
These changes will move the CHEDBS with STEM concentration degree program to a total of 124 hours (from the previous 122) required for graduation.	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Add 3 hr. general elective	The changes to the CHED and ELEL programs are being made in response to the Arkansas Department of Education's (ADE) significant revisions of the competencies required for K-6 elementary teacher education programs. In making the changes, program faculty consulted ADE's required content competencies, the content addressed in the Praxis and new state required Reading Exam candidates must pass to obtain licensure, various national and state standards documents, and leading research in the elementary education field.
Remove STEM 5023 and replace it with STEM 4043, Innovation and Creativity in STEM	To ensure that the undergraduate degree program does not include any graduate level courses.

Upload attachments

[CHEDBS and ELEDMA - EDUC Major Revision - ATS_Matrix.xlsx](#)

[CHEDBS and ELEDMA - EDUC Major Revision - Section C.pdf](#)

[CHEDBS and ELEDMA - EDUC Major Revision - K_6_Matrix.xlsx](#)

Reviewer Comments

Ketevan Mamiseishvili (kmamisei) (09/21/18 9:28 am): Added program goals and learning outcomes

Alice Griffin (agriffin) (09/24/18 5:21 pm): Rollback: Please see my comments from email

correspondence of 9/24/2018.

Lisa Kulczak (lkulcza) (09/28/18 1:58 pm): Approving so proposal can move forward, but followup discussion needed concerning graduate level courses in requirements. All "courses not found" currently in approval process.

Ketevan Mamiseishvili (kmamisei) (10/08/18 10:40 am): Graduate course was replaced with an undergraduate course.

Alice Griffin (agriffin) (10/12/18 4:00 pm): Renamed documents to match BOT naming convention.

Alice Griffin (agriffin) (10/12/18 4:02 pm): Proposed courses in red have reached UCPC for approval.

Key: 151