

Date Submitted: 10/11/21 10:06 pm

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

Last approved: 12/10/20 2:26 pm

Last edit: 11/04/21 9:29 am

Changes proposed by: mimbeau

Catalog Pages Using this Program

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

Submitter: **575-3570 7456** User ID: **mimbeau huteza** Phone:

Program Status: Active

Academic Level: Undergraduate

Type of proposal: Major/Field of Study

Select a reason for this modification
Revising an Approved Licensure Program--(Cover Sheet, Section C)

Are you adding a concentration?
No

Are you adding or modifying a track?
No

Are you adding or modifying a focused study?
No

Effective Catalog Year: Fall 2022

College/School Code: College of Education and Health Professions (EDUC)

Department Code: Department of Curriculum and Instruction (CIED)

In Workflow

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

Approval Path

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

1. 10/11/21 5:07 pm
Matthew Ganio
(msganio): Rollback
to Initiator
2. 10/19/21 8:19 am
Matthew Ganio
(msganio):
Approved for EDUC
Dean Initial
3. 10/20/21 8:14 am
Alice Griffin
(agriffin): Approved
for Director of
Curriculum Review
and Program
Assessment
4. 10/20/21 9:52 am
Gina Daugherty
(gdaugher):
Rollback to Director
of Curriculum
Review and
Program
Assessment for
Registrar Initial
5. 10/20/21 10:45 am
Alice Griffin
(agriffin): Approved
for Director of
Curriculum Review
and Program
Assessment
6. 10/25/21 2:00 pm
Gina Daugherty
(gdaugher):
Rollback to Director
of Curriculum
Review and
Program

- Assessment for Registrar Initial
7. 10/25/21 5:06 pm
Alice Griffin
(agriffin): Approved for Director of Curriculum Review and Program Assessment
 8. 10/26/21 10:23 am
Gina Daugherty
(gdaugher): Approved for Registrar Initial
 9. 10/26/21 10:38 am
Gina Daugherty
(gdaugher): Rollback to Registrar Initial for Institutional Research
 10. 10/26/21 3:28 pm
Gina Daugherty
(gdaugher): Approved for Registrar Initial
 11. 10/26/21 3:39 pm
Jennifer Beasley
(jgbeasle): Approved for University Teacher Education Board
 12. 10/26/21 3:43 pm
Doug Miles
(dmiles): Approved for Institutional Research
 13. 10/26/21 3:47 pm
Ed Bengtson
(egbengts):

Approved for CIED
Chair

14. 11/03/21 2:27 pm

Matthew Ganio

(msganio):

Approved for EDUC

Curriculum

Committee

15. 11/03/21 3:58 pm

Matthew Ganio

(msganio):

Approved for EDUC

Dean

16. 11/03/21 4:05 pm

Suzanne Kenner

(skenner): Approved

for Global Campus

17. 11/03/21 4:09 pm

Ketevan

Mamiseishvili

(kmamisei):

Approved for

Provost Review

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)
6. May 21, 2019 by hkindall

7. Dec 10, 2020 by
Karen Turner
(kjvestal)

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 **123** ~~124~~
hours needed to
complete the
program?

Program Requirements and Description

Requirements

STEM Concentration (STEM)

Pre- Elementary Education (PELED) requirements †

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)
or MATH 1313	Quantitative Reasoning (ACTS Equivalency = MATH 1113)
BIOL 1543	Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture)
& BIOL 1541L	and Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)
or BIOL 1524	Biological Principles (ACTS Equivalency = BIOL 1004 Lecture)
GEOS 1113	Physical Geology (ACTS Equivalency = GEOL 1114 Lecture)
& GEOS 1111L	and Physical Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)

<u>HIST 2003</u>	History of the American People to 1877 (ACTS Equivalency = HIST 2113)
or <u>HIST 2013</u>	History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)
<u>GEOS 1123</u>	Human Geography (ACTS Equivalency = GEOG 1113)
or <u>ANTH 1023</u>	Introduction to Cultural Anthropology (ACTS Equivalency = ANTH 2013)
HIST 2013	History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)
<u>HIST 1113</u>	Institutions and Ideas of World Civilizations I (ACTS Equivalency = HIST 1113)
or <u>HIST 1123</u>	Institutions and Ideas of World Civilizations II (ACTS Equivalency = HIST 1123)
<u>ARHS 1003</u>	Basic Course in the Arts: Art Lecture (ACTS Equivalency = ARTA 1003)
or <u>MLIT 1003</u>	Experiencing Music (ACTS Equivalency = MUSC 1003)
or <u>THTR 1003</u>	Theatre Appreciation (ACTS Equivalency = DRAM 1003)
<u>PLSC 2003</u>	American National Government (ACTS Equivalency = PLSC 2003)
<u>WLIT 1113</u>	World Literature: Beginnings to 1650 CE (ACTS Equivalency = ENGL 2113)
or <u>WLIT 1123</u>	World Literature: 1650CE to Present (ACTS Equivalency = ENGL 2123)

Additional PELED requirements

28

<u>CIED 1003</u>	Introduction to Technology in Education
<u>CIED 1013</u>	Introduction to Education
<u>COMM 1313</u>	Public Speaking (ACTS Equivalency = SPCH 1003)
or <u>COMM 2323</u>	Interpersonal Communication
ENSC 1003	Environmental Science
& ENSC 1001L	and Environmental Science Laboratory
<u>COMM 1233</u>	Media, Community and Citizenship
or <u>PHIL 2003</u>	Introduction to Philosophy (ACTS Equivalency = PHIL 1103)
or <u>PHIL 2103</u>	Introduction to Ethics (ACTS Equivalency = PHIL 1003)
or <u>PHIL 2203</u>	Logic (ACTS Equivalency = PHIL 1003)
or <u>PHIL 3103</u>	Ethics and the Professions
or <u>PSYC 2003</u>	General Psychology (ACTS Equivalency = PSYC 1103)
<u>HIST 3383</u>	Arkansas and the Southwest (or any 3 hour Arkansas history course)
<u>MATH 2213</u>	Survey of Mathematical Structures I
<u>MATH 2223</u>	Survey of Mathematical Structures II
<u>PHYS 1034</u>	Physics for Elementary Education Majors
or <u>GEOS 1133/1131L</u>	Earth Science (ACTS Equivalency = GEOL 1124 Lecture)
or <u>ASTR 2003/2001L</u>	Survey of the Universe (ACTS Equivalency = PHSC 1204 Lecture)
or <u>STEM 4104</u>	Astronomy for Educators
<u>CIED 3013</u>	Development and Learning Theories in the K-6 Classroom

Childhood Education major requirements

48

To be completed following admission to CHED program

6 hours Elective

~~3-hour Elective (Linguistics or Phonology focus recommended) †~~ENGL 2003 Advanced CompositionSTAT 2303 Principles of Statistics (ACTS Equivalency = MATH 2103)

ECON 3053	Economics for Elementary Teachers
or ECON 2143	Basic Economics: Theory and Practice
CIED 2943	Foundations of Language and Literacy
CIED 3023	Survey of Exceptionalities †
CIED 3053	The Emerging Adolescent †
CIED 3113	Emergent 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 3453	Developmental Literacy †
CIED 4153	Classroom Management in the Elementary Grades †
CIED 4183	Instruction and Assessment of Writing †
CIED 4533	Reading Comprehension Through Children's and Adolescent Literature †

STEM Concentration requirements

12

3 hrs of General Elective

CIED 4423	Teaching English as a Second Language †
STEM 4033	Introduction to STEM Education †
STEM 4043	Creativity and Innovation in STEM Education

Total Hours

123

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
	FallSpring
ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013) (Satisfies General Education Outcome 1.1)1	3
MATH 1203 College Algebra (ACTS Equivalency = MATH 1103) (Satisfies General Education Outcome 2.1)1 or MATH 1313 Quantitative Reasoning (ACTS Equivalency = MATH 1113) Satisfies General Education Outcome 3.4:1	3
BIOL 1543 Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture) & BIOL 1541L Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab) or BIOL 1524 Biological Principles (ACTS Equivalency = BIOL 1004 Lecture)	4
CIED 1013 Introduction to Education	3
Choose one of the following:1	2

CHOOSE ONE OF THE FOLLOWING: 1

COMM 1233 Media, Community and Citizenship (Satisfies General Education Outcome 3.2)

~~WLIT 1113 World Literature: Beginnings to 1650 CE (ACTS Equivalency = ENGL 2113) (Satisfies General Education Outcome 3.2)~~

PHIL 2003 Introduction to Philosophy (ACTS Equivalency = PHIL 1103) (Satisfies General Education Outcome 3.2)

PHIL 2103 Introduction to Ethics (ACTS Equivalency = PHIL 1003) (Satisfies General Education Outcome 3.2)

PHIL 2203 Logic (ACTS Equivalency = PHIL 1003) (Satisfies General Education Outcome 5.1)

PHIL 3103 Ethics and the Professions (Satisfies General Education Outcome 5.1)

PSYC 2003 General Psychology (ACTS Equivalency = PSYC 1103)

ENGL 1023 Composition II (ACTS Equivalency = ENGL 1023) (Satisfies General Education Outcome 1.1)1 3

HIST 2003 History of the American People to 1877 (ACTS Equivalency = HIST 2113) (Satisfies General Education Outcomes 3.2, 3.3 and 4.2)1 3

or HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123) Satisfies General Education Outcome 4.1:1

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)

Satisfies General Education Outcome 3.4:1

GEOS 1113 Physical Geology (ACTS Equivalency = GEOL 1114 Lecture) 4

& GEOS 1111L Physical Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)

MATH 2213 Survey of Mathematical Structures I 3

Year Total: 16 16

Second Year Units

FallSpring

Satisfies General Education Outcome 3.1:1

ARHS 1003 Basic Course in the Arts: Art Lecture (ACTS Equivalency = ARTA 1003) 3

or MLIT 1003 Experiencing Music (ACTS Equivalency = MUSC 1003)

or THTR 1003 Theatre Appreciation (ACTS Equivalency = DRAM 1003)

MATH 2223 Survey of Mathematical Structures II 3

~~HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123) (Satisfies 3 - General Education Outcomes 3.2, 3.3 and 4.2)~~

PLSC 2003 American National Government (ACTS Equivalency = PLSC 2003) 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) (Satisfies General Education 3

Outcomes 1.2 and 5.1)1

or COMM 2323 Interpersonal Communication

Select one of the following: 3

<u>HIST 3383</u> 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) (Satisfies General Education Outcome 3.3)	-	3
CIED 2943 Foundations of Language and Literacy	-	3
STAT 2303 Principles of Statistics (ACTS Equivalency = MATH 2103) (or any 3-hour statistics course)	-	3
<u>PHYS 1034</u> Physics for Elementary Education Majors		4
or <u>GEOS 1133/1131L</u> Earth Science (ACTS Equivalency = GEOL 1124 Lecture)		
or <u>ASTR 2003/2001L</u> Survey of the Universe (ACTS Equivalency = PHSC 1204 Lecture)		
or <u>STEM 4104</u> Astronomy for Educators		
<u>CIED 1003</u> Introduction to Technology in Education		3
<u>WLIT 1113</u> World Literature: Beginnings to 1650 CE (ACTS Equivalency = ENGL 2113)		3
or <u>WLIT 1123</u> World Literature: 1650CE to Present (ACTS Equivalency = ENGL 2123)		
<u>CIED 3013</u> Development and Learning Theories in the K-6 Classroom		3
Year Total:		15 16
Third Year		Units
		FallSpring
<u>CIED 3013</u> Development and Learning Theories in the K-6 Classroom	3	-
<u>CIED 2943</u> Foundations of Language and Literacy	3	
<u>CIED 3113</u> Emergent Literacy	3	
<u>PHYS 1034</u> Physics for Elementary Education Majors	4	-
or <u>ASTR 2003/2001L</u> Survey of the Universe (ACTS Equivalency = PHSC 1204 Lecture)		
or <u>STEM 4104</u> Astronomy for Educators		
<u>STAT 2303</u> Principles of Statistics (ACTS Equivalency = MATH 2103)	3	
<u>ENGL 2003</u> Advanced Composition	3	
Elective	3	
<u>CIED 3453</u> Developmental Literacy		3
<u>CIED 3053</u> The Emerging Adolescent	-	3
<u>CIED 3123</u> Mathematics Methods in the K-6 Classroom	3	
<u>CIED 3023</u> Survey of Exceptionalities		3
Elective		3
<u>ECON 3053</u> Economics for Elementary Teachers		3
or <u>ECON 2143</u> Basic Economics: Theory and Practice		
Year Total:		15 15
Fourth Year		Units
		FallSpring
<u>CIED 3123</u> Mathematics Methods in the K-6 Classroom	3	-

CIED 3143 Teaching Science in the Elementary Grades	3
<u>CIED 4183</u> Instruction and Assessment of Writing	3
<u>STEM 4033</u> Introduction to STEM Education	3
<u>CIED 3133</u> Integrated Social Studies for the K-6 Classroom	3
CIED 4423 Teaching English as a Second Language	3 -
CIED 3053 The Emerging Adolescent	3
<u>CIED 4153</u> Classroom Management in the Elementary Grades	3
<u>CIED 4533</u> Reading Comprehension Through Children's and Adolescent Literature (Satisfies General Education Outcome 6.1)1	3
CIED 3143 Teaching Science in the Elementary Grades	- 3
CIED 4423 Teaching English as a Second Language	3
<u>STEM 4043</u> Creativity and Innovation in STEM Education	3
Elective	3
Year Total:	15 15

Total Units in Sequence: 123

1Students must complete the State Minimum Core requirements as outlined in the Catalog of Studies. The courses that meet the state minimum core also fulfill many of the university's General Education requirements, although there are additional considerations to satisfy the general education learning outcomes. Students are encouraged to consult with their academic adviser when making course selections.

Are Similar Programs available in the area?

No

Estimated Student Demand for Program na

Scheduled Program **See CHEDBS 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.

Learning Outcomes

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.

Description and justification of the request

Description of specific change	Justification for this change
Additional course options were added to the program of study for university core courses that were equivalent from Arkansas community colleges.	These changes were necessary to honor the university agreement with community colleges Associate of Arts in Teaching students to enter our Childhood Education Bachelor of Science-STEM concentration.

Upload attachments

[CHEDBS-STEM - Educator Licensure Revision - Cover Sheet.pdf](#)

[CHEDBS-STEM - Educator Licensure Revision - Section C Protocol.docx](#)

[CHEDBS-STEM - Educator Licensure Revision - MOA AAT Agreement.pdf](#)

[CHEDBS-STEM - Educator Licensure Revision - Eight Semester Plan.docx](#)

Reviewer Comments

Matthew Ganio (msganio) (10/11/21 5:07 pm): Rollback: Rolling back per conversation to attach 8-semester plan.

Alice Griffin (agriffin) (10/19/21 8:31 am): Updated submitter field and phone number.

Alice Griffin (agriffin) (10/19/21 3:09 pm): Revised scheduled program review date to match CAEP visit.

Alice Griffin (agriffin) (10/19/21 3:18 pm): Renamed supporting documents to match BOT naming convention.

Alice Griffin (agriffin) (10/20/21 8:11 am): ATTENTION REGISTRAR: Since this request is related to teacher licensure UTEB will need to be added to the workflow and an off campus approval roles (BOT, ADHE, and DESE) will also need to be added.

Gina Daugherty (gdaugher) (10/20/21 9:52 am): Rollback: Rolling back at the request of Director of Curriculum Review.

Alice Griffin (agriffin) (10/20/21 10:43 am): Inserted General Education footnote.

Alice Griffin (agriffin) (10/20/21 10:44 am): Revised schedule program review date.

Concentrations are not reviewed, programs are reviewed.

Alice Griffin (agriffin) (10/20/21 10:45 am): Inserted correct degree title into Section C protocol.

Gina Daugherty (gdaugher) (10/25/21 2:00 pm): Rollback: Rolling back at the request of Director of Curriculum Review.

Alice Griffin (agriffin) (10/25/21 5:04 pm): Moved PLSC 2003 to State Minimum Core group and moved COMM 1233, PHIL 2003, PHIL 2103, PHIL 2203, PHIL 3103, and PSYC 2003 to Additional PELED requirements with permission from the college.

Alice Griffin (agriffin) (10/25/21 5:04 pm): Removed University Core from catalog copy. That language is no longer used in order to reduce confusion with the state minimum core and the general education curriculum.

Gina Daugherty (gdaugher) (10/26/21 10:38 am): Rollback: Rolling back to update workflow.