



SCE 4945
Practicum in Secondary Science Education
85815 001
Fall 2026

Instructor Name

Rita Ortiz

University Course Description

This seminar provides teacher candidates with opportunities to interact with peers, public school faculty and university faculty regarding classroom and related school-based experiences. This course is restricted to science education majors.

Course Requisites

Prerequisite(s):

Corequisite(s):
SCE4320

Course Format

The hybrid format of the course fulfills the in-person in-field experience (practicum) and the online class meetings. This course consists of in-person field experiences, synchronous online class meetings and consultations, and asynchronous online work using the modules on Canvas. We will have a total of 5 synchronous online class meetings via Microsoft Teams on Thursdays, at 5:00-

7:45pm, on the following dates: 8/27, 9/17, 10/08, 10/22, and 11/12 as well as asynchronous online work and 1-1 online consultation meetings in October/November (dates TBD). Practicum field experiences will begin in mid-September and end in mid-November. You will be placed with a middle/high school science teacher (Mentor Teacher [MT]). Students are expected to attend their school site two times per week for a minimum of 2.5 hours per visit for a total of a minimum of 50 hours. (Note: You must be there two times per week and not simply once per week for a longer time). You will coordinate your field experience schedule* with your MT. You are welcome, from the USF perspective, to spend additional time at the schools – however this must be discussed and confirmed with your MT and course instructor. In all, plan to spend approximately 10-12 weeks at a particular campus (minimum 50 hours total). Five class meetings (on Fridays) are required.

**Undergraduates: Time in the field has been designated for Tuesdays and Fridays from 8:00 - 11:00 AM. However, you and your mentor teacher will plan the schedule that works best for you and the students.*

Student Learning Outcomes

- Observed and worked with a wide range of students.
- Participated in non-direct instructional work and the management of the classroom.
- Participated in grading and gained exposure to the complexities of grading.
- Experienced planning, teaching, and assessing.
- Developed a variety of instructional methods and the ability to adapt them to changing circumstances of adolescents in a school context.
- Gained knowledge and skills to be responsive to Florida and appropriate professional
- organization guidelines.
- Gained a deeper understanding of educational, situational and student context.

Course Objectives

The course is designed to help students apply science knowledge for teaching addressed in university-based coursework. Specifically, students will strengthen their foundational knowledge to:

- Design scientifically accurate explanations that are comprehensive and useful to students;
- Use scientifically appropriate and comprehensible concepts and topics;
- Interpret and make scientific and pedagogical judgments about student learning,
- Be able to respond productively to students' science-related questions and curiosities;
- Make judgments about the quality of science instructional materials and modify as necessary;
- Be able to pose effective scientific questions and problems that are productive for student's learning;
- Assess students' science learning and take next steps.

Required Texts and/or Readings and Course Materials

Course readings will be provided by the instructor and/or made available through the [USF Library Services](#).

Supplementary (Optional) Texts and Materials

- Next Generation Science Standards: <https://www.nextgenscience.org>;
- The Framework for K-12 Science Education:
<https://www.nextgenscience.org/framework-k-12-science-education>;
- CPALMS: www.cpalms.org
- Florida State Science Standards:
<https://www.fldoe.org/academics/standards/subject-areas/math-science/science>

Grading Scale

This course is pass/fail, however 75% of your expectations will be addressed with your early field experience and final paper, with 25% of your expectations in participating in our class discussions and presentation of coursework.

S (Satisfactory performance; Pass): The student shows sufficient development regarding reflection on teaching and learning of science, in addition to evaluation of aspects of their profession and/or professionalism. Assignments are of good quality. Journal entries are timely and descriptive in nature. The student contributes to class discussions. The student adheres to guidelines of professionalism when interacting with colleagues and the course instructor. The student has received at least 3 out of 5 on each criterion of the Final Critical task.

U (Unsatisfactory performance; Fail): The student shows lack of development regarding reflection on teaching and learning of science and/or evaluation of aspects of their profession and/or professionalism. Either some assignments are not completed, are often late, and/or are of poor quality. Journal entries are sporadic and/or terse. Participation attempts in class discussions are minimal. The student demonstrates lack of professionalism when interacting with colleagues and/or the course instructor. The student has received a score of 1 or 2 on at least one criterion of the Final Critical task.

Criminal Background Check Requirement: This course includes a pre-internship early field experience component. Because of this, you will need to obtain the required clearance to work with students in a public-school setting. Please follow the procedures outlined in the Department of Secondary Education's Criminal Background Check Requirement document and submit a copy of your approval documents as stated in Canvas. Students who are not "cleared" to work in a public-school setting will be required to drop or withdraw from this course and/or program or they will receive a grade of F.

Grade Categories and Weights

Assignment	Points
In-Field Schedule	5
Field Log Entries (total 4)	10 each
Reflection Prompts (total of 4)	15 each
Video Recording Lesson	10
Observations 1 and 2	55 each
Professional Responsibility Event	10
Field Observation Hours Log	10

Assignment	Points
Science Teaching Contribution	5
Reflection Final Paper (Final Critical Task)	50
Total	300

Major Topics and Course Schedule

Course Schedule

Date	Topics	Due
Week of 08/31	Course and field placement overview	Fingerprints
Week of 09/07	First Week Field Experiences	In-Field Schedule
Week of 09/14	First Week Field Experiences Learning in the Field	Field Log: The Structures of the Learning Environment
Week of 09/21	Learning in the Field	Field Log: The Learning Environment
Week of 09/28	Learning in the Field	Reflection Prompt 1
Week of 10/5	Learning in the Field	Field Log: Discussion & Questioning Techniques.
Week of 10/12	Learning in the Field Connecting Theory to Practice	Field Log: Engagement Strategies.
Week of 10/19	Learning in the Field Connecting Theory to Practice	Reflection Prompt 2 First observation (lesson plan, feedback from mentor teacher AND supervisor, reflection)

Date	Topics	Due
Week of 10/26	Learning in the Field Connecting Theory to Practice	First observation (lesson plan, feedback from mentor teacher AND supervisor, reflection)
Week of 11/02	Learning in the Field Connecting Theory to Practice	Reflection Prompt 3. Second observation (lesson plan, feedback from host teacher AND supervisor, reflection); Video recording lesson.
Week of 11/09	Learning in the Field Connecting Theory to Practice	Second observation (lesson plan, feedback from host teacher AND supervisor, reflection); Video recording lesson.
Week of 11/16	Learning in the Field Connecting Theory to Practice Practicum Debrief	Reflection Prompt 4 Second observation (lesson plan, feedback from host teacher AND supervisor, reflection).
Weeks of 11/23 and 11/30	Learning in the Field Make-up days Course Wrap-up	Course Evaluations All make-up work/assignment revisions due 12/07

USF Core Syllabus Policies

USF has a set of central policies related to student recording class sessions, academic integrity and grievances, student accessibility services, academic disruption, religious observances, academic continuity, food insecurity, pregnancy and related conditions, and sexual harassment that **apply to all courses at USF**. Be sure to review these online:

<https://www.usf.edu/provost/faculty-success/resources-policies-forms/core-syllabus-policy-statements.aspx>

Student Recordings

Florida Statute 1004.097 Free Expression on Campus

Students may, without prior notice, record video or audio of a class lecture for a class in

which the student is enrolled for their own personal, educational use (USF Policy 10-048). A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach enrolled students about a particular subject. Recording class activities other than class lectures, including but not limited to lab sessions, student presentations (whether individually or part of a group), class discussion, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, private conversations between students in the class or between a student and the faculty member is prohibited. Recordings may not be used as a substitute for class participation and class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the USF Student Conduct Code.

Course Policies: Grades

Late Work Policy:

There are no make-ups for in-class or synchronous participation points unless arrangements have been made before class. If an assignment cannot be completed to quality by the due date, arrangements must be made in advance regarding a modified due date (instructor has sole authority regarding this matter). Assignments turned in late will be assessed a penalty: 5% off per day late.

Grades of "Incomplete"

The current university policy concerning incomplete grades will be followed in this course. For undergraduate courses: An "I" grade may be awarded to a student only when a small portion of the student's work is incomplete and only when the student is otherwise earning a passing grade. The time limit for removing the "I" is to be set by the instructor of the course. For undergraduate students, this time limit may not exceed two academic semesters, whether or not the student is in residence, and/or graduation, whichever comes first. For graduate students, this time limit may not exceed one academic semester. "I" grades not removed by the end of the time limit will be changed to "IF" or "IU," whichever is appropriate.

Campus Free Expression

It is fundamental to the University of South Florida's mission to support an environment where divergent ideas, theories, and philosophies can be openly exchanged and critically evaluated. Consistent with these principles, this course may involve discussion of ideas that you find uncomfortable, disagreeable, or even offensive.

In the instructional setting, ideas are intended to be presented in an objective manner and not as an endorsement of what you should personally believe. "Objective" means that the idea(s) presented can be tested by critical peer review and rigorous debate, and that the idea(s) is supported by credible research.

In this course you may be asked to engage with complex ideas and to demonstrate an understanding of the ideas. Understanding and engaging with an idea does not require you to believe it or to agree with it.

Course Policies: Technology and Media

You will need to be able to demonstrate proficiency at basic computer skills, maintain reliable internet access, and meet the computer system requirements listed here:

<http://www.usf.edu/innovative-education/resources/student-services/technical-requirements.aspx>

Course Policies: Student Expectations

Health and Wellness

Your health is a priority at the University of South Florida. We encourage members of our community to look out for each other and to reach out for help if someone is in need. If you or someone you know is in distress, please make a referral at www.usf.edu/sos so that the Student Outreach & Support can contact and provide helpful resources to the student in distress. A 24-hour licensed mental healthcare professional, offered through the counseling center, is available by phone at 813-974-2831, option 3. Please remember that asking for help is a sign of strength. In case of emergency, please dial 9-1-1.

Title IX Policy

USF is committed to fostering a safe and respectful learning environment, free from sex discrimination and sexual harassment, in accordance with Title IX and USF Policy 0-004. If a student shares an experience of sexual harassment, sexual assault, stalking, or relationship violence with a USF employee (including faculty), that employee will notify the Title IX Office. This allows the Title IX Office to send the student an email with information about support resources and options—if it is safe to do so. Students are not required to respond to this email. The Title IX Office is a private resource. Information is shared only on a need-to-know basis to provide students with support measures. To speak to a confidential resource, students may contact USF Center for Victim Advocacy at 813-974-5757. Confidential resources do not notify the Title IX Office unless the student requests it. For more information about Title IX, available resources, or to make a report, please visit www.usf.edu/title-ix.

Course Hero / Chegg Policy

The USF Policy on Academic Integrity specifies that students may not use websites that enable cheating, such as by uploading or downloading material for this purpose. This does apply specifically to Chegg.com and CourseHero.com – almost any use of these websites (including uploading proprietary materials) constitutes a violation of the academic integrity policy.

Professionalism Policy

Per university policy and classroom etiquette; mobile phones, iPods, etc. must be silenced during all classroom and lab lectures. Those not heeding this rule will be asked to leave the classroom/lab immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings. Students who habitually disturb the class by talking, arriving late, etc., and have been warned may suffer a reduction in their final class grade.

Turnitin.com

In this course, turnitin.com may be utilized. Turnitin is an automated system which instructors may use to quickly and easily compare each student's

assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you may be expected to submit all assignments in both hard copy and electronic format. After the assignment is processed, as instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process visit <http://www.turnitin.com>.

Netiquette Guidelines

- Act professionally in the way you communicate. Treat your instructors and peers with respect, the same way you would do in a face-to-face environment. Respect other people's ideas and be constructive when explaining your views about points you may not agree with.
- Be sensitive. Be respectful and sensitive when sharing your ideas and opinions. There will be people in your class with different linguistic backgrounds, political and religious beliefs or other general differences.
- Proofread and check spelling. Doing this before sending an email or posting a thread on a discussion board will allow you to make sure your message is clear and thoughtful. Avoid the use of all capital letters, it can be perceived as if you are shouting, and it is more difficult to read.
- Keep your communications focused and stay on topic. Complete your ideas before changing the subject. By keeping the message on focus you allow the readers to easily get your idea or answers they are looking for.
- Be clear with your message. Avoid using humor or sarcasm. Since people can't see your expressions or hear your tone of voice, meaning can be misinterpreted.

Email and Discussion Board Guidelines

- Use the subject line effectively by using a meaningful line of what your email or discussion is about.
- Keep your emails and postings related to the course content. You should not post anything personal on a discussion board unless it is requested by the instructor.
- Any personal, course or confidential issues should be directly communicated to the instructor via email. The discussion boards are public spaces; therefore, any issues should not be posted there.

End of Semester Student Evaluations

All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made

available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is highly encouraged and valued.

Food and Drink Policy (for in-campus sessions only).

Please adhere to the firm policy of no beverages (other than bottled/capped water), food, tobacco products, or like items in the classroom. Your understanding of the necessity for this policy and cooperation will be greatly appreciated. This policy will be strictly enforced.

Learning Support and Campus Offices

Academic Accommodations

Students with disabilities are responsible for registering with Student Accessibility Services (SAS) in order to receive academic accommodations. For additional information about academic accommodations and resources, you can visit the SAS website.

[SAS website for the Tampa campus and Sarasota-Manatee Teachout site.](#)

[SAS website for the St. Pete campus.](#)

Academic Support Services

The USF Office of Student Success coordinates and promotes university-wide efforts to enhance undergraduate and graduate student success. For a comprehensive list of academic support services available to all USF students, please visit the [Office of Student Success website](#).

Canvas Technical Support

If you have technical difficulties in Canvas, you can find access to the Canvas guides and video resources in the “Canvas Help” page on the homepage of your Canvas course. You can also contact the help desk by calling 813-974-1222 in Tampa or emailing help@usf.edu.

[USF IT Services](#)

Center for Victim Advocacy

The [Center for Victim Advocacy](#) empowers survivors of crime, violence, or abuse by promoting the restoration of decision making, by advocating for their rights, and by offering support and resources. Contact information is available online.

Counseling Center

The Counseling Center promotes the wellbeing of the campus community by providing culturally sensitive counseling, consultation, prevention, and training that enhances student academic and personal success. Contact information is available online.

[Counseling Center website for the Tampa campus and Sarasota-Manatee Teachout site.](#)

[Counseling Center website for the St. Pete campus.](#)

Tutoring

The Tutoring Hub offers free tutoring in several subjects to USF undergraduates. Appointments are recommended, but not required. For more information, email asctampa@usf.edu.

[Tutoring website for the Tampa campus and Sarasota-Manatee Teachout site.](#)

[Tutoring website for the St. Pete campus.](#)

Writing Studio

The Writing Studio is a free resource for USF undergraduate and graduate students. At the Writing Studio, a trained writing consultant will work individually with you, at any point in the writing process from brainstorming to editing. Appointments are recommended, but not required. For more information or to make an appointment, email: writingstudio@usf.edu.

[Writing studio website for the Tampa campus and Sarasota-Manatee Teachout Site.](#)

[Writing studio website for the St. Pete campus.](#)

Student Ombuds Office

Florida Statute 1006.51 and Florida Board of Governors Regulation 6.011 require that all public institutions provide ombuds services to students. The Student Ombuds Office at USF is a confidential, impartial, informal, and independent resource for students experiencing challenges related to the university. Ombuds can help students safely explore options, clarify processes, and consider next steps. [Learn more or make an appointment at usf.edu/student-ombuds.](https://usf.edu/student-ombuds)