Integrated Content Curriculum Instruction in Elementary Grades

CIEE 3335 Science in the Elementary School

Spring 2018

are required courses for the IDS Education Major/Elementary Certification

College of Education

Department of Curriculum and Instruction

Instructor: **Dr. Lautrice M. Nickson**
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Student Availability Hours:

Monday	8:30-1:00

Note: *These times may vary due to scheduling of observations during Field Experience and supervising student teachers. It is best to make an appointment.*

Day and Time of Class:
Tuesdays 1-3:50
Location of Class: TWC 215

Course Descriptions:
CIEE 3335: The Teacher Candidate will be immersed in the culture and context of the EC-6 classroom with the idea that both confidence and competence in science teaching is key. The role of the teacher candidate throughout this experience is that of a learner and a teacher. The teacher candidate works collaboratively with practicing EC-6 teachers in field based settings.

SHSU IDEA COURSE OBJECTIVES:

Essential:

1. Applying course material to improve professional thinking, problem solving, and decision making in regards to teaching content in the schools (i.e., Integrated curriculum, service learning, and DAP and Field Experience Reflections).

Important:

2. Developing specific skills, competencies, and reflective thinking needed by teachers as professionals.

Professional Organization Membership Opportunities: (You are encouraged to join at least one!☺)

Science Teachers Association of Texas (STAT) http://statweb.org/ $10.00 Student Membership
National Science Teachers Association (NSTA) http://nsta.org/ $35.00 Student Membership
Phi Delta Kappa International (PDK – Sam Houston State Chapter) http://pdkintl.org $54.00

REQUIRED TEXT and OTHER SOURCES:

*TEKS Charts for Science Content Areas See supply list on Blackboard.
****One small Dry Erase board with markers***
****Access to Children's literature***
**Content-rich Websites*
** Pedagogy and Professional Responsibility Standards (PPR) (downloads at TEA Website)*
****Project Learning Tree*** (11th edition) America Forest Foundation. $55.00 (purchased at Project Learning Tree mid-semester)

***TK20 Account** required for this course---TK20 is an electronic toolkit used by candidates to provide evidence that they have mastered state and professional standards for the profession. Additional information regarding Tk20 is available at: https://tk20.shsu.edu/

Academic Community Engagement (ACE):

In this course, you will not only learn knowledge and skills about the teaching profession, but also actively use them to make a difference in your community to improve the quality of life of your students, your mentor teacher and/or your campus community. It is hoped that this experience will help you see yourself as a positive force in this world and deepen your understanding of your role as a citizen by the contribution you will give during this semester.

Your ACE project will include your Service Learning Project "Leaving a Legacy". This will be for a grade and will require a reflection over the experience. This assignment will be discussed during the semester. This will be completed during your 120 hour Field Experience portion of the class.

Course Format:
Weekly meetings in this integrated curriculum course will consist of modeling the most effective and research-based practices in teaching mathematics, science, and classroom management that foster and support candidates' active participation and reflections. Cooperative learning, group projects, use of literature/writing, integrated curriculum, and instructional technology will be emphasized. The candidate will participate in hands-on activities associated with planning, teaching, and assessing all content learning *for all learners* using the Texas state curriculum (TEKS). Teacher reflections will be required.

Course Content:
1. ***T***his course is designed to provide you with *INSTRUCTION* based on *RESEARCH* which, when coupled with your *FIELD EXPERIENCE*, will help develop your professional *DISPOSITIONS*, *KNOWLEDGE*, and *SKILLS* to effectively teach social studies in the elementary. These dispositions, knowledge, and skills will prepare you to effectively *PLAN*, *IMPLEMENT*, *ASSESS*, and *MODIFY* instruction as you work with and teach diverse learners.
2. The purpose of this course is to help prepare you for a career in the teaching profession. Emphasis will be placed on application and analysis of content knowledge, professional standards, and the development of methodological skills through field-based experiences. The nature of math, science and social studies as a discipline and the scope and sequence of appropriate content for each grade level will be applied and reflected upon. Constructivist principles and ideas will be practiced in the course and field. Active involvement in class projects and assignments will enable you to develop an understanding of curriculum, instructional methods and materials, and performance assessment techniques to improve student learning in elementary science. All pedagogical methods are based on education research, best practice and State and National Standards.
3. The 12-hour block is field-based and provides an integrated and holistic experience that will better prepare candidates for the complex task of educating children. Emphasis will be placed on content knowledge and the development of methodological skills through field-based experiences. Fifty-percent of the teacher candidates' time will be field-based in public school classrooms. The block integrates instruction through promoting: effective social studies teaching strategies, reflective teaching, designing lesson plans, evaluating student progress, effective classroom management and discipline, integrated teaching, and meeting the needs of diverse students. Each candidate will be placed in a classroom setting appropriate for the degree they are seeking. The candidate will spend at least 120 hours during the semester in a public school classroom as part of field experience. When in the field the candidate will be expected to assist the mentor teacher with campus duties when applicable as well as plan, implement, and assess social studies instructional teaching and learning. Throughout the field experience the mentor teacher and university faculty monitor and assist the teacher candidates. Your field experience is designed to allow you to work with diverse learners and diverse faculty in public schools. You will impact EC-6 student learning in a school setting collaborating with a mentor teacher and university supervisor as you develop the knowledge, skills, and dispositions related to planning, implementing, and assessing effective social studies instruction. There will be class requirements related to field experience and these are described in the CIEE 3335 Assignment section. CIEE 3335 is required courses for Elementary Certification.

Field experience provides a unique opportunity for teacher candidates to:

- begin the transition from a college student to a teacher,
- familiarize themselves with the culture of the social studies classroom in elementary schools,
- observe and put into practice the content concepts and skills learned in the course,
- better understand the learners, the processes involved in developing conceptual understanding in students, and multiple approaches to facilitate learning, and,
- observe and understand the complexity of teacher roles and responsibilities on a daily basis.

Course Descriptions:
CIEE 3335 is a teaching methodology courses designed to help teacher candidates gain competencies in planning, implementing, assessing, managing and modifying content instruction that meets the needs of diverse learners.

Student Guidelines

University Policies

- SHSU Academic Policy Manual-Students
  - Procedures in Cases of Academic Dishonesty #810213
  - Disabled Student Policy #811006
  - Student Absences on Religious Holy Days #861001
  - Academic Grievance Procedures for Students #900823
- SHSU Academic Policy Manual-Curriculum and Instruction
  - Use of Telephones and Text Messagers in Academic Classrooms and Facilities #100728

SHSU Dispositions and Diversity Proficiency (DDP) Standards

	DDP	CF	CAEP	NCATE
1.	Demonstrates an attitude of reflection and thoughtfulness about professional growth and instruction.	2	1.1 (InTASC #10) & 3.3	1. c., 1.g., & 4. c
2.	Demonstrates a commitment to using technology to create an authentic learning environment that promotes problem-solving and decision making for diverse learners.	2	1.5 & 3.4	1.b, 4.a., & 6.d.
3.	Practices ethical behavior and intellectual honesty.	3	1.1(InTASC #9) , 3.3, & 3.6	1.g. & 4.a.
4.	Demonstrates thoughtfulness in communication and an awareness and appreciation of varying voices.	3	3.1, 3.3	4.a.
5.	Demonstrates knowledge of second language acquisition and a commitment to adapting instruction or programs to meet the needs of culturally and linguistically diverse learners.	3 & 5	1.1 (InTASC #2)	4.a.& 4.d.
6.	Demonstrates ability to be understanding, respectful and inclusive of diverse populations.	3 & 5	3.1	4.a. & 4.d.
7.	Uses assessment as a tool to evaluate learning and improve instruction for all learners	4	1.1 (InTASC #6)	1.d. & 4.a.
8.	Demonstrates a commitment to literacy, inquiry, and reflection.	1 & 4	1.1 (InTASC #9) & 3.3	1. d, 1. g., & 4.a.
9.	Leads diverse learners to higher level thinking in cognitive, affective, and/or psychomotor domains.	5	1.1 (InTASC, & #2)	4.a.
10.	Demonstrates a commitment to adapting instruction or programs to meet the needs of diverse learners.	5	1.1 (InTASC #2 and #9), & 1.4, 2.3	1.c., 3.c., 4.a., & 4.d.

CF: Conceptual Framework
CAEP: Council for the Accreditation of Educator Preparation (see page 20-21 of CAEP Standards for cross-cutting themes and diversity characteristics)
NCATE: National Council for the Accreditation of Teacher Education

The Dispositions and Diversity Proficiency (DDP) Standards are administered and evaluated in prescribed courses to all educator preparation student in initial and advanced programs (*please provide additional information for the candidate if the DDP is administered during your course).*

College of Education Information

Accreditation

The programs within the SHSU College of Education have the distinction of receiving accreditation and national recognition from multiple accrediting bodies. All educator certification programs, including teaching and professional certifications, have received ongoing accreditation from the Texas Education Agency (**TEA**). Additionally, the educator preparation program has been accredited by the Council for the Accreditation of Educator Preparation (**CAEP**-formerly NCATE) since 1954. Many of the educator preparation concentration areas have also chosen to pursue national recognition from their respective Specialized Professional Associations (**SPA**), signifying the program is among the best in the nation. The programs within the Department of Counselor Education have also received accreditation from the Council for Accreditation of Counseling and Related Educational Programs (**CACREP**).

Course and Program Evaluation

Near the end of the semester, students are asked to take part in the University's adopted course evaluation system, IDEA. The assessments are completed online and instructions are emailed to each student. Students' assessments of courses are taken are systematically reviewed by the Dean, Associate Deans, Department Chairs, and individual faculty members. Only after the semester has completed are faculty members allowed to view aggregated results of non-personally-identifiable student responses.

The College of Education conducts ongoing research regarding the effectiveness of the programs. Students receive one survey in the final semester prior to graduation regarding the operations of the unit during their time here. A second survey occurs within one year following completion of a program, and is sent to students and their employers. This survey requests information related to students' quality of preparation while at SHSU. Students' responses to these surveys are critical to maintaining SHSU's programs' excellence.

CONTENT METHODS EXPECTATIONS

Methods Block Professionalism and Expectations:

- Check Blackboard regularly for assignments, announcements, grades, changes.
- Communicate with your course instructor for any concerns that could affect your learning, attendance, and participation in class.
- Observe regular attendance and prepare to actively participate in class and in the field.
- Engage in team collaboration and active listening
- Engage in thoughtful reflections on teaching practices and learning opportunities
- Relate or make cognitive connections between and among readings, discussions, activities, assignments and the PPR competencies.
- Consistently demonstrate good disposition.
- **Cell phones and computers are away during class unless otherwise instructed.**

Professional Participation

It is expected that teacher candidates be active, enthusiastic, and collegial participants in face-to-face and online activities during the semester. In addition, it is expected that course work is completed in a timely and professional manner on the schedule posted. Points are lost if these expectations are not fulfilled.

Field Experience:

Field experience is a **mandatory** component of the methods courses. It takes place in established public schools with strong mentors. During field experience days (at least 120 hours), candidates will have a variety of assignments that are directly related to this course and allow candidates to see connections among pedagogy, practice, and content. Any missed days/hours WILL be made up.

Field experience provides a unique opportunity for teacher candidates to:

- begin the transition from a college student to a teacher,
- familiarize themselves with the culture of the mathematics classroom in elementary schools,
- observe and put into practice the concepts and skills learned in the course,
- better understand the learners, the processes involved in developing conceptual understanding in students, and multiple approaches to facilitate learning, and,
- observe and understand the complexity of teacher roles and responsibilities on a daily basis.

EVALUATION PROCEDURES AND GRADING POLICIES

The evaluation system outlined below is an attempt to provide candidates with a significant role in determining their final course grade for all CIEE Courses. This system is based on my belief that the most important variable involved in determining the candidate's final grade should be the quantity of high-quality work completed, and all assignments submitted must demonstrate the quality of work expected of teacher candidates; Work is expected to be professionally written with correct grammar, tense, and spelling. It is important to realize that as a student, and future teacher, it is your responsibility to provide the highest possible quality work in a timely manner. **Extra credit is not offered in this course.**

EXPECTATIONS: EVALUATION PROCEDURES AND GRADING POLICIES

Due Dates for assignments:

The evaluation system outlined below is an attempt to provide candidates with a significant role in determining their final grade for the Methods Block. This system is based on my belief that the most important variable involved in determining the candidate's final grade should be the quantity of high-quality work completed. My requirement is that all assignments submitted must demonstrate the quality of work expected of prospective elementary school teachers; this means that you should write assignments as if your future administrators, superintendents, and parents will be reading it. Work is expected to be professionally written with correct grammar, tense, and spelling. You, in turn, have options regarding the amount of work you put into your assignments. You **earn** your grades…we don't **give** them.

- **Due Dates for Assignments:** Due dates will be announced well in advance and will be honored. No late work will be accepted except in **EXTREME** circumstances. "Extreme case" determination will be at the discretion of the methods professors. I will accept an assignment for a reduced grade up to 24 hours after the due date. After that time, ***the project still must be completed to pass the course,*** but the student will receive a zero.
- **Rewrites and Redos*:*** It is our policy **not** to offer rewrites or "redos" of assignments. It is our expectation that you will learn from our feedback and work to improve your next assignment. Please make sure you understand the directions and proofread your work.
- **A grade of D or lower will require that the course be retaken before you are eligible for student teaching.**

- ***Failure to demonstrate professional behavior and dispositions during field experience or in the methods classroom may result in a grade of "F" for the course and repeating the methods block or even dismissal from the program. This includes plagiarism or any other form of academic dishonesty as well as a campus dismissing you during your placement.***

- All out of class work is graded on content, professional language usage, grammar, punctuation, and spelling. All out-of-class assignments should be typed. Please note: Any written assignment that has five language usage, spelling, grammatical, or punctuation errors will not be evaluated. The candidate can resubmit the assignment for evaluation after all language usage, spelling, grammatical, or punctuation errors are corrected. The candidate could be required to sign-up and attend the SHSU Writing Center to receive writing assistance before being allowed to resubmit the assignment for evaluation. The professor will decide on the length of time allowed for completing the assignment.

- *Professor may alter the course assignments/schedule as necessary to enhance teacher candidate learning. Any changes will be announced in a timely fashion to candidates.*

Writing Policy

You are professionals and soon to be a college graduate. As such, we hold our students to a high standard when communicating with others, especially in writing. You will write frequently as an educator and in our classes. All written work must be typed and must meet the high quality standards expected of a classroom teacher. Your spelling, grammar, sentence structure, and style counts. Should you find writing to be problematic, the SHSU Writing Center offers help to those students who need assistance in meeting high standards. Please note that the tutors do not serve as proofreaders. Rather, they assist writers to organize their thoughts and to write more coherently. Bring your written work to the Writing Center, well in advance of due dates, and if necessary, solicit their assistance throughout the writing process. Be mindful that, as a future teacher of writing (which is now being taught in every subject area), your written work must be that of a professional. Present your assignments as you would if they were to be reviewed by a future administrator, member of the school board, or parents of prospective students.

Writing policy statement for Content Methods Block:

Any written assignment that has five language usage, spelling, grammatical, or punctuation errors will not be evaluated. The candidate can resubmit the assignment for evaluation after all language usage, spelling, grammatical, or punctuation errors are corrected. The candidate could be required to sign-up and attend the SHSU Writing Center to receive writing assistance before being allowed to resubmit the assignment for evaluation. The professor will decide on the length of time allowed for completing the assignment.

Academic Assistance: If you need help with your writing assignments, please call or visit the Sam Writing Center --- Farrington Building, (Phone) 936-294-3681

Time Requirement

It is expected that you will spend approximately three hours of prep and/or work time per each hour of class you are registered for. For example, CIED 4336 is a three hour course. Therefore, it is reasonable to expect to spend nine hours per week outside of class on assignments and projects related to this course.

Methods Block Expectations: Be Positive, Prepared, and Professional!

**Professionalism:* This set of courses represents your last significant preparation for teaching as a college student. You are preparing to enter the professional world in a few short months, so our expectations are very high. You have worked hard to get to this far in your educational career, and we are charged with sending competent, enthusiastic educators into the schools. As former elementary educators and administrators, we know what schools are looking for in new teachers and the behaviors that you exhibit now are a good indicator of your competency as a teacher. With that in mind, professionalism is of the utmost importance. As a part of your preparation for becoming a teacher, you will be expected to act in a professional manner. This includes:

Attendance and punctuality: (See also College of Education Attendance policy)

We expect you to be IN class ON time. Daily attendance is a course requirement because of the high level of interaction during the hands-on/minds-on activities in all classes. Group collaboration and discussion comprise a significant component of scheduled class time. If you find that you must miss a class, it is your responsibility to contact your classmates to find out what was missed. Participation points will be given in class at times and these cannot be made up. Please note that if you are more than 15 minutes late, or choose to leave early, you will forfeit your daily points. Any field time that is missed, for any reason, must be made up without exception.

Your instructors will only take responsibility for having handouts and materials at class *on the day initially provided.* If you have to be absent, be sure you have arranged for a peer to obtain materials for you. *After more than 1 three-hour absence, your final grade will be deducted by 5 points for each additional class hour missed..*

PLEASE NOTE: An absence is not an excuse to miss assignment deadlines – you may email the assignment prior to class time or ask a classmate to bring it in for you. Failure to do so will result in a zero (see "Due Dates"). Please plan ahead!

*Participation: Participation means more than attending the class.

- Participation means contributing to the discussion and making meaningful comments, both in small group and whole group situations.

- Participation means asking questions and actively encouraging other class members to contribute. But, please be sure not to monopolize discussions.
- Participation means actually doing the activities we have planned for you with a good attitude. No matter how easy or trivial something may seem, we have constructed each of our courses carefully to provide you with a meaningful, applicable experience
- Engagement: It is expected that you will demonstrate active engagement during in class and out-of-class activities. Active engagement means that you are actively involved in the lecture, Power Point, or class activity. In your field classroom, engagement means that you are working with kids, assisting your mentor teacher, and teaching lessons with a positive, professional attitude.

*Respect: You have the right to learn in a respectful environment. Be considerate of others. Listen while others are talking. Behave in an ethical and professional manner. Please turn your cell phones off and put them out of view when you enter the classroom.

*Attitude: Be curious, flexible, patient, take risks, and care about what you are doing! Attitude is equally important in class and in the field. You are expected to interact with a wide variety of people – from professors to administrators to children – and your attitude should always reflect that of one who wants to learn and who has a heart for teaching and children.

*Professional Dispositions: This course follows the SHSU procedures for continuous positive growth toward strong teaching skills and dispositions as reflected in the Assessment of Candidate's Professional Dispositions. It is the policy of the Department that positive teaching dispositions are a basic requirement. In the event of problematic demonstration of teaching dispositions, incidents will be documented and the candidate will be referred to the Professional Concerns Committee.

*Student Interaction Policy: When we are in the field, it is expected that you will maintain the highest degree of integrity and professionalism possible. With this in mind, we expect you to adhere to the following rules:

- Do NOT communicate with any public school student inside or outside school unless it concerns academics or classroom learning.
- Do NOT text, e-mail or access student Instagram, Snap Chat, or Facebook pages (or any other social media).
- Do NOT call students on their cell phones or home phones.
- Contact with students outside of school is prohibited.
- Do NOT give students rides or socialize with them or their families.

College of Education Attendance Policy

Regular and punctual attendance is required and will be documented every class period.
As per University policy, candidates will not be penalized for three (3) hours of absence during the semester. This class period absence should be used carefully for emergencies and illnesses. It is important that candidates notify the professor via email or the web based absence form for content methods prior to, or on the day of, the absence regardless of the reason for the absence.
Upon the second absence, after the three (3) hours of absence allowed by the University, the Department of Curriculum and Instruction will be notified and a notation will be made in the candidate's file. After the third absence, the candidate will attend a conference with the course professor as well as the Chairperson of Curriculum and Instruction to discuss and evaluate reasons for the absences, and to determine if the candidate needs to continue in the program. Excessive absences can constitute reasons for lowering of semester grades, and possibly, removal from the course or block of courses.
It is the student's responsibility to obtain prior approval from the instructor for making up class assignments. Documentation from the student may be required for approval. It is also the student's responsibility to retrieve handouts and materials from the missed class from classmates. Any missed group work may not be made up.

Tardies

If a student is fifteen or more minutes late to class or leaves class fifteen minutes or more before class is over, an absence will be recorded. A student who shows a pattern of being a few minutes late (but less than 15) will be notified that continuation of that pattern will result in an absence.

Class Assignments:

Science

5E Model Science Lesson Plan	50 points	
Inquiry Co-Teach lesson (with partner) & team evaluation	100 points	
Science Paper Bag Book	50 points	
Science Demo Opportunity with snapshot lesson plan	100 points	
Interactive Science Notebook with reflections	50 points	
Various In-class activities (participation points)	100 points	
PLT Reflection	50 points	
Service Learning Project (field-based)	100 points	

Programmatic/Other Assignments (3X = counts for Science, Math, and Social Studies)

Mentor Teacher Appraisal	150 points	
Professor Disposition Points – Classroom/Field	350 points*	
Thank you note/gift to mentor	Credit (disposition points)	

*See online Professor Disposition Appraisal Form

Grades:

A 90% -100%
B 80% - 89%
C 70% - 79%
D 60% - 69%
F below 60%

**Over 3 hours of absence will result in the lowering of your final grade by 5percentage points per additional hour missed.*
**The professor reserves the right to alter course requirements to better meet the learning needs of the teacher candidates.*

Note: ALL assignments MUST be completed to pass Methods Block. Please see the late policy regarding reduced credit, etc. If you do not meet the 24-hour late policy, you are STILL required to complete the assignment. You will not receive any points for the completion. However, failure to do so may result in failure of the course.

*Any unprofessional behavior, either in class or in the field will be reported to the Professional Concerns Committee. This may result in dropping the Methods Block for the semester or in expulsion from the program. If a campus does not wish for you to return to field, you will fail this course.

Course Description:

This unique classroom and field-based experience is designed to acquaint the *prospective* elementary teacher with a variety of instructional principles and practices for engaging children in the learning of relevant science concepts and skills. This course is intended to help teacher candidates develop the knowledge, attitudes, and skills required for you, as a new teacher, to effectively nurture children's curiosity and guide them in exploring and learning about the fascinating world around them.

The nature of science as a discipline and the scope and sequence of appropriate content for each grade level will be explored. Active involvement in class projects and assignments will enable teacher candidates to develop an understanding of curriculum, instructional methods and materials, and evaluation techniques for elementary science based upon educational research, contemporary practice, and state and national standards for science education. Teacher candidates will have opportunities to demonstrate your knowledge, attitudes, and skills both in class with your peers and with elementary

students during your field placement. Personal reflection on class experiences and learning is an expected component of your participation in this course.

The intent of this course is to immerse teacher candidates in the culture and context of the elementary/middle school with the idea that both confidence and competence in science teaching is key. The role of the teacher candidate throughout this experience is that of a learner and a teacher. The teacher candidate works collaboratively with practicing EC-6 teachers in field based settings.

Standards Matrix:
This course meets the following state and national standards:

- ✓ State Board for Educator Certification (SBEC)- http://www.sbec.state.tx.us
  Pedagogy and Professional Responsibilities (PPR)
- ✓ National Science Teachers Association http://www.nsta.org/pdfs/NSTAstandards2003.pdf
- ✓ Association for Childhood Education International (ACEI) - http://www/acei.org
- ✓ **SHSU Conceptual Framework**
- ✓ **National Council for Accreditation of Teacher Education** (NCATE)

National Research Council. (1995). *The National Science Education Standards*. National Academy Press, Washington, DC. http://www.nsta.org/publications/nses.aspx
Web address for state standards: http://tea.state.tx
Web address for specialty organization standards: www.nsta.org

CIEE 3335 Science in the Elementary Classroom

ACE-The teacher candidate works collaboratively with practicing EC-6 teachers in field based settings, and will reflect on those experiences.(ACE)

COURSE OBJECTIVES AND STANDARDS MATRIX for CIEE 3335 Science

Topics/Objectives	Activities /Assignments (field-based activity)	Measurement (including performance based)	Standards Alignment ✓ State Board for Educator Certification (SBEC)- *Pedagogy and Professional Responsibilities (PPR)* ✓ National Science Teachers Association Association for Childhood Education International (ACEI) - ✓ **SHSU Conceptual Framework** ✓ **National Council for Accreditation of Teacher Education** (NCATE)
The EC-6 science teacher explores the history and nature of science and identifies the role of science in contemporary classrooms.	Create a Science Journal with a "Science in my World" themed cover Explore the journey of science education today via PowerPoint. Construct a 5E lesson plan to teach to the classmates Create an Interactive Science Notebook	See Journal Peer Review Rubric Reflection Rubric	**PPR:** Standard 1 1.7k, 1.19k 1.16s-1.18s 1.19s-1.23s 1.6s -1.11s **NSTA/NSES**: IV **ACEI** 2.2 **CF: 1** NCATE: 1

The EC-6 science teacher manages classroom, field, and laboratory activities to ensure the safety of all students.	*Teach a hands-on Science Lesson	See Lesson Plan Rubric Class Science Demo	**PPR:** Standards I, III 1.12k - 1.18k 1.20k 1.11s – 1.22s 3.4s -3.6s PPR Domain 03 - Implementing effective, responsive instruction and assessment **NSTA/NSES**: I **ACEI** 3.4 **CF: 5** NCATE: 1, 2, 3
The EC-6 science teacher uses the correct tools, materials, equipment, and technologies.	*Teach a Science Lesson EC-6 Participate in a Metric Olympics competition (Activities that Integrate Mathematics and Science – AIMS) and write a reflection that addresses the prompt: *Why do children need to learn and use the metric system in science?*	See Lesson Plan Rubric See Reflection Rubric Class Science Demo	**PPR:** Standards I, III 1.12k - 1.18k 1.20k 1.11s – 1.22s 3.4s -3.6s PPR Domain 03 - Implementing effective, responsive instruction and assessment **NSTA/NSES**: III **ACEI** 3.3 **CF: 2** NCATE: 1
The EC-6 science teacher describes the processes of scientific inquiry and explains the role of inquiry in science instruction.	Complete lab activities and write a reflection in the interactive science journal. Students use the processes skills of science as they investigate sea shells. Identify three types of hands-on activities: guided, challenge & inquiry and participate in an exploration of foam. See: http://www.exploratorium.com	See reflection rubrics Class Science Demo	**PPR:** Standards I, III 1.12k - 1.18k 1.20k 1.11s – 1.22s 3.4s -3.6s PPR Domain 03 - Implementing effective, responsive instruction and assessment **NSTA/NSES**: III **ACEI** 3.3 **CF: 4** NCATE: 1
The EC-6 science teacher has theoretical and practical knowledge about teaching science and about how students learn science.	FOSS Kits – Full Option Science Systems FOSS and read "The Biological Basis of Thinking and Learning" by Lawrence Lowery	Class Science Demo	**PPR: PPR:** Standards I, III 1.12k - 1.18k 1.20k 1.11s – 1.22s 3.4s -3.6s PPR Domain 03 - Implementing effective, responsive instruction and assessment **NSTA/NSES**: IV **ACEI** 3.2 **CF: 1**
The EC-6 science teacher develops varied and appropriate assessments to monitor science learning.	Creating Classroom-based assessment tasks Cookie Rubric Activity Creating a Unit Performance Assessment Create formative assessments for lesson plan and for mini-lesson.	See unit rubric	**PPR:** Standards I, III 1.12k - 1.18k 1.20k 1.11s – 1.22s 3.4s -3.6s PPR Domain 03 - Implementing effective, responsive instruction and assessment **NSTA/NSES**: V **ACEI** 3.4 **CF: 4** NCATE: 2
The EC-6 science	*Write a Science-eyed Case Study Field	See science-eyed case	**PPR:** Standard IV 3.1s – 3.3s

teacher understands how science affects the daily lives of students and how science interacts with and influences personal and societal decisions.	Paper that identifies and describes science in the elementary and middle school Students conduct a long-term observation of Moon Phases and write a grade-level appropriate lesson plan for moon phases. Project Learning Tree Professional Development	study rubric See Moon Phases Rubric Reflection rubric	4.5s-4.15s 4.9k-4.12k PPR Domain 04 – Fulfilling professional roles and responsibilities. **NSTA/NSES**: VII **ACEI** 5.2 **CF: 5** **ACE**
The EC-6 science teacher knows and understands the science content appropriate to teach the statewide curriculum (TEKS) in physical science.	Students explore physics and simple machines by creating a bobble head Student identify state of matter and rewrite an ice-cream activity using the Five-E instructional model. Student map the states of matter TEKS strand K-8 and then reflect on *how elementary science programs are like an ice-cream cone.*	See Bobble Head Rubric Reflection rubric Class Science Demo	**PPR:** Standard I, II 1.8k-1.11k 1.10s-1.11s 1.23k, 1.23s 3.8s – 3.14s **NSTA/NSES**: VIII **ACEI** 5.1 **CF: 1** NCATE: 1
The EC-6 science teacher identifies the science content appropriate to teach the statewide curriculum (TEKS) in life science.	Students are introduced to the unit development process through a classic "Fishy Business" unit. Students explore the interdependence of living things and symbiosis through a "Fishy Feeding Frenzy" activity. Students explore the external anatomy (structure/function of fish) through Fish Printing – Gyotaku	See unit rubric	**PPR:** Standards I, III 1.12k - 1.18k 1.20k 1.11s – 1.22s 3.4s -3.6s PPR Domain 03 - Implementing effective, responsive instruction and assessment **NSTA/NSES**: IX **ACEI** 5.1 **CF: 1** NCATE: 1
The EC-6 science teacher knows and understands the science content appropriate to teach the statewide curriculum (TEKS) in Earth science.	Students conduct a long term observational moon phase study. Develop an integrated thematic science unit centered on one of four themes: 1. Nature of science 2. Properties, patterns, and models 3. Constancy and change 4. Systems	See unit rubric	**PPR:** Standards I, III 1.12k - 1.18k 1.20k 1.11s – 1.22s 3.4s -3.6s PPR Domain 03 - Implementing effective, responsive instruction and assessment **NSTA/NSES**: 023 **ACEI** 5.1 **CF: 1** NCATE: 1
The EC-6 science teacher can identify unifying concepts and processes that are common to all sciences.	Develop an integrated thematic science unit centered on one of four themes: Nature of science Properties, patterns, and models Constancy and change Systems	See unit rubric	**PPR:** Standards I, III 1.12k - 1.18k 1.20k 1.11s – 1.22s 3.4s -3.6s PPR Domain 03 - Implementing effective, responsive instruction and assessment **NSTA/NSES**: VII **ACEI** 3.1 **CF: 1** NCATE: 1

Technology Integration:

All methods courses will implement technology integrations:

-to apply technology to support instruction in various content areas in elementary. The courses will explore, evaluate, and utilize computer/technology resources to design and deliver instruction as well as to assess student learning.

-*Introduction/Application of Technology in Classroom

*Use of technology in instruction and learning
*Theory of learning and the role of technology
*Use of computer and technology in teaching and learning
*Review and critique of educational websites
*Identify methods and media for learning
*Select appropriate methods, media, and materials for more meaningful learning
*Use of various forms of technology in instruction
*Using the Internet and distance education
*Analysis of student work and materials used during instruction
*Current and future issues in instructional technology

-*Learn to apply technology in the instructional process

*Learn the fundamental principles, generalizations, or theories involved in applying technology in the instructional process
*Gain factual knowledge (terminology, classifications, methods, trends) used in applying technology in the instructional process
*Develop specific skills, competencies, and points of view needed by professionals while applying technology in the instructional process

-address a variety of PPR Standards, including the four Standards specifically addressed as follows:

The teacher understands procedures for designing effective and coherent instruction and assessment based on appropriate learning goals and objectives.

The teacher understands and applies principles and strategies for communicating effectively in varied teaching and learning contexts.

The teacher incorporates the effective use of technology to plan, organize, deliver, and evaluate instruction for all students.

The teacher monitors student performance and achievement; provides students with timely, high quality feedback; and responds flexibly to promote learning for all students.

Technology Integrations:

Standards Matrix:

Objectives	***Activities***	***Performance Assessment***	***Conceptual Framework SHSU COE***	***Standards***				
				SBEC	***ISTE***	***NCATE***	***NMSA***	***ACEI***
				Technology Applications Standards				
Demonstrate the knowledge and proper application of technology-related terms and concepts	Complete classroom activities appropriately incorporating terms and concepts	Website Resources; Technology Show & Tell; Organizational Spreadsheet	CF1, CF2, CF5	1.1k, 1.1s, 1.2s, 1.3s, 1.4s, 1.5s,1.6s, 1.7s, 1.8s, 1.9s, 1.10s, 1.11s, 1.12s, 1.13s, 1.16s, 1.17s, 1.18s	3	1	3.5k, 3.9p, 4.4k, 4.5p, 5.7k, 7.10k	2a
Meaningful application of data input strategies	Review & critique of various software and websites; Analysis of Student Learning	Website Resources; Technology Show & Tell; Organization Spreadsheet	CF2, CF5	1.1k, 1.2k, 1.1s, 1.2s, 1.3s, 1.4s, 1.6s, 1.13s, 1.16s	5	1, 2, 3	3.5k, 3.8k, 5.9p, 7.9k	2a, 3e
Develop a working knowledge of the ethical practices in making informed decisions regarding current technologies and their applications	Discuss and present conclusions	Technology Show & Tell; Website Resources	CF1, CF2	1.3k, 1.14s, 1.15s, 1.16s, 1.17s, 1.18s	4	1	2.2p, 3.5k, 3.9p, 5.6k, 5.6p, 7.9k, 7.10k	2a, 3e
Demonstrate process in identifying task requirements necessary to efficiently acquire, analyze, and evaluate a	Hands-On Computer Lab activity; Discuss and present conclusions	Integrated Technology Lesson plan; Technology Show & Tell;	CF1, CF2, CF5	2.2k, 2.3k, 2.3s, 2.8s	3	1, 3	2.2p, 3.5k, 3.9p, 5.6k, 7.9k, 7.10k	2a, 3e

variety of electronic information		Website Resources						
Apply search strategies in the efficient acquisition, analysis, and evaluation of electronic information	Hands-On Computer Lab activity ; Discuss and present conclusions	Analysis of Student Learning; Technology Show & Tell; Website Investigator	CF2, CF5	2.1k, 2.1s, 2.2s	4, 5	1, 2, 3	2.2p, 3.5k, 3.9p, 5.6k, 7.9k, 7.10k	2a, 2i, 3e
Demonstrate appropriate use of current technology in acquiring, analyzing, and evaluating electronic information	Hands-On Computer Lab activity; Discuss and present conclusions	Technology Show & Tell; Website Resources; Integratged Technology Lesson	CF2, CF5	2.3s, 2.4s, 2.5s, 2.6s, 2.7s	4, 5	1, 2, 3	2.2p, 3.5k, 3.9p, 5.6k, 7.9k, 7.10k	2a, 2i, 3e
Utilize task-appropriate tools to synthesize knowledge that supports the work of individuals and groups in problem-solving situations.	Student Projects for Classroom; Blackboard assignments and usage; Discuss and present conclusions;	Technology Show & Tell; Integrated Technology Lesson	CF1, CF2	3.1s, 3.2s, 3.3s, 3.4s, 3.5s, 3.6s, 3.7s, 3.8s, 3.9s, 3.10s, 3.11s, 3.12s, 3.13s, 3.14s, 3.15s, 3.16s, 3.17s	2	1	2.2p, 3.5k, 3.9p, 4.4k, 4.5p, 7.10k	2a, 2i
Create and Modify solutions that support the work of individuals and groups in problem-solving situations.	Hands-On Computer Lab Activities; Student Projects for Classroom; Blackboard Assignments and usage; Discuss and present conclusions; Use of Web 2.0 tools	Website Resources; Technology Show & Tell; Orgainzational Spreadsheet; Integrated Technology Lesson	CF1, CF2, CF5	3.1k, 3.2k, 3.1s, 3.2s, 3.3s, 3.4s, 3.5s, 3.6s, 3.7s, 3.9s, 3.10s, 3.11s, 3.12s, 3.13s, 3.14s, 3.15s, 3.16s, 3.17s	2	1, 3, 4	1.2k, 1.3k, 1.2p, 1.4p, 1.5p, 2.1p, 2.4p, 3.5k, 3.9p, 4.4k, 4.5p, 7.10k	2a, 2i
Evaluate the results of using task-appropriate tools to support work in problem-solving situations.	Student assignments using various software; Hands-on Computer Lab Activities; Use of Web 2.0 tools	Technology Show and Tell; Integrated Technology Lesson	CF1, CF2, CF4, CF5	3.3k, 3.14s, 3.15s, 3.16s, 3.17s	2	1, 2, 3, 4	1.2k, 1.3k, 1.4p, 1.5p, 2.1p, 3.10k, 7.10k	2a, 2i
Demonstrate communication of information in different formats and for diverse audiences	Technology Tutoring; Hands-on Computer Lab Activities; Skype discussions	E-Portfolio Website:Website Resources; Technology Show and Tell	CF1, CF3, CF5	4.1k, 42k, 4.3k, 4.1s, 4.2s, 4.3s, 4.4s, 4.5s, 4.6s, 4.7s, 4.8s, 4.9s, 4.10s. 4.11s, 4.12s	5	1, 4	1.2k, 1.3k, 1.2p, 1.4p, 1.5p, 6.4k, 6.1p, 7.10k	2a, 2i, 3b, 3c, 3d, 3e, 4, 5a, 5b, 5c, 5d
Plan and Organize instruction for students that incorporates the effective use of current technology for teaching and integrating the TEKS into the curriculum	Plan for delivery of instruction; Designing Technology Presentation	Website Resources; Technology Show & Tell; Integrated Technology Lesson	CF1, CF2, CF5	5.1k, 5.2k, 5.3k, 5.8k, 5.1s, 5.2s, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.9s, 5.10s, 5.11s, 5.12s, 5.13s, 5.17s, 5.18s	2,	1, 3, 4	1.2k, 1.3k, 1.2p, 1.4p, 1.5p, 2.1p, 2.4p, 3.5k, 3.9p, 4.4k, 4.5p, 5.6k, 5.7k, 5.1p, 7.10k	1, 2a, 3a, 3b, 3c, 3d, 4, 5a, 5b, 5c, 5d
Deliver and Evaluate instruction for students that incorporates the effective use of current technology for teaching and integrating the TEKS into the curriculum	Review of software and websites; Student Demonstrations	Technology Show & Tell; Website Resources; E-PortfolioWebsite; Integrated Technology Lesson	CF1, CF2, CF5	5.7k, 5.3s, 5.4s, 5.10s, 5.11s, 5.12s, 5.13s, 5.14s, 5.15s, 5.16s, 5.18s	2, 3	1, 3, 4	1.2k, 1.3k, 1.2p, 1.4p, 1.5p, 1.6p, 2.1p, 2.4p, 3.5k, 3.10k, 3.9p, 4.4k, 4.5p, 5.6k, 5.7k, 5.1p, 7.10k	1, 2a, 2i, 3a, 3b, 3c, 3d, 3e, 4, 5a, 5b, 5c, 5d
				PPR Standards				

Design instruction for all students that reflects relevant content and appropriate assessment	Designing Technology Presentation; Student Projects for Classroom	Website Resources; Technology Show & Tell; Integrated Technology Lesson	CF1, CF4, CF5	1.19k, 1.20k. 1.21k, 1.22k.1.23k, 1.24,	2	1, 2, 3, 4	1.2k, 1.3k, 1.2p, 1.4p, 1.5p, 1.6p, 2.1p, 2.4p, 3.5k, 3.9p, 5.6k, 5.7k, 5.1p, 5.6p, 6.2k, 7.10k	1, 2a, 3a, 3b, 3c, 3d, 3e, 4, 5a, 5b, 5c, 5d
Create classroom environment of respect and rapport , fostering positive climate	Student Demonstrations; Technology Tutoring	Technology Show & Tell; Website Resources; Integrated Technology Lesson	CF1, CF5	2.10k	2	1, 3, 4	5.6p, 6.4k, 6.1p, 7.1p	1
Create instruction that makes use of effective communication techniques, engaging instructional strategies, and efficient feedback	Designing Technology Presentation; Student Projects for Classroom; discussions	Technology Show & Tell; Website Resources; Integrated Technology Lesson	CF3, CF4, CF5	3.7k	2,3	1, 3, 4	1.2p, 1.4p, 1.5p, 1.6p, 2.1p, 2.4p, 3.5k, 3.9p, 4.4k, 4.5p, 5.6k, 5.7k, 5.1p, 7.10k	1, 2a, 2i, 3a, 3b, 3c, 3d, 3e, 4, 5a, 5b, 5c, 5d

Course Requirements: See Above Matrix and Assignments

*****Please note: Your dispositions will be evaluated both in the classroom and in the field. Continued unprofessional behavior unbecoming of a teacher candidate will result in an F in the class. The behaviors will be documented and submitted to the Professional Concerns Committee.***

*A grade in any methods course of "D" or lower will result in the candidate repeating all method courses before they are eligible for student teaching.

Program Requirements:

All required program uploads must be completed by no later than the week before grades are to be posted for the end of the semester. In order to receive your final grade for this course, you must complete all program requirements by the assigned due dates, and not later than a week before grades are to be posted for the end of the semester.

. The program requirements for this course are:

- Emerging Dispositions in Tk20
- Lesson Plans in Tk20
- Field Experience Documentation Log to Sam Web
- TWS training and a one lesson TWS sample
- THEA scores

Final Grades

To receive your final grade for this course, you must complete all program requirements by the assigned due dates. The program requirements for this course are:

- Emerging Dispositions in TK20
- Lesson Plans in TK20
- Field Experience Log in Sam Web
- Portfolio

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