



The BSCS 5E Instructional Model: An Inquiry-Based Method of Instruction

3 Semester, Graduate Level Credits

Thank you for registering for this course. Included are the following important information:

1. Course Syllabus
2. Assignment Plan – Assignments to turn in & Grading Rubric
3. Course Hourly Breakdown

Assignment Deadline: This course is a rolling course throughout the year, which means it does not have a specific deadline to submit completed assignments. However, you must submit all completed assignments by 6 months after the registration date with Credits for Teachers. Please allow 4 weeks from the date assignments are submitted for the grade to be added to your transcript.

Registering with the University: Please register with the university prior to starting your coursework. *Students must register for the course through the university prior to the end of the semester in which they are enrolled with Credits for Teachers.* To register, please follow the respective instructions on Schoology depending on the university you are registering with.

Upon Completion of the Course: Please submit assignments and discussion posts as instructed on Schoology. *Make sure to check the email address you used to create your Schoology account regularly, including the spam folder, as we will be contacting you with this email address moving forward with any updates regarding your coursework.*

If you need assistance or have any questions, feel free to contact our staff by leaving a message on Schoology or emailing at info@creditsforteachers.com.

5E Model Syllabus

3 credits

Course Description: This course offers a specific model of inquiry instruction called the 5E model. Included in the course is a description of each of the phases of the 5E model (Engage, Explore, Explain, Elaborate, and Evaluate) as well as how to implement each phase in the classroom. Although originally designed for a science classroom, the 5E model can be applied to any content. By incorporating this model, educators provide more inquiry in their instruction allowing students to make their own discoveries and therefore improve their learning.

Learning Objectives:

- Students will learn and explain each phase of the BSCS 5E instructional model.
- Students will be able to apply all five phases of the BSCS 5E instructional model to engage learners in lessons and the curriculum.
- Students will design more inquiry-based lessons using the 5E instructional model.
- Students will develop skills to reflect on & improve their own teaching practices.

Required Texts:

- “Chapter 3 – The BSCS 5E Instructional Model” from the book *The BSCS 5E Instructional Model: Creating Teachable Moments* by Rodger W. Bybee.
- “Chapter 8 – I Was Just Wondering...: An Evaluation” from the book *The BSCS 5E Instructional Model: Creating Teachable Moments* by Rodger W. Bybee.
- “Chapter 9 – Implementing the BSCS 5E Instructional Model in Your Classroom: A Final Evaluation” from the book *The BSCS 5E Instructional Model: Creating Teachable Moments* by Rodger W. Bybee.

Course Components:

This course includes selected readings, selected videos, discussion boards, online assignments, and a final paper. All components and all course materials can be found on the Schoology course page. The assignments, including the final paper, will be turned in online via Schoology. Students must receive an 80% or better on each assignment to receive university credit.

Course Outline:

- Part 1: Reading #1
 - 5E Model Reading PDF #1
 - Video: Introduction to the 5E Teaching Model
 - Reading Assignment: 5E Model Reflection
- Part 2: Reading #2
 - 5E Model Reading PDF #2

- 5E Model Reading PDF #3
- Video: 5Es in Action
- Video: 5E Lesson Format for Art Education
- Reading Response Discussion
- Part 3: Implementation of Strategies
 - Initial Thoughts Discussion
 - Implementation Plan Assignment
 - Lesson Plan Assignment
- Part 4: Final Reflection
 - Final Reflection Paper
 - Final Thoughts Discussion

Reading (and/or Video) Assignment:

The purpose of the reading assignment is to analyze the reading(s) (and at times the videos) and show an understanding of the content and strategies provided. Students are also responsible for reflecting on and explaining how these new strategies can be applied to their own practice.

Reading Assignment Rubric:

Grade	Description
A (14-15)	Student answers all questions thoroughly with detail. The responses are well thought out and in depth and show understanding of the 5E model. The examples given are detailed to the point that it is very clear what the outcome will look like in the classroom.
B (12-13)	Student answers all questions. Examples of new strategies are explained. More detail could have been given in one or more of the responses.
Not Passing (11 or below)	Some questions are complete while others are not. Student may have left out examples or just failed to answer all parts of the question. The 5E model is mentioned but full understanding is missing.

Implementation Plan:

The purpose of the Implementation Plan is for students to show how they will implement strategies from the course in their lessons and/or school days in the future. Students are responsible for creating a 4 week unit plan for one of the units in their curriculum that includes regular implementation of the strategies from the course within the lessons of the unit.

Implementation Plan Rubric:

Grade	Description
A (18-20)	Student's unit plan is a minimum of 4 weeks and includes all of the required components. Student also includes all of the required components for each lesson within the plan. Student demonstrates the implementation of learned

	strategies, and there is clear evidence that one or more strategies from the course are incorporated within each lesson.
B (16-17)	Student's unit plan is a minimum of 4 weeks and includes the required components. Student also includes the required components for the majority of the lessons within the plan, but 1-5 of the lessons are incomplete. Student demonstrates the implementation of learned strategies, and there is evidence of one strategy from the course incorporated within each lesson.
Not Passing (15 or below)	Student's unit plan is 3 weeks or less and includes some of the required components, but one or more are missing. Student includes some of the required components for the lessons within the plan, but 6 or more of the lessons are incomplete. Student partially demonstrates the implementation of learned strategies. Some of the lessons have strategies from the course incorporated while others do not, or none of them do.

Lesson Plan:

The purpose of the lesson plan assignment is to see a more detailed account of students utilizing the strategies from the course within their lessons. This provides a specific example of what will happen in the classroom.

Lesson Plan Rubric:

Grade	Description
A (14-15)	Student's lesson plan includes all of the required components. All activities within the lesson plan are described in detail. There is clear evidence that multiple strategies from the course were used throughout the lesson.
B (12-13)	Student's lesson plan includes the majority of the required components, but 1 or 2 are missing. Some detail is used when describing the activities within the lesson, but some activities are missing detail. There is evidence that multiple strategies from the course were used throughout the lesson.
Not Passing (11 or below)	Student's lesson plan is missing several of the required components. The activities within the lesson are not described in detail. There is little or no evidence that strategies from the course were used throughout the lesson.

Discussion Board:

The purpose of the discussion boards is to share ideas and experiences with fellow teachers in order to learn from each other and inevitably improve everyone's practice. For each discussion board, students are responsible for responding to the questions presented in a well-thought out response. Students must also reply to a minimum of 1 other student's response per discussion board.

Discussion Board Rubric:

Grade	Description
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A (5)	Student's responses are clear, well written, and include a high level of detail. Student answers all parts of the question(s) thoroughly using clear and highly appropriate evidence from the course. For each discussion board, student also completes a minimum of 1 reply to another student's post. The reply is thoughtful and incorporates ideas learned from the course.
B (4)	Student's responses are clear, well written, and include some amount of detail. Student answers the majority of the question(s) thoroughly using appropriate evidence from the course. For each discussion board, student also completes a minimum of 1 reply to another student's post. The reply is thoughtful and incorporates ideas learned from the course. OR Student's response meets the requirements of an A. However, they did not include a reply to another student's post.
Not Passing (3 or below)	Student's responses are unclear and do not include very much detail. Student answers some of the question(s) using some or no evidence from the course. The reply to another student's post is brief and does not incorporate ideas learned from the course, or it is missing all together.

Final Reflection Paper:

Within the final paper, students must explain the strategies from the course they plan to implement and reflect on the impact they hope those strategies will have on their practice and on student learning. Students will also explain how they plan to implement the strategies, aspects they valued, and aspects they would modify.

Final Paper Rubric:

Grade	Description
A (36-40)	Student has implemented all 5 phases of the 5E instructional model within their lessons, and it is clear that each phase will be completed by the end of the unit. Student has explained in detail how each phase was incorporated or modified if needed, including specific strategies within each phase. Lastly, student has answered all of the reflection questions.
B (32-35)	Student has implemented the majority of the 5 phases of the 5E instructional model. However, one phase is incomplete or missing all together. Student has explained how each phase was incorporated or modified if needed, including specific strategies within each phase. Lastly, student has answered the majority of the reflection questions, but one or two are missing.
Not Passing (31 or below)	Student has implemented 3 or less of the phases of the 5E instructional model. Student has provided some explanation of how the phase(s) used were incorporated or modified if needed, but the explanation is incomplete. Student has answered some of the reflection questions but responses are incomplete, or none of the questions have been answered.

5E Model - Assignment Plan, Grading, & Hourly Breakdown

5E Model Reflection Assignment	X/15 pts
Implementation Plan Assignment	X/20 pts
Lesson Plan Assignment	X/15 pts
Reading Response Discussion Board	X/5 pts
Initial Thoughts Discussion Board	X/5 pts
Final Thoughts Discussion Board	X/5 pts
Final Reflection Paper on 5E Model	X/40 pts
Final Grade	X/105 pts

Final Grade Scale

95-105 pts	A
84-94 pts	B
83 pts & below	Not Passing

Suggested Hourly Breakdown

Reading/reviewing assigned course materials	5
Planning strategies into a unit plan	8
Practicing strategies/techniques in the classroom (within the unit plan)	20
Reflecting on lessons and effectiveness of strategies	5
Brainstorming and writing all discussion boards & assignments	7
Total Hours	45

Bibliography

Anderson, Kerry, director. *5Es In Action. YouTube*, YouTube, 17 Nov. 2014, www.youtube.com/watch?v=lQzQumJmJv8&t=80s.

Bybee, Rodger W. *The BSCS 5E Instructional Model: Creating Teachable Moments*. NSTA Press, National Science Teachers Association, 2015.

Mattel, director. *Introduction to the 5E Teaching Model | Hot Wheels Speedometry | Hot Wheels | Mattel. YouTube*, YouTube, 22 Sept. 2014, www.youtube.com/watch?v=W_xZrRWwe_g.

Rowland, Melissa, director. *5 E Lesson Format for Art Education*. YouTube, YouTube, 29 Sept. 2014, www.youtube.com/watch?v=LtM4iryXe74.

Credits for Teachers Policies

Graduate-level professional development credits are not part of a degree program. These courses can be used for professional development, salary advancement, and recertification. Students should seek approval of appropriate district or college officials before enrolling in these courses to satisfy any degree, state credential, or local school district requirements. This credit may be applied toward a degree program at the discretion of the accepting institution. Courses are rolling throughout the year, which means it does not have a specific deadline to submit completed assignments. You must submit coursework by 6 months after the registration date with Credits for Teachers. Students have up to 30 days after the purchase of a course to request a refund.

Thank You!

