

**UNIT PLAN ASSESSMENT**  
**BIO/PHS 3400 Methods of Teaching Science**

<b>Requirement</b>	<b>Exceeds Requirement (5 points)</b>	<b>Meets Requirement (2-4 points)</b>	<b>Does Not Meet Requirement (0-1 point)</b>
1. Unit length and scope	The unit encompasses at least three weeks of instruction. The scope is particularly well thought out.	The unit encompasses at least three weeks of instruction. The scope is appropriate.	The unit encompasses fewer than three weeks of instruction and/or the scope is too narrow or too broad.
2. Unit Objectives	Objectives for the unit are very clear and appropriate. They include key knowledge and skills and are particularly well thought out.	Objectives for the unit are clear and appropriate. They include key knowledge and skills.	Objectives for the unit are unclear or missing.
3. Unit content	There is a very clear and direct relationship between the objectives and the content of the unit.	There is a direct relationship between the objectives and the content of the unit.	The relationship between some or all of the objectives and the content of the unit is unclear.
4. Human development	The intended grade level is stated, and all lessons demonstrate an in-depth understanding of the cognitive, social, emotional, ethical and physical domains at the appropriate level of development.	The intended grade level is stated, and the lessons demonstrate an understanding of the cognitive, social, emotional, ethical and physical domains at the appropriate level of development.	The intended grade level is not stated and/or one or more lessons demonstrate a lack of understanding of the cognitive, social, emotional, ethical and physical domains at the appropriate level of development.
5. Curricular sequence	The sequence of curricular content is particularly well thought out and very logical.	The sequence of curricular content is logical.	The sequence of curricular content is unclear or illogical.
6. Instructional methods  NSTA 3a	Unit includes a variety of instructional methods that demonstrate an excellent knowledge and understanding of how to select appropriate teaching and learning activities, which are inclusive and motivating for all students.	Unit includes a variety of instructional methods that demonstrate a knowledge and understanding of how to select appropriate teaching and learning activities, which are inclusive and motivating for all students.	Unit does not include a variety of different types of instructional methods, includes inappropriate methods, and/or fails to be inclusive and motivating for all students.

<b>Requirement</b>	<b>Exceeds Requirement</b>	<b>Meets Requirement</b>	<b>Does Not Meet Requirement</b>
7. Assessment  NSTA 3c	Unit includes excellent use of fair and equitable assessment strategies to analyze student learning and to evaluate if the learning goals are met. Assessment strategies are designed to continuously evaluate preconceptions and ideas that students hold and the understanding that students have formulated.	Unit includes use of fair and equitable assessment strategies to analyze student learning and to evaluate if the learning goals are met. Assessment strategies are designed to evaluate preconceptions and ideas that students hold and the understanding that students have formulated.	Unit does not include use of fair and equitable assessment strategies to analyze student learning and to evaluate if the learning goals are met. Assessment strategies are not designed to evaluate preconceptions and ideas that students hold and the understanding that students have formulated.
8. Scientific concepts and principles  NSTA 1a	Lessons very successfully and accurately convey to students concepts and principles of science. Creative planning is evident.	Lessons successfully and accurately convey to students concepts and principles of science.	One or more lessons contain scientific inaccuracies and/or are ineffective at conveying concepts or principles.
9. Scientific theories  NSTA 1a	In particularly effective ways, the unit teaches how scientific theories are developed.	The unit teaches how scientific theories are developed.	The unit fails to teach how scientific theories are developed.
10. Scientific laws  NSTA 1a	The unit teaches the nature of scientific laws and relates concepts to them in particularly effective ways.	The unit teaches the nature of scientific laws and relates concepts to them.	The unit fails to teach the nature of scientific laws or to relate concepts to them.
11. Science interrelationships  NSTA 1a	The unit makes relationships in and between sciences clear in more than three lessons.	The unit makes relationships in and between sciences clear in three lessons.	The unit makes relationships in and between science clear in fewer than three lessons.
12. Inquiry  NSTA 2a	Unit includes many (5+) inquiry lessons and/or include more than three types of inquiry. Demonstrates excellent knowledge of how all students learn science.	Unit has 5 lessons that include inquiry. At least three types of inquiry are represented. Demonstrates some knowledge of how all students learn science.	Unit has fewer than 5 lessons that include inquiry, and/or fewer than three types of inquiry are represented. Does not demonstrate knowledge of how all students learn science.

<b>Requirement</b>	<b>Exceeds Requirement</b>	<b>Meets Requirement</b>	<b>Does Not Meet Requirement</b>
13. Active Inquiry NSTA 2b, 3b	Unit includes multiple (3+) very well planned active inquiry lessons where students collect and interpret data in order to develop and communicate concepts and understand scientific processes, relationships and natural patterns from empirical experiences. Applications of science – specific technology are included in the lesson where appropriate. These lessons thoughtfully and creatively provide for equitable achievement of science literacy for all students.	Unit includes some (3) active inquiry lessons where students collect and interpret data in order to develop and communicate concepts and understand scientific processes, relationships and natural patterns from empirical experiences. Applications of science –specific technology are included in the lesson where appropriate. These lessons provide for equitable achievement of science literacy for all students.	Unit does not include active inquiry lessons where students collect and interpret data in order to develop and communicate concepts and understand scientific processes and relationships and natural patterns from empirical experiences, or the lessons are inappropriate. These lessons do not provide for equitable achievement of science literacy for all students.
14. History and Philosophy of science	Unit includes well planned and effective lessons that teach how science discovers new knowledge and/or the history of science.	Unit includes multiple lessons that teach how science discovers new knowledge and/or the history of science.	Unit does not include multiple lessons that teach how science discovers new knowledge and/or history of science, or lessons are ineffective.
15. Laboratory and Field Settings  NSTA 3a	Unit includes more than three activities in a laboratory and/or field setting. Creative planning is evident.	Unit includes one activity in a laboratory or field setting.	Unit does not include an activity requiring laboratory or field setting, or the assignment is inappropriate.
16. Socially important issues	Unit includes more than three effective lessons about socially important issues in science or technology and teaches processes used to analyze issues.	Unit includes three effective lessons about socially important issues in science or technology and teaches processes used to analyze issues.	Unit includes fewer than three effective lessons about socially important issues in science or technology or processes used to analyze issues.

Requirement	Exceeds Requirement	Meets Requirement	Does Not Meet Requirement
17. Naïve concepts and preconceptions  NSTA 2c	Unit incorporates both instructional and assessment strategies that confront and address naïve concepts and preconceptions effectively and creatively.	Unit incorporates both instructional and assessment strategies that confront and address naïve concepts and preconceptions.	Unit does not incorporate both instructional and assessment strategies that confront and address naïve concepts and preconceptions, or does not incorporate them effectively.
18. Community resources	Unit includes more than one lesson that uses community resources to promote the learning of science.	Unit includes one lesson that uses community resources to promote the learning of science.	Unit does not include a lesson that uses community resources to promote the learning of science, or the lesson is inappropriate.
19. Analysis of problems	Unit includes more than one lesson that engages students in analysis of a problem, including considerations of risks, costs, and benefits of alternative solutions, relating these to the knowledge, goals, and values of the students.	Unit includes one lesson that engages students in analysis of a problem, including considerations of risks, costs, and benefits of alternative solutions, relating these to the knowledge, goals, and values of the students.	Unit does not include a lesson that engages students in analysis of a problem, including considerations of risks, costs, and benefits of alternative solutions, relating these to the knowledge, goals, and values of the students, or the lesson is inappropriate.
20. Interdisciplinary	More than one lesson is interdisciplinary, i.e., the topic teaches material from two or more disciplines simultaneously.	One lesson is interdisciplinary, i.e., the topic teaches material from two or more disciplines simultaneously.	No interdisciplinary lessons are included, or the lesson is inappropriate.
21. Technology  NSTA 3a, 3b	More than one lesson includes learning activities in which students use computers, and/or the activities are particularly effective.	One lesson includes learning activities in which students use science-specific technology to develop concepts, understand scientific processes, relationships and natural patterns from empirical experiences.	No lessons include learning activities in which students use computers, or the lesson is inappropriate.

<b>Requirement</b>	<b>Exceeds Requirement</b>	<b>Meets Requirement</b>	<b>Does Not Meet Requirement</b>
22. Higher level cognitive skills	More than 10 lessons require the students to use higher level cognitive skills.	Ten lessons require the students to use higher level cognitive skills.	Fewer than 10 lessons require the students to use higher level cognitive skills.
23. Safety NSTA 3d	Concern for the safety and welfare of students is particularly well thought out for all lessons.	All lessons demonstrate adequate concern for the safety and welfare of students.	One or more lessons demonstrate lack of concern for the safety and welfare of students.
24. Understanding and positive regard for students and their families	All lessons demonstrate a thorough understanding and positive regard for students and their families regardless of culture, religion, gender, sexual orientation, and varying abilities.	All lessons demonstrate understanding and a positive regard for students and their families regardless of culture, religion, gender, sexual orientation, and varying abilities.	One or more lessons fail to demonstrate understanding and a positive regard for students and their families.
25. Students' learning NSTA 3c	All lessons relate new material to students' prior knowledge and experiences. They demonstrate understanding of diverse learning needs in particularly effective ways.	All lessons relate new material to students' prior knowledge and experiences. They demonstrate understanding of diverse learning needs.	One or more lessons fail to relate new material to students' prior knowledge and experiences and/or they fail to demonstrate understanding of diverse learning needs.
26. State and National Curriculum Standards NSTA 1c	All lessons demonstrate an understanding of and are mapped to all relevant State and National Curriculum Standards for teaching of science.	All lessons demonstrate an understanding and are mapped to relevant State and National Curriculum Standards for teaching of science.	One or more lessons do not demonstrate an understanding and are not mapped to State or National Curriculum Standards.
27. Unit-at-a-glance table	A one-page table is included that summarizes each day of the unit in a particularly clear way.	A one-page table is included that summarizes each day of the unit.	The summary table is missing or unclear.

<b>Requirement</b>	<b>Exceeds Requirement</b>	<b>Meets Requirement</b>	<b>Does Not Meet Requirement</b>
28. Record-keeping system	A record-keeping system (e.g., an electronic grade book or spreadsheet file) is included, with all of the unit's assessments and their points possible. Sample students' data and grade calculations are included.	A record-keeping system (e.g., an electronic grade book or spreadsheet file) is included, with all of the unit's assessments and their points possible.	The record-keeping system is missing, incomplete, or unclear.
29. Citation of sources	All sources of ideas are properly and very clearly cited.	All sources of ideas are properly cited.	Citations of sources are missing or unclear.
30. Planning materials	All materials used in planning the unit are credible and relevant. A wide variety of types of sources is used.	All materials used in planning the unit are credible and relevant.	Some materials used in planning the unit lack credibility or relevance.
<b>Total Points (out of 150)</b> _____			



Council for the  
Accreditation of  
Educator Preparation

## ACCREDITATION ACTION REPORT

College of Education  
Eastern Illinois University  
Charleston, Illinois

Accreditation Council August 2021

Accreditation Application Date: \*

*This is the official record of the Educator Preparation Provider's accreditation status.*

*The Educator Preparation Provider should retain this document for at least two accreditation cycles.*

\* This EPP was accredited previously by NCATE or TEAC and the initial application date is not available. CAEP was established July 1, 2013.

### ACCREDITATION DECISION

**Accreditation with stipulations** is granted at the advanced-level. Accreditation status is effective between Fall 2021 and Spring 2025. The provider must demonstrate that all stipulations have been corrected to continue accreditation. A site visit will occur in Fall 2024.

### SUMMARY OF STANDARDS

CAEP STANDARDS	INITIAL-LICENSURE LEVEL	ADVANCED-LEVEL
STANDARD 1/A.1: STD 1	Not Applicable	Met
STANDARD 2/A.2: STD 2	Not Applicable	Met
STANDARD 3/A.3: STD 3	Not Applicable	Met
STANDARD 4/A.4: STD 4	Not Applicable	Met
STANDARD 5/A.5: STD 5	Not Applicable	Met

### AREAS FOR IMPROVEMENT AND STIPULATIONS

**Areas for Improvement:** Identified areas for improvement are addressed in the provider's annual report.

**Stipulations:** Stipulations are addressed in the provider's annual report and must be corrected within two years to retain accreditation.

### ADVANCED LEVEL AREAS FOR IMPROVEMENT AND STIPULATIONS

#### STANDARD A.1: STD 1

Areas for Improvement	Rationale
1 The EPP provided limited evidence from direct performance measures that a majority of candidates enrolled in the advanced programs are able to demonstrate their	The EPP provided licensing exam data for programs but provided limited evidence that candidates are able to apply specialized content and discipline knowledge

understanding of critical concepts and principles for their specialized field of study. (Component A.1.2)

contained in approved state and/or national discipline-specific standards.

## STANDARD A.5: STD 5

Areas for Improvement	Rationale
1 There is limited evidence that the EPP assures that appropriate stakeholders, including alumni, employers, practitioners, school and community partners, and others defined by the provider, are involved in program evaluation, improvement, and identification of models of excellence. (Component A.5.5)	The EPP provided limited evidence of a formal mechanism used to solicit stakeholder input in a regular and systematic way for all advanced programs.

Stipulations	Rationale
1 There is no evidence that the EPP has a quality assurance system to monitor completer achievements and provider operational effectiveness. (Component A.5.1)	The EPP has identified a set of siloed processes and measurements. There is no regular and systematic data collection, no sharing, reporting, or analysis of the limited data. There is no documentation of multiple measures, analysis of the data, and no indication that the data has been used to improve the programs.

## AREA(S) FOR IMPROVEMENT OR WEAKNESS(ES) from previous legacy accreditor review (NCATE or TEAC)

### Removed:

Area for Improvement or Weakness	Rationale
1) NCATE ST 2: Although programs are involved in the collection of data, the unit does not systematically analyze and evaluate those data for program and unit improvement.  2) NCATE ST 6: Educational Leadership faculty loads for teaching on the main campus, in offsite cohorts, and online generally exceed nine hours for graduate teaching per semester or the equivalent.	1) The legacy AFI is addressed in CAEP Standard 5 and is reflected in new AFI or Stipulations under CAEP. Remove AFI  2) The legacy AFI is no longer in CAEP standards. Remove AFI

## INFORMATION ABOUT ACCREDITATION STATUSES

**Accreditation** for seven (7) years is granted if the EPP meets all CAEP Standards and components, even if areas for improvement (AFIs) are identified in the final report of the Accreditation Council.

- **Areas for Improvement (AFIs)** indicate areas which must be improved by the time of the next accreditation visit. Progress reports on remediation of AFIs are submitted as part of the Annual Report. AFIs not remediated by a subsequent site review may become stipulations.

**Accreditation with stipulations is granted for 2 years** if an EPP meets all standards but receives a stipulation on a component under any standard. Failure to submit a response to the stipulation within a two (2)-year time frame results in revocation. Failure to correct the condition leading to the stipulation within the specified two (2)-year period results in revocation or probation.

- **Stipulations** describe serious deficiencies in meeting CAEP Standards and/or components and



must be brought into compliance in order to continue accreditation. All stipulations and relevant evidence are reviewed by the Accreditation Council. Failure to correct the condition leading to the stipulation results in probation or revocation of accreditation.

**Probationary Accreditation** is granted for two (2) years when an EPP does not meet one (1) of the CAEP Standards. Failure to submit a response to the stipulation within a two (2)-year time frame results in revocation. Failure to correct the condition leading to the stipulation within the specified two (2)-year period results in revocation.

## SCOPE OF ACCREDITATION

The scope of CAEP's work is the accreditation of educator preparation providers (EPPs) that offer bachelor's, master's, and/or doctoral degrees, post-baccalaureate or other programs leading to certification, licensure, or endorsement in the United States and/or internationally. (2018).

CAEP does not accredit specific degree programs, rather EPPs must include information, data, and other evidence on the following in their submission for CAEP's review:

All licensure areas that prepare candidates to work in preschool through grade 12 settings at the initial-licensure and advanced levels that lead to professional licensure, certification, or endorsement as defined by the state, country, or other governing authority under which the EPP operates and for which the state, country, or other governing authority has established program approval standards.

Depending on an EPP's submission, accreditation may be awarded at one or both of the following levels: Initial-Licensure level and/or Advanced-Level.

1. **Initial-Licensure Level Accreditation** is provided at the baccalaureate or post-baccalaureate levels leading to initial-licensure, certification, or endorsement that are designed to develop P-12 teachers.
2. **Advanced-Level Accreditation** is provided at the post-baccalaureate or graduate levels leading to licensure, certification, or endorsement. Advanced-Level Programs are designed to develop P-12 teachers who have already completed an initial-licensure program, currently licensed administrators, or other certified (or similar state language) school professionals for employment in P-12 schools/districts. CAEP's Advanced-Level accreditation does not include any advanced-level program not specific to the preparation of teachers or other school professionals for P-12 schools/districts; any advanced-level non-licensure programs, including those specific to content areas (e.g., M.A., M.S., Ph.D.); or Educational leadership programs not specific to the preparation of teachers or other school professionals for P-12 schools/districts.

Information on accreditation status, terms, and any conditions provided within this directory is specific to the accreditation level(s) described above. CAEP-accredited EPPs are required to distinguish accurately between programs that are accredited and those that are not.

**NOTE:** *Neither CAEP staff, evaluation team members, nor other agents of CAEP are empowered to make or modify Accreditation Council decisions. These remain the sole responsibility of the Council itself.*

## End of Action Report

## **CLAS Deans' comments on B.S. in Science Teacher Licensure report**

**Reviewer: Mike Cornebise**

1. SLOs are clear and follow NCATE accreditation guidelines. The information gleaned will allow the program to demonstrate student attainment of accreditation standards while at the same time allowing for any necessary curricular adjustments.
2. The NCATE Accreditation letter is appended to this document and illustrates that EIU's Science Teacher Licensure program in Biological Science, Chemistry, Physics and Earth Science meets NSTA standards and is nationally recognized and accredited.

Overall, the plan looks ready for data collection. Let us know if we can assist with program assessment as you begin the process. The next report is due in fall of 2023.