# Curriculum and Teaching I Lecture and Lab

# Science CTSE 4090

**Spring 2021 Course Syllabus and Timeline**

**AUBURN UNIVERSITY SYLLABUS**

1. **Course Number:** CTSE 4090 **Course Title:** Science Methods **Credit Hours:** 4 (lecture and lab)

**Prerequisites:** Admission to Teacher Education and Senior Standing

**Requisites:** None

The course includes a lecture and laboratory field experience. There is a separate guide for the methods laboratory placement that is provided for class.

Professor:

Dr. Melody Russell

5004 Haley Center

phone: 334-844-6880

Office Hours: By appointment only

I will respond to emails typically within 48 hours unless I am away from the office. If you do not hear back within 48 hours of emailing please send another email. [russeml@auburn.edu](mailto:russeml@auburn.edu)

1. **Date Syllabus Prepared:** January 2021

# Text: Required:

**Kellough, R. & Kellough, N. 4th Edition. Secondary School Teaching: A guide to methods and resources. Merrill: Prentice Hall. New Jersey.**

**Kozol, J. (2012) Savage Inequalities: Children America’s Schools**

**USB flashdrive for videotaped lessons**

**Additional readings may be assigned for the course.**

**Office Hours: By appointment only**

On Campus (lecture): Mondays 5:00pm-6:50pm. – HC 2462/4 Combined Lecture and Lab

Lab: Wednesday, 8:00 am – 12:30 pm Haley Center 2462/4 or field placement in designated school until instructor provides direction on placement. Combined Lecture and Lab Field Placement lab times will be Weds during the time listed for the class only.

**Email:** [**russeml@auburn.edu**](mailto:russeml@auburn.edu)

# Please note some class meetings may be virtual via Zoom , Panopto or another virtual platform.

# Students should use a laptop or device that is not a cell phone for class. There are often assignments that must be completed and these can not be completed using a cell phone. Students must also have the video on for the entirety of the class and not appear distracted. Please make sure that you are in a place that is appropriate for classmates to view or use a background to avoid distractions (if at all possible). In the event that you are unable to do this just let the instructor know at the beginning of the class. Students should not be driving while in class, etc. for safety reasons. Students are also required to stay for the duration of the class unless otherwise instructed.

**Goals and Objectives –** In this methods course we will learn and practice methods of teaching aligned with “inquiry” from the NGS S and *applied within* a Learning Cycle Model for teaching as outlined in the Alabama Cours e of Study: Science. While coteaching and learning new educational methods, you will begin to reflect on practice and make the necessary changes required of professional science educators to improve practice.

# Course Description:

Planning, teaching strategies, evaluation techniques and classroom management procedures needed to be a successful science teacher.

The prospective Science teacher will become familiar with planning, teaching strategies, evaluation techniques and classroom management procedures needed to be a successful inquiry-based teacher. This course will combine hands- on experiences with learning theory. This course will address various issues relative to planning as well as effective teaching strategies, needed towards becoming a successful educator. We will also discuss modern ideas on cognition and learning for science students in the secondary school classroom. In addition, we will address various teaching.

Strategies that address issues of equity and diversity in the science classroom. Students will select and demonstrate various teaching strategies and work in the field with experienced teachers in local schools to master these skills. The course emphasis on higher-order reasoning and process skills in grades 6-12 science will use both state and national standards as a guide.

This course combines hands-on experiences with learning theory. We will discuss modern ideas on cognition and learning for science students in grades six through twelve. We will derive a working definition of science literacy, and then discuss attributes of effective science teaching. I will model some teaching strategies, which have been shown to be effective. We will discuss these, along with the objectives they were designed to accomplish. Then you will select your own objectives and use strategies to help students master them. By working with experienced teachers in local schools, you will learn how hands-on experiences are used to support meaningful learning in science. Our emphasis will be on learning higher-order reasoning and process skills in grades 6-12 science using state and national standards as guides.

# All assignments are to be typed, double-space d, and in APA style (6th ed).

1. **Course Objectives:**

The purpose of this course is to enhance your pedagogical skills and focus on teaching science. The science teacher should understand the nature of science, its content and related concepts, as well as implications of secondary science education, the lives of our students, our community and society. The focus of this course will be on exploring science teaching in a variety of ways. This course will also focus on equity in science teaching, learning, and the education of students. Particular emphasis is placed on connecting the science curriculum and science learning goals to the direct lifestyles and perceptions of secondary level students. In addition, this course explores learning and inquiry from the perspectives of the scientific methodology and through purposeful processes of discovery, conceptualization, and understanding.

Upon Completion of this course, students should:

* 1. **Master beginning science-teaching skills** *while also* managing students through peripheral participation and coaching with an experienced classroom science teacher.
  2. **Demonstrate their knowledge and abilities** to use methods supporting inquiry including demonstration, laboratory, and outreach projects, use of technology, questioning, discussion, and cooperative learning. ***[See weekly assignments].***
  3. **Properly plan and use standards-based practices** in the science classroom where they are most effective for student learning – i.e. use of a Learning Cycle Model. ***[See lesson plans].***
  4. **Self-assess their ongoing teaching abilities and dispositions for** professional growth in order to successfully meet the needs of diverse learners in the science classroom. ***[See dispositions form].***
  5. **Request and give professional assistance** in teaching and managing students through reflection***.***
  6. Demonstrate an increase in readiness to teach science to children in multicultural and diverse classroom settings.
  7. Engage in problem solving relevant to science teaching through consideration of teaching cases as well as their own experiences.
  8. Learn to formulate questions or challenges about teaching science.
  9. Develop, practice, and critique methods and hands-on activities that demonstrate science principles in the curriculum and their roles in real life situations.
  10. Develop and document strategies to demonstrate personal development as a teacher, and lifelong learner.
  11. Prepare and teach science lessons that are rich in content, and culturally varied instructional strategies that maximize *all* students’ opportunities and participation in science.
  12. Organizing instruction to actively engage students in learning science.
  13. Learn how to grow and improve your pedagogy.
  14. State specific reasons why you want to become a science teacher and how you plan to proceed.
  15. State a specific rationale and philosophy for the teaching of your secondary science subject.
  16. Describe national and state standards for scientific literacy among 13 - 18-year-olds. *[290-3-3-.14 All Sciences – Common Rules (1) (a) 4]*
  17. List specific learning objectives from the *Alabama Course of Study (Science)* and plan lessons to accomplish them. *[290-3-3-.14 (1) (a) 4, (b) 6]* List science process skills and how your teaching can help students master these. *[290-3-3-.14 (1) (b) 5]*
  18. Describe trends and frameworks for science curricula at the middle and high school levels. *[290-3-3-.14 (1) b) 7]*
  19. List ways to integrate mathematics with science teaching and define a unified science curriculum.
  20. Teach with confidence a hands-on, laboratory-based science lesson to accomplish specific learning objectives.

*[290-3-3-.14 (1) (a) 4, 5 (b) 4]*

* 1. Present a plan to use and maintain a science-teaching laboratory in your area of specialization. *[290-3-3-.14 (1)*

*(b) 3]*

* 1. Describe safety features of a well-managed science classroom and teaching laboratory, and how you will operate both to avoid accidents. Demonstrate knowledge of proper care of equipment and specimens. *[290-3-3-.14 (1)*
     1. *5]*
  2. Describe facilities, strategies and materials, which provide for optimal learning in your teaching area. *[290-3-3-*

*.14 (1) (a) 8]*

* 1. Demonstrate knowledge & competence in selecting textbooks & supplies appropriate for student learning outcomes.
  2. Design a science program around the Science-Technology-Society framework, using contemporary societal problems as a focus for science learning experiences. *[290-3-3-.14 (1) (a) 6, (b) 2]*
  3. Use computer technology (e-mail and worldwide web) to achieve multi-media science instruction. *[290-3-3-.14 (1) (a) 7]*
  4. Describe the role of the teaching internship in becoming a science teacher. Plan for your teaching internship.
  5. Present a portfolio of your science teaching, including the importance of decision-making, planning, professional organizations, in-service renewal, and personal fulfillment in this career.

1. Understand how to teach students whose first language is not English.
2. Use a variety of strategies that demonstrate the candidates’ knowledge and understanding of how to select the appropriate teaching and learning activities –including laboratory or field settings and applicable instruments and/or technology-to allow access so that all students learn. These strategies are inclusive and motivating for all students.

**The course also address the standards listed below relative to categories of teacher competencies outlined in AU EDUCATE Alabama. This is just used as a guide. Students will also be provided with insight on EdTPA. These standards include content knowledge, teaching & learning, literacy, diversity, and professionalism.**

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| --- |
| **Standard 1: Content Knowle dge** |
| 1.1 Demonstrate deep knowledge of subject--‐matter content and an ability to organize related facts, concepts, and skills |
| 1.2 Use learners’ prior knowledge, experience, and interests to plan content and to help individual students  attain learning goals |
| 1.3 Connect the curriculum to other content areas and real--‐life settings to promote retention and relevance |
| 1.4 Design instructional activities based on state content standards |
| 1.5 Provide instructional accommodations, modifications, and adaptations to meet the needs of each individual learner |

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| **Standard 2: Teaching and Learning** |
| 2.1 Design a classroom organization and management system |
| 2.2 Create a positive climate that promotes respect and responsibility |
| 2.3 Create a safe, orderly, and stimulating learning environment and nurtures responsibility, motivation, and engagement of learners |
| 2.4 Develop challenging, standards--‐based academic goals for each learner |
| 2.5 Engage learners in developing and monitoring goals |
| 2.6 Design coherent lessons that integrate a variety of instructional strategies |
| 2.7 Create learning activities that optimize each individual’s growth and achievement within a supportive environment |
| 2.8 Use formative assessments to adjust instruction |
| 2.9 Use summative assessments to measure learner attainment of specified learning targets |
| 2.10 Maintain evidence and records of learning performance to communicate progress |
| 2.11 Analyze and use disaggregated standardized assessment results for planning |
| **Standard 3: Literacy** |
| 3.1 Demonstrate standard oral and written communications |

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| 3.2 Foster and respond to effective verbal and nonverbal communication during instruction. |
| 3.3 Use age--‐appropriate instructional strategies to improve learners’ skills in critical literacy components |
| 3.4 Integrate narrative and expository reading strategies across the curriculum m |
| 3.5 Develop skills to solve math problems across subject areas using a variety of strategies to verify and interpret results and to draw conclusions |
| 3.6 Communicate mathematical concepts, processes, and symbols |
| 3.7 Identify and integrate available emerging technologies into the teaching of all content areas |
| 3.8 Facilitate learners' individual and collaborative use of technology |
| **Standard 4: Diversity** |
| 4.1 Develop culturally responsive curriculum and instruction in response to individual differences |
| 4.2 Communicate in ways that show sensitivity to diverse populations and respond appropriately to cultural, ethnic, and social differences. |
| 4.3 Demonstrate and apply to own practice an understanding of how biases can affect teaching |
| 4.7 Understand and recognize the characteristics of exceptionality |
| 4.8 Facilitate inclusive learning environments that support and address the needs of learners with learning differences and disabilities |
| 4.10 Design learning experiences that engage all learning **preferences** |
| **Standard 5: Professionalism** |
| 5.1 Work in partnership with cooperating teacher to facilitate student learning and well--‐being |
| 5.2 Participate in professional growth opportunities to improve teaching practice |
| 5.3 Perform as a leader at the program level and within the school |
| 5.4 Promote professional ethics and integrity |
| 5.5 Comply with local, state, and federal regulations and policies |

**Required AU Nametag –** Wares Jewelers to be ordered as a class through a student volunteer

**Required Materials for checkout from the LRC –** Digital recorder. Please check with your school regarding guidelines on videotaping.

# Required Text –

**Kellough, R. & Kellough, N. 4th Edition Secondary School Teaching: A guide to methods and resources. Merrill: Prentice Hall. New Jersey.**

**Kozol, J. (2012) Savage Inequalities: Children America’s Schools**

# Ancillary Text:

Alabama Cours e of Study. Available via download at Alex.org (Alabama Learning Exchange)

NGSS (Next Generation Science Standards) Available online.

\*Additional articles and readings will be disseminated or may be placed on reserve in the LRC or main library at least 1 week before the date for discussion on the reading You are responsible for reading all materials prior to the class meeting dates and should be prepared to facilitate and/or lead group discussions on articles assigned. Lack of preparation and failure to have read assignments may result in point deductions from your final course grades

*Cultural Diversity*

“I don’t care that you know. I want to know that you care” Author Unknown

*Participation*

This class is intended to be both interactive and collaborative. You are expected to come to class prepared to discuss assignments. We may also designate small groups during the initial class session, and you will spend some time doing collaborative work. Learning is most effective when we fully participate in the process of constructing knowledge. In this course, it is my expectation that everyone actively participate. Participation starts with preparation. It is my expectation that each class participant will be fully prepared for each day by having read the assigned materials and completed other work requested and required. In addition, please make sure to check your e-mail on a daily basis. Occasionally information regarding the course may be e-mailed and students are held responsible for any information sent via e-mail. If you are having problems with your account please make sure to get the issues taken care of as soon as possible.

*Expectations*

In this course, I expect you to:

* Reflect critically on all experiences and readings.
* Be prompt and in attendance at all course sessions.
* Demonstrate critical reflection through discussion, writing and course assignments.
* Complete assignments to the best of your ability.
* Communicate expectations and ideas.
* Recognize and validate the values of other class members.
* Participate fully in all class discussion

# Weekly Lecture and Lab Schedule

Pleas e note that lab meeting at the field placement may be changed at the dis cretion of the ins tructor. Some of the lab dates may also be designated as field trips for professional development. Check your e-mail frequently. In addition, topics may change bas ed on the pacing of the course. Reading as s ignments are usually pos ted on Canvas and/or given at least 1 week before the next class meeting when they will be due. Also note that some lecture days may also be used for lab hours. We may also have multiple field trips for professional development that may be on designated days for the lab field placement. Please note that field placement times may be changed to in class meetings or workshops. Changes may also occur if specified based by the placement site.

Monday January 11, 2021 Meet for class in via Zoom

Introduction and review of syllabus

Wednesday January 13, 2021 Review methods laboratory placement guidelines-class meeting via Zoom

**Friday January 15, 2021 Last Day to Add Course**

January 16-Feb. 1 Drop course penalty days-dropping a course during these days will result in a $100.00 drop fee per course dropped.

**Monday January 18, 2021 Dr. MLK Jr Holiday-No class**

Wednesday January 20, 2021 **Tell me about yourself presentation**

Monday January 25, 2021 Lesson plan development-

**Microteaching #1**

10th class day

Wednesday January 27, 2021 Lesson plan development-

# February 1st 15th class day. Last day to drop course with no grade assignment Last day for potential tuition refund for dropped class

Monday February 1, 2021 Lesson plan development-

Effective teaching strategies

(SLO 6)

**Microteaching #2**

Wednesday February 3, 2021 Lesson planning/Field trip-Project Wild and Project Learning Tree (tentative)

Monday February 8, 2021 **Reflective reading assignment #1 due today**

Instructional strategies for the science classroom

Wednesday February 10, 2021 Field placement (tentative)

Monday February 15, 2021 Assessment: Assessment tools in inquiry: Questioning, discussion, concept mapping, lab practical, journaling, and other forms of alternative assessment

**Reflective reading assignment #2 due today**

Tuesday February 16, 2021 Wellness day-No class

Wednesday February 17, 2021 Scheduled field placement/or class

Monday February 22, 2021 **1st exam**

Wednesday February 24, 2021 Scheduled field time/workshop or class

# Wednesday February 24 Early alert/midterm grade

Monday March 1 , 2021 Equity in science teaching (SLO 9,10,11)

**Microteaching #3**

Midsemester-Early Alert midterm

Wednesday March 3, 2021 Scheduled field time

Monday March 8, 2021 Equity in science teaching (SLO 9,10,11)

Wednesday March 10, 2021 Wellness day, No class

March 11, 2021 41st class day

Monday March 15, 2021 Classroom Management Equity in science education

Wednesday March 17, 2021 Scheduled field time

Monday March 22, 2021 Classroom Management Equity in science teaching; Lab safety

**Reflective Reading assignment #3 due today**

Wednesday March 24, 2021 Scheduled field time

Monday March 29, 2021 Effective teaching strategies

**Microteaching #4 due today**

Wednesday March 31, 2021 Scheduled field time

Thursday April 1, 2021 Wellness day-no class

Monday April 5, 2021 Equity in science teaching and Multicultural Science Education

Wednesday April 7, 2021 Scheduled field time

Monday April 12, 2021 Effective teaching strategies

Wednesday April 14, 2021 Scheduled field time

Monday April 19, 2021 Strategies in Effective Science Teaching

Wednesday April 21, 2021 Last day of class for lab

Strategies in effective science teaching

## Wrap up discussion on topics covered

TBA-May be Scheduled field time or Meet in HC

# Outreach Reflection Paper and Outreach Documentation due

Thursday April 22, 2021 Last day to Withdraw from a class with no grade penalty “W” assigned

Last day of classes

April 23-25 Study/Reading Day

# April 26-30 Final Exam Period –There will be a Final Exam for this course.

May 1-3 Commencement

# Final exam CTSE 4090-See AU final exam schedule –Since the class meets two days a week. Information on date and time for the final will be provided based on the AU final exam schedule date (at the discretion of the professor for the course). This is to be sure no students have conflicts with another class exam. Tentatively the 2nd exam will be based on the Monday meeting time and date. This date should be April 26, 7:00pm-9:30pmCST.

1. **Cours e requirements and evaluation.** Because this is a professional program, you will be evaluated using multiple means of authentic assessment: Pedagogical knowledge, reflective writing, teaching performance, and self-assessment. **Every student in this class MUST have a completed fingerprint background check and be approved to work with youth in the schools. If you have not done this please see me immediately.**

Grading Scale:

|  |  |
| --- | --- |
| A | 90%-100% |
| B | 80%-89% |
| C | 70%-79% |
| D | 60%69% |
| F | <60% (less than 60) |

Grading Scale

At Auburn University, a 4.0 grade scale is used. An A equals 4.0; B, 3.0; C, 2.0; D, 1.0; and F equals 0.0. Students must maintain a 2.0 average GPA in all courses in order to progress in this program. If addition, students must earn at least a D in each individual course in order to earn credit and progress to the next course.

Grades of “D” are possible, but do not give credit for this course-failure (D or F). Students must retake the course if their final course grade is below a “C.”

The final grade for this course will be based on lecture assignments, exams, quizzes and the field experience evaluations. You must pass the lecture and laboratory portion of the course to receive a passing final grade for the course.

***General grading rubric for assignments***

100%: beyond the call of duty; strikingly impressive; excellent in every way 90%: both complete and showing evidence of original, active, critical thought 80%: all specified aspects of assignments minimally completed

<75% one or more aspects of assignments missing or unacceptable

## 8. Course Evaluation

**As s ignments** Points

4 Microteaching lessons at 5 points each 20 points

4 unannounced quizzes at 5 points each 20 points

1st Exam 20 points

2nd Exam 20 points

Reflection assignment 1 5 points

Reflective assignment 2 5 points

Reflective assignment 3 5 points

Outreach experience reflection paper and 5 points

Outreach experience (may be designated by instructor) Both must be completed in order to receive credit for the assignment.

***Laboratory Field Placement S/U*** (if student receives an unsatisfactory rating based on failing ratings on the Science Ed. COI (e.g. failure to turn in lesson plans or assignments, low ratings on multiple standards in COI) the student will automatically receive a 25 point deduction from final grade for CTSE 4090 methods course). This unsatisfactory rating in the field component for the class will result in -25 points from the final grade.

***Project /Assignment Descriptions***

## Microteaching/Inq uiry-based demonstration “Teach-a-Lesson” (4 presentations at 5 points each) You will perform an inquiry based demonstration which actually “teaches something” to the class.

This mini- lesson is an opportunity for you to micro-teach to your colleagues and receive constructive feedback. You are expected to be creative and the lesson must be interactive. The 2 microteaching lesson may address any topic and the additional 2 microteaching lessons must be on a science topic (of your choice.) Make sure that the presentation is very hands-on and interactive. In essence, the lesson plan should be designed to “teach something” to the class in no more than 10 minutes. If you have a hobby or special skill, you can demonstrate your skill or a technique, etc for the 1st microteaching lesson. Therefore, you must plan appropriately and determine what knowledge/principle, etc. is critical for the learners involved and the most effective way to convey the primary goals of the lesson. ***The lesson will be timed and a sign-up sheet will be provided.*** *No exceptions or late presentations will be accepted) . A* checklist will be provided in this syllabus. Students will have 10 minutes for the mini-lesson.

Total points possible 5 (1 point each)

Assignment will be graded based on the following:

* 1. Focuses students immediately before performing demonstration.\_\_\_\_\_
  2. Explains to students by showing.\_\_\_\_\_
  3. Demonstrates the ability to interest students.\_\_\_
  4. Asks students to share their observations.\_\_\_
  5. Alerts students to essential learning.\_\_\_\_\_

## Laboratory experience Required-Automatic 25 point deduction if student receives an unsatisfactory rating on final evaluation from mentor teacher and university supervisor Students will also not pass the methods course if they do not meet the field placement requirements and pass the evaluations for the field placement.

Through a cooperative arrangement with local teachers, you will work in the preparation and implementation of interactive demonstrations on current science topics with students. Laboratory placements will be at local/area schools. This class requires that you are on-site at an assigned school for the laboratory field experience.

\*You will keep a log of your activities there for this practicum experience. You may be assigned a partner from this class for your classroom teaching.

\*Please note that any violation of the AU student policy ehandbook code of conduct in the student handbook may result in automatic dismissal from the field placement site and the student may receive an automatic 50 point deduction from the final grade for the CTSE 4090 course. This is at the discretion of the instructor for the course and in accordance with AU policy.

\*Documentation to record your visits must be signed by your cooperating teacher. Attendance is mandatory and you will be expected to attend during each Wednesday during the 8:00am-12:30pm-designated time for the laboratory experience (unless you are instructed to meet in class or on campus). There may also be field trips or virtual workshops designated on some lab days (e.g. AMSTI, Project Wild/Learning Tree). This information will be provided to students prior to the field trip.

\*Your mentor teacher will complete a sign in sheet for you each visit. Failure to report to the laboratory field placement

will result in an incomplete for the course. In addition, failure to receive satisfactory science education evaluations and feedback from mentor teacher and university supervisor will result in automatic deduction of 25 points for the laboratory experience (which is part of the lecture class so you point deduction for lecture will be 25 points) and may result in student not passing the methods course and referral to the Department Chair or Dean’s office for review.

**\*No unexcused absences will be allotted for the laboratory experience because attendance is paramount and mandatory for your practical experience to be fulfilling**. Absences not in accordance with the official AU absence policy may result in 5-point deduction from the final grade for the course for each infraction (at the discretion of the instructor for the course). However, please note that both unexcused and excused absences must be made up. Failure to do this may result in not passing the class.

\*Each absence may result in a 5 point deduction unless in accordance with AU absence policy (at the discretion of the instructor for the course). Sign-in sheets will be provided at the school site to document attendance. Excessive absences may result in withdrawal from this course or incomplete for the methods course. In addition, other lab days might be designated as in class days however; students will be notified in ample time. Additional information regarding placements will be provided. More than one excused/unexcused absence may result in referral for withdrawal from the CTSE 4090 course and a 5-point deduction from the final grade for the course for each infraction (at the discretion of the instructor for the course).

\*Students will receive a midterm assessment and if the midterm assessment is unsatisfactory, the student may be recommended to drop the course. An action plan may be developed (at the discretion of the instructor for the course) and if the student does not improve in the areas outlined by the end of the semester the student may be at risk of the course (lecture and lab).

\*All excused or unexcused absences must be made up before the end of the semester.

\* Please note that if the mentor teacher allows students can attend the field placement site additional hours. The additional field time will enhance students teaching effectiveness so this is strongly encouraged.

1. ***1st Exam and 2nd Exam-Exam 1 (20 points) Exam 2 (20 points)***

*To evaluate your understanding of the various concepts, and terminology discussed in the class. The format of the midterm will be short-answer/discussion midterm.*

1. ***4 unannounced quizzes at 5 points each (20 points total)***
2. ***Outreach experience and outreach reflection paper 5 ho urs (5 points)***

There may be opportunities provided for students to complete this outreach experience component face to face. If face 2 face options are not possible then the instructor will provide an alternative assignment Students will participate in an outreach experience volunteering at the Forest Ecology Preserve.

\*Please make sure that you have completed a fingerprint/background check with Professional Ed. Services. I will provide more information from the FEP in the next few weeks so you can decide what volunteer outreach experience you will select. In the event that you can not attend the scheduled dates that we are given for volunteering at the Forest Ecology Preserve you MUST contact the professor for this course to determine what volunteer outreach experience that you will be able to complete. DO NOT participate in any volunteer outreach experience without first receiving permission from the professor for this course. Failure to adhere to this guideline may result in you not receiving credit for this assignment at the discretion of the professor for the course. Students will turn in documentation of the hours completed. Failure to inform the instructor of what you plan to do for the volunteer outreach experience by March 8th and complete this experience by the April 21 deadline (unless you are volunteering at the FEP and the field trips were cancelled due to weather) will result in point deduction from final grade for the entire assignment –Paper and outreach experience (5 points total)-At the discretion of the instructor for the course. You can not currently be working where you volunteer. This must be a new experience.

***Outreach reflection paper and documentation of outreach experience hours. Must complete 5 hours (5 points) and turn in the completed paper for credit.***

Students will write a minimum two page single-spaced reflection paper on their volunteer outreach experience and the paper must include the following questions. In the event that due to unforeseen circumstances students can not complete the outreach experience an alternative assignment will be provided.

* 1. What new insights do you gain from the outreach experience?
  2. What will you do in your own classroom to integrate more nontraditional and informal science experiences in your classroom?
  3. What did you do as part of your outreach hours and how has this helped you improve professionally?
  4. What do you think the students gained from the experience based on your observations?
  5. Provide a brief overview of what you did for your outreach hours?

1. ***Reflection Paper for Assigned Readings 1, 2, and 3 (5 points each)-15 points total***

Students will be provided specific assigned readings where they will be required to write a two-page minimum (3-page maximum) reflection single spaced/no-creative margins). Guiding questions will be provided with each assigned reading. Students will be given at least 1 week notice of assigned reading due date. Questions for each assigned reading are as follows and each question is worth 1 point. Please note that although you may be assigned multiple chapters for the reflective readings you are to write your reflection from a “holistic” perspective to encompass all chapters covered. In addition, the professors for this course may assign additional readings to discuss for the class or be covered in pop quizzes. Complete the assignment with numbers listed and then include the question and your answer/response.

1. Which surprised you the most about the assigned reading?
2. What did the assigned reading tell you that you already knew?
3. What did the assigned reading tell you that you did not already know?
4. What implications does this assigned reading have for teaching students?
5. What part of the assigned reading influenced you the most and how will you implement this in your own classroom?

In the event that there are AU critical conversation events for one of the reflection papers students may write a two-page minimum (3-page maximum) reflection (single spaced/no-creative margins). Students must notify the instructor of the course if they plan to do one of the reflective assignments based on a critical conversations event. Guiding questions will be provided with each assigned reading. Students will be given at least 1 week notice of assigned reading due date. Questions for each assigned reading are as follows and each question is worth 1 point. Please note that although you may be assigned multiple chapters for the reflective readings you are to write your reflection from a “holistic” perspective to encompass all chapters covered. In addition, the professors for this course may assign additional readings to discuss for the class or be covered in pop quizzes. Complete the assignment with numbers listed and then include the question and your answer/response.

1. Which surprised you the most about the presentation by the speaker?

1. What did the speaker tell you that you already knew?
2. What did the speaker tell you that you did not already know?
3. What implications does the information the speaker covered have for teaching students?
4. What part of the presentation by the guest speaker influenced you the most and how will you apply what you have learned?

F. TELL ME ABOUT YOURSELF/TELL US ABOUT YOU. Homework assignment. Failure to complete this assignment may result in 5 points being deducted from final grade. This assignment is S/U-Satisfactory if all questions answered. Unsatisfactory if all questions are not answered and assignment is not completed based on the guidelines.

Directions: Answer each question completely and truthfully. This assignment is to be done as a PREZI presentation. You are only allowed to have 10 slides in this presentation. The entire presentation must contain the following: 10 slides, 5 website links, and 5 pictures.

You must answer the following questions in the Prezi presentation.

1. Tell me about your hometown (socio-economic status, location, town characteristics, student diversity, etc.)
2. Tell me about your high school (socio-economic status, location, town characteristics, student diversity, etc.)
3. Why do you want to become a science teacher or why did you become a teacher?
4. Tell me two interesting facts about yourself and how they shape you as a person?
5. Address a “good” science experience during any grade-level and how it influenced your perception of science.
6. Address a “bad” science experience during any grade level and how it influenced your perception of science.
7. What do you feel is the “purpose” of science in public/private school?
8. What do you think is the role of a science teacher?
9. What is an example of a technology-based lesson that you can integrate into your classroom based on your content area?
10. What types of technology will you use in your classroom and how will you explain to students the importance or relevance of technology?

## G. Canvas, or Zoom discussion, online discussion board

There may be some class meetings that utilize Canvas and entail on-line discussions or live chat discussions. Students are required to log in and participate in all discussion. Failure to participate will be considered an unexcused class absence and may result in a 5-point deduction from your final grade for each time that you fail to participate.

# Class Policy Statements:

Partic ip atio n: Students are expected to participate in all class discussions and participate in all exercises. It is the

student’s responsibility to contact the instructor if assignment deadlines are not met. Students are responsible for initiating arrangements for missed work.

Attendance/Absences: Attendance is required at each class meeting. If an exam is missed, a make-up exam will be given only for University-approved excuses as outlined in the AU ehandbook. Arrangement to take the make-up exam must be made in advance. Students who miss an exam because of illness need a doctor’s statement for verification of sickness and should clear the absence with the instructor the day they return to class. Other unavoidable absences from campus must be documented and cleared with the instructor **in advance**.

Students are expected to attend all scheduled classes on campus AND scheduled field hours. You should give prior notice whenever possible of any extenuating circumstances that cause you to miss class or field commitment – notification does not mean that you are excused from class. **Only documented excuses as listed in the AU guidelines/student handbook are permissible without penalty**; and **documentation must be submitted within seven days of missing class.** Students may lose five points from their final course grade for each undocumented abs ence (at the discretion of the instructor of the course). Two tardies to class (more than 5 minutes late) will count as one unexcused abs ence and will res ult in a lose s of five points from the final course e grade. After three unexcused absences (or 4 tardies), students will be referred to the Office of Student Affairs to be withdrawn from the course.

* Students are responsible for checking class emails and Canvas daily, if you use email or Canvas. You are to use your AU official email address only for all correspondence with the instructor for the class.
* Classroom Behavior: The Auburn University Classroom Behavior Policy is strictly followed in the course;

please refer to the Student Policy eHandbook at [http://www.auburn.edu/s tudent\_info/s tudent\_policies /](http://www.auburn.edu/student_info/student_policies/) for details of this policy.

Unannounced quizzes: There will be 4 unannounced quizzes. (5 points each)

Dis tance Learning Students: Unless specific instructions have been given for a designated course,

students in distance education courses shall take all closed resource examinations under the supervision

of an approved proctor. Examples of approved proctors include a school superintendent, a principal of a

high school, or a dean or department head of a college. Proctors shall be verified and exams shall be sent

directly to the proctor, who will manage the examination in a secure manner, requiring students to present

a picture ID.

Accommodations: Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternative time can be arranged. To set up this meeting, please contact me by e-mail. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to make an individual appointment with the instructor during the first week of classes – or as soon as possible if accommodations are needed immediately. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).

Hones ty Code: The University Academic Honesty Code and the AU ehandbook Rules and Regulations pertaining to Cheating and all Academic Honesty policies will apply to this class. All portions of the Auburn University Student Academic Honesty code (Title XII) found in the Student Policy eHandbook at [http://www.auburn.edu/s tudent\_info/student\_polic ie s /](http://www.auburn.edu/student_info/student_policies/) will apply to this class. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

Professionalism: As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College’s conceptual framework. These professional commitments or dispositions are listed below:

* + Engage in responsible and ethical professional practices
  + Contribute to collaborative learning communities
  + Demonstrate a commitment to diversity
  + Model and nurture intellectual vitality

# Justification for Graduate Credit for Graduate Credit only-

Graduate courses “should be progressively more advanced in academic content than undergraduate programs” and should “foster independent learning” (SACS guidelines 3.6.1 and 3.6.2).

Factors to consider in evaluating a course for graduate credit include but are not limited to the following:

use of specific requisites; content of sufficient depth to justify graduate credit (materials beyond the introductory level); content should develop the critical and analytical skills of students including their application of the relevant literature; rigorous standards for student evaluation (all students in a 6000-level course must be evaluated using the same standards); course instructor must hold graduate faculty status or be approved by the Dean of the Graduate School.

Policies and Procedures

If normal class and/or lab activities are disrupted due to high number of students experiencing illness or an emergency or crisis situation (such as a widespread H1N1 flu outbreak), the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.

Confidentiality is essential in this course. Any assignments, discussions, cases or episodes are not to be shared outside of this class.

\*Please note that lack of professionalism in this course will not be tolerated. This includes making any derogatory of negative comments about the course and its course contents, students, or the instructor of the course, which can be deemed as unprofessional and will be duly noted and reported to the appropriate administration. Please maintain professional at all times both in the classroom and at the schools during your field placement and refrain from all derogatory or defamatory comments outside or inside of class about the instructor, teachers, school systems and administrators, other professors or classmates. If it comes to the attention of the instructor that a student is exhibiting this unprofessional behavior disciplinary actions may be taken to remove the student from the course and recommendation for removal from the program due to violation of the professional behaviors and memorandum of understanding contracts.

**Science Education Field Experience Code of Conduct:**

**Please be mindful that appropriate conduct is paramount to the success of your Field Experience. Students are required to adhere to the following guidelines regarding dress code:**

* **No flip-flops**
* **No baseball caps or hats**
* **No food or drinks in the classroom if you are teaching (i.e. do not carry a bottle of water of cup of coffee around the classroom).**
* **No low-cut blouses or shirts, shorts, or mini-skirts**
* **No tee-shirts (only on spirit day)**
* **Tattoos and body piercings should be concealed and discrete so as not to draw unnecessary attention.**
* **No gossiping or unproductive behaviors or discussions regarding university supervisors, instructors, or the College of Education.**
* **No exceptions regarding the dress code outside of spirit day**
* **No excessive complaining about assignments, professors, courses, teachers or students to other colleagues, teachers, students etc. Any and all concerns must be directed to your university supervisor so that they can arrange a meeting to address your concerns.**
* **Students are not to attend placement sites under the influence or inebriated. If it is determined that the student is under the influence of any substance they will automatically be dismissed from the placement site for that day and will be subject to dismissal from the program and receive an unsatisfactory for the Clinical Residency.**

**Failure to adhere to the policy on professionalism may result in your receiving an unsatisfactory rating for the Methods lecture and lab component. You must pass the laboratory component in order to pass the methods course since they are taught together.**

**In the event that your university supervisor arrives and you are not dressed according to the dress code, you may be asked to make-up the day, which would be considered an unexcused absence. Receiving this document and reviewing the document as part of the clinical residency orientation for science education clinical resident means that you comply with this document and will abide by the guidelines in the c o d e of conduct listed.**

**\*Students will also be required to sign a professionalism contract and COE memo of understanding contract**. **Failure to comply with the guidelines in this contract will result in receiving an unsatisfactory rating for the methods course lecture and lab.**

**GoReact Virtual Observations**

Intern Observation Guidelines Students will be observed using GoReact platform a minimum of four observations. Students will have intern feedback conferences via Zoom or another online videoconferencing platform. We will also have a review of using GoReact to familiarize students. Students may also be observed using Zoom or another virtual platform (or possible observed face2face to be determined by the instructor for the course).

See below for information on GoReact:

For Students:

[Student Training Video](https://goreact.wistia.com/medias/khx8jd3sb0)

[Student Tech Support](https://help.goreact.com/hc/en-us/requests/new)

### **Online Student Learning Expectations**

All students in this course are expected to have all the equipment and software needed to be successful in the course.

All students are expected to contribute to their own learning as active and well-prepared participants. Weekly modules will provide various opportunities for reading, reflection, applied experiences, collaboration, and writing. Since these activities are woven through the entire week and generally do not require your “electronic presence” at any particular time or day, there should be no need to "miss" class. You should plan on spending the same amount of preparation and “in class” time on this course as you would if you were taking the course face-to-face.

Assignments will be submitted via Canvas and you should check your email and Canvas regularly for updates. The learning activities for each week are carefully sequenced and offered in small chunks so you can accomplish reasonable amounts throughout the week. You should log on to the course website regularly to work through course materials and participate in course discussions.

For more detailed information about university grading standards, please refer to information on the following link: [Auburn University Undergraduate Academic Policies on Grades (Links to an external site.)](https://www.auburn.edu/cosam/departments/student-services/academic-policies.htm#grades)

#### **Posting/Appealing Exam and Assignment Grades**

All exam and assignment grades will be posted to Canvas. Students will have five business days from the date that the exam/assignment scores are posted on Canvas to send an email to the instructor requesting grade adjustments on their work. To appeal a grade that you have received, please compose and send an email to your instructor writing out the exam or assignment in question, indicating the answer you submitted, and providing a written justification from the reading/class notes/etc. on why you think your answer is correct.

Once received, the instructor may or may not communicate with you regarding your appeal. Ultimately, the instructor will render a decision. If no appeal is sent to the instructor after five business days, the assignment score is final. Failure to monitor your progress as the semester progresses does not warrant a re-grade on assignments evaluated earlier in the semester. Once the 5-day appeal period has passed, students forfeit their right to have the graded material reassessed at a later date.

**Late Assignment Policy**

# Late/remedial work policy

**Please note assignments will NOT be accepted late unless the student has a university approve d excuse.**

It is very important that students submit work on time, or they will find it very difficult to catch up. All work in the course (e.g., assignments, discussions, exams, quizzes, etc.) will be due by 5:00pm CST on the date noted on the class calendar. Students should reach out to their instructor immediately to discuss any concerns. In situations where you are experiencing technical difficulties submitting your assignment near the deadline, please consult the Canvas help desk resources available in left navigation. Please work to avoid encountering technical difficulties near the assignment due dates by completing your work ahead of deadlines.

**Make Up Policy**

Students who miss the normal exams will need to contact the instructor and turn in the valid excuse within **48 hours**from the time that the exams were given. The makeup exam schedule is determined by the instructor and will need to be done within ONE week (5 work days) from the time that the exams were given. Students will need to check the class email for the makeup details. Students who miss the makeup without valid excuses will get zero on the exam.

The format, questions and difficulty-level of make-up exams are not guaranteed to be same as the normal exam, which are at the discretion of the instructors. Students are not allowed to choose the make-up dates, formats on their own.

**Valid excuses**include: 1). illness documented by a physician. 2) evidence of personal or family emergency. 3) official university excuses.

**Excuses are only accepted for the exams and missed assignments due to one of the university approved excuses.**

**Faculty and Communication Feedback**

At the beginning of each course, make sure that you understand the instructor’s preferred mode of communication and any specific communication protocol. One of the best ways to be effective as a student is to understand the instructor’s expectations and operate within those boundaries. Students should give the instructor **48 hours** to get back to them on any communication, and **one week** for grading turnaround time  on major assignments. **The instructor reserves the right to alter these feedback parameters due to contingencies such as holidays, course progress, campus emergencies, weather, holidays, professional activities, etc. with notice provided.** If students have concerns about communication or feedback, they should always go to the professor first. Students should explain their concern as clearly as possible without judgment or emotion. Effective communication is an important skill, and every interaction in their program is an opportunity to develop this skill.

**Your Auburn University email address is the university-approved form of communication between instructors and students.** Follow the steps [in the video linked here  (Links to an external site.)](https://community.canvaslms.com/videos/1072)to set your notifications preferences and specify that all course alerts are routed to your Auburn University email address (userid@auburn.edu). You can contact [Auburn University's OIT Help Desk  (Links to an external site.)](http://www.auburn.edu/oit/helpdesk/)for assistance forwarding mail sent to your Auburn email address to a different email address that you regularly check. Additionally, it is your responsibility to read course announcements sent by your instructor. These are posted in Canvas, and you can configure your notification preferences to receive an email each time a new announcement is posted.

**This course will be supported by Auburn University’s Canvas platform.** The syllabus, class assignments, occasional lectures, test grades, final grades, and important announcements will be posted to the Canvas site for this course. Check the Canvas site for this course frequently.

**Instructor Assistance with Course Performance**

If you are struggling academically with this class, do NOT wait until the end of the semester to ask for help. Your instructor is here to help you, but cannot provide help unless you communicate the problem. In announcements to the class, your instructor may specify a preferred method of communication. You are strongly encouraged to reach out to your instructor early in the course and follow-up whenever you encounter challenges with the material.

**Accessibility**

Auburn University has adopted an Honor System proposed by its students and faculty to promote academic integrity and has enacted the following code:

“We, the faculty, instructors, and students of the (University course here) pledge to fulfill our mutual responsibilities to each other and the academic community at large with honor and integrity in order to build and maintain a climate of respect and trust that will enhance our research, teaching, and learning. We will support the Honor System of the School, and will not tolerate activities that undermine academic integrity.”

Academic dishonesty is an offense that will be reported to the Academic Honesty Committee. Please refer to the following document for further information regarding academic honesty: [Auburn University Student Academic Honesty Code](https://sites.auburn.edu/admin/universitypolicies/policies/academichonestycode.pdf)

**COVID-19 Related Policies**

Due to the Coronavirus pandemic, public health measures have been implemented across Auburn’s campus. Students should stay current with these practices and expectations through the campus reentry plan, [A Healthier U (Links to an external site.)](https://ahealthieru.auburn.edu/). The sections below provide expectations and conduct related to COVID-19 issues.

**Health and participation in Class**

You are expected to complete your Healthcheck screener daily.

Your health and safety, and the health and safety of your peers, are my top priorities. If you are experiencing any symptoms of COVID-19, or if you discover that you have been in close contact with others who have symptoms or who have tested positive, you must follow the instructions on the Healthcheck app. My hope is that if you are feeling ill or if you have been exposed to someone with the virus, you will stay home to protect others.

Please do the following in the event of an illness or COVID-related absence:

* Notify me in advance of your absence, if possible
* Provide me with medical documentation, if possible
* Keep up with coursework as much as possible
* Participate in class activities and submit assignments remotely as much as possible
* Notify me if you require a modification to the deadline of an assignment or exam
* Finally, if remaining in a class and fulfilling the necessary requirements becomes impossible due to illness or other COVID-related issues, please let me know as soon as possible so we can discuss your options.

Students with questions about COVID-related illnesses should reach out to the COVID Resource Center at (334) 844-6000 or at [ahealthieru@auburn.edu](mailto:ahealthieru@auburn.edu)

**Health and Well-Being Resources**

These are difficult times, and academic and personal stress is a natural result. Everyone is encouraged to take care of themselves and their peers. If you need additional support, there are several resources on campus to assist you:

* COVID Response Team ([ahealthieru.edu (Links to an external site.)](http://www.ahealthieru.edu))
* Student Counseling and Psychological Services ([http://wp.auburn.edu/scs/ (Links to an external site.)](http://wp.auburn.edu/scs/))
* AU Medical Clinic ([https://cws.auburn.edu/aumc/ (Links to an external site.)](https://cws.auburn.edu/aumc/)

If you or someone you know are experiencing food, housing or financial insecurity, please visit the Auburn Cares Office (<http://aucares.auburn.edu/>

**A Healthier U Community Expectations**

We are all responsible for protecting ourselves and our community. Please read about student expectations for fall semester, including completing the daily GuideSafe™ Healthcheck ([https://ahealthieru.auburn.edu/ (Links to an external site.)](https://ahealthieru.auburn.edu/)).

You are expected to (1) take your temperature daily and (2) complete your Healthcheck screener to receive your A Healthier U pass. **You may be asked at any time during class to show your pass.**

Course Expectations Related to COVID-19

* **Face Coverings**: As a member of the Auburn University academic community you are required to follow all university guidelines for personal safety with face coverings, physical distancing, and sanitation. Face coverings are required in this class and in all campus buildings. Note that face coverings must meet safety specifications, be worn correctly, and be socially appropriate.  
  You are required to wear your face coverings at all times. If you remove your face covering or are non-compliant with the university’s [policy on face coverings (Links to an external site.)](https://ocm.auburn.edu/news/coronavirus/updates/20200618-face-masks-required.php?ref=coronavirus), you will be instructed to leave the classroom and will be held to the protocols outlined in the [Auburn University Policy on Classroom Behavior (Links to an external site.)](https://sites.auburn.edu/admin/universitypolicies/Policies/PolicyonClassroomBehavior.pdf). Any student who willfully refuses to wear a face covering and does not have a noted accommodation may be subject to disciplinary action.
* **Physical Distancing**: Students should observe appropriate physical distancing and follow all classroom signage/avoid congregating around doorways before or after class. If the instructional space has designated entrance and exit doors, you should use them. **Students should exit the instructional space immediately after the end of instruction to help ensure social distancing and allow for the persons attending the next scheduled class session to enter.**
* **Course Attendance**: If you are quarantined or otherwise need to miss class because you have been advised that you may have been exposed to COVID-19, you will be expected to develop a plan to keep up with your coursework during any such absences.
* **Course Meeting Schedule**: This course might not have a traditional meeting schedule in Fall 2020. Be sure to pay attention to any updates to the course schedule as the information in this syllabus may have changed. Please discuss any questions you have with me.
* **Technology Requirements:** This course may require particular technologies to complete coursework. If you need access to additional technological support, please contact the AU Bookstore at [aubookstore@auburn.edu](mailto:aubookstore@auburn.edu).

*Disruptive or concerning classroom behavior involving the failure to wear a face covering, as directed by Auburn University, represents a potential Code of Student Conduct violation and may be reported as a non-academic violation. Please consult the* [*Classroom Behavior Policy* (Links to an external site.)](https://sites.auburn.edu/admin/universitypolicies/Policies/PolicyonClassroomBehavior.pdf).

**Plan B**

**In the event that AU and assigned school placements have to transition to remote/online/virtual learning only students will continue their field placements and all field placement responsibilities. If the school placement site closes or does not allow clinical residents or teacher candidates to continue the field placement remotely/online/virtually then the instructor for the course may be able to designate an alternative field placement (with approval of the COE Deans office). If the instructor can not assign an alternative field placements (due to COVID-19 restrictions, etc.) then the clinical resident may have to be assigned an incomplete for the semester. Dr. Schnittka and Mr. Mark Brennamen will be the “back up plan” instructors for the course in the event that the instructor assigned for the course can not attend or conduct classes.**

**Course Delivery Changes Due to COVID-19**

Please be aware that the situation regarding COVID-19 is frequently changing, and the delivery mode of this course may adjust accordingly. In the event that the delivery method is altered, please be assured that the learning goals and outcomes of the course will not change; however, some aspects of the course will change in terms of the mode of delivery, participation, and testing methods. Those details will be shared via Canvas as soon as possible. Please be prepared for this contingency by ensuring that you have access to a computer and reliable Internet.

Please signature that you have read this document in its entirety and understand the contents and guidelines outlined in the document. Failure to comply with all of the guidelines outlined in this document may result in immediate dismissal from the Science Education Program at Auburn University. Upon completion of reading and reviewing this document for the class you you have read, understand, and agree to follow all of the guidelines outlined in the syllabus and A Healthier U policies and procedures. Please sign and date that you agree to follow all guidelines outlined in this document: Print name\_\_\_\_\_\_\_\_\_\_\_\_\_Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_