



RHODE ISLAND COLLEGE

FEINSTEIN SCHOOL OF EDUCATION AND HUMAN DEVELOPMENT

[SED 406: INSTRUCTIONAL METHODS, DESIGN, AND TECHNOLOGY]

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Department: Educational Studies

1. DESCRIPTION

Students learn the fundamentals of lesson design and methods for integrating instructional technology to enhance content area teaching and learning. Students design and present model lessons in a laboratory setting. 3 credit hours. Pre-requisite: Admission to a secondary education teacher education program or consent of department chair

2. OUTCOMES

SED 406: Instructional Design, Methods, and Technology is designed to be the first instructional methods class that our middle and high school teacher candidates receive. They are expected to master the fundamentals of writing objectives, planning lessons, and assessing student learning. These lessons should include a variety of instructional methods, incorporate technology, and allow for opportunities to reflect and grow as professionals. Because the classes can include teacher candidates from anthropology, biology, chemistry, english, french, general science, geography, history, mathematics, physics, political science, social science, sociology, and spanish, we have decided to align the syllabus to the Rhode Island Professional Teaching Standards and the National Educational Technology Standards for Teachers. Both sets of standards are listed below, followed by the alignment matrix.

National Educational Technology Standards for Teachers (NETS – T)

Effective teachers model and apply the National Educational Technology Standards for Students (NETS•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators.
Teachers:

1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

Teachers:

- a. promote, support, and model creative and innovative thinking and inventiveness
- b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S.

Teachers:

- a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity

- b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. provide students with multiple and varied formative and summative assessments aligned with content and technology
- e. standards and use resulting data to inform learning and teaching

3. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global/digital society.

Teachers:

- a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
- c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
- d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information
- e. resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

Teachers:

- a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright,
- b. intellectual property, and the appropriate documentation of sources
- c. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
- d. promote and model digital etiquette and responsible social interactions related to the use of technology and information
- e. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

Teachers:

- a. participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community
- c. building, and developing the leadership and technology skills of others
- d. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- e. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

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THE RHODE ISLAND PROFESSIONAL TEACHING STANDARDS (RIPTS)

1. Teachers create learning experiences using a broad base of general knowledge that reflects an understanding of the nature of the communities and world in which we live.

Teachers...

- reflect a variety of academic, social, and cultural experiences in their teaching
- use a broad content knowledge base sufficient to create interdisciplinary learning experiences designed to ensure that all students achieve state standards for content and achievement
- exhibit a commitment to learning about the changes in their disciplines and in our world that models a commitment to lifelong learning for students
- facilitate student involvement in the school and wider communities

2. Teachers have a deep content knowledge base sufficient to create learning experiences that reflect an understanding of central concepts, vocabulary, structures, and tools of inquiry of the disciplines/content areas they teach.

Teachers...

- know their discipline/content areas and understand how knowledge in their discipline/content area is created, organized, linked to other disciplines, and applied beyond the school setting
- design instruction that addresses the core skills, concepts, and ideas of the disciplines/content areas to help all students meet Rhode Island's learning standards
- select appropriate instructional materials and resources (including technological resources) based on their comprehensiveness, accuracy, and usefulness for representing particular ideas and concepts in the discipline/content areas
- engage students in a variety of explanations and multiple representations of concepts, including analogies, metaphors, experiments, demonstrations, and illustrations, that help all students develop conceptual understanding
- represent and use differing viewpoints, theories, and methods of inquiry when teaching concepts and encourage all students to see, question, and interpret concepts from a variety of perspectives

3. Teachers create instructional opportunities that reflect an understanding of how children learn and develop.

Teachers...

- understand how students use their prior knowledge to construct knowledge, acquire skills, develop habits of mind, and acquire positive dispositions toward learning
- design instruction that meets the current cognitive, social and personal needs of their students
- create age-appropriate lessons and activities that meet the variety of developmental levels of students within a class

4. Teachers create instructional opportunities that reflect a respect for the diversity of learners and an understanding of how students differ in their approaches to learning.

Teachers...

- design instruction that accommodates individual differences (e.g., stage of development, learning style, English language acquisition, cultural background, learning disability) in approaches to learning
- use their understanding of students (e.g., individual interests, prior learning, cultural background, native language, and experiences) to create connections between the subject matter and student experiences
- seek information about the impact of students' specific challenges to learning or disabilities on classroom performance, and work with specialists to develop alternative instructional strategies to meet the needs of these students where appropriate
- make appropriate accommodations and modifications for individual students who have identified learning differences or needs in an Individualized Educational Plan (IEP), 504 Accommodation Plan, Personal Literacy Plans (PLP's), or other approved school-based individualized learning plans (ILP's)

5. Teachers create instructional opportunities to encourage all students' development of critical thinking, problem solving, performance skills, and literacy across content areas.

Teachers...

- design lessons that extend beyond factual recall and challenge students to develop higher level cognitive skills
- pose questions that encourage students to view, analyze, and interpret ideas from multiple perspectives
- make instructional decisions about when to provide information, when to clarify, when to pose a question, and when to let a student struggle to try to solve a problem
- engage students in generating knowledge, testing hypotheses, and exploring methods of inquiry and standards of evidence
- use tasks that engage students in exploration, discovery, and hands-on activities

6. Teachers create a supportive learning environment that encourages appropriate standards of behavior, positive social interaction, active engagement in learning, and self-motivation.

Teachers...

- use principles of effective classroom management to establish classrooms in which clear rules and standards of behavior are maintained
- establish a safe, secure and nurturing learning environment that supports the active engagement of all students
- provide and structure the time necessary to explore important concepts and ideas
- help students establish a classroom environment characterized by mutual respect and intellectual risk-taking
- create learning groups in which all students learn to work collaboratively and independently
- communicate clear expectations for achievement that allow all students to take responsibility and advocate for their own learning

7. Teachers work collaboratively with all school personnel, families and the broader community to create a professional learning community and environment that supports the improvement of teaching, learning and student achievement.

Teachers...

- work collaboratively with colleagues to examine teacher practice, student work and student assessment results with the goal of improving instruction and achievement
- develop relationships with students and their families to support learning
- understand the role of community agencies in supporting schools and work collaboratively with them as appropriate

8. Teachers use effective communication as the vehicle through which students explore, conjecture, discuss, and investigate new ideas.

Teachers...

- use a variety of communication strategies (e.g., listening, restating ideas, questioning, offering, counter examples) to engage students in learning
- use a variety of modes of communication (e.g., verbal, visual, kinesthetic) to promote student learning
- use technological advances in communication, including electronic means of collecting and sharing information, to enrich discourse in the classroom and the school
- emphasize oral and written communication through the instructional use of discussion, listening and responding to the ideas of others and group interaction
- seek knowledge of and demonstrate sensitivity to the particular communication needs of all students

9. Teachers use appropriate formal and informal assessment strategies with individuals and groups of students to determine the impact of instruction on learning, to provide feedback, and to plan future instruction.

Teachers...

- select and/or design individual and group classroom assessments based on the strengths, limitations, and data provided by the assessments
- identify and consider student and contextual variables that may influence performance so that a student's performance can be validly interpreted
- systematically collect, synthesize, and interpret assessment results from multiple assessments to monitor, improve, and report individual and group achievement
- provide students with opportunities and guidance to evaluate their own work and behavior against defined criteria and use the results of self assessment to establish individual goals for learning
- use assessment results to provide students with timely, helpful, and accurate feedback on their progress toward achievement goals
- maintain records of student learning and communicate student progress to students, parents/guardians, and other colleagues
- use information from their assessment of students to reflect on their own teaching, to modify their instruction and to help establish professional development goals

10. Teachers reflect on their practice and assume responsibility for their own professional development by actively seeking and participating in opportunities to learn and grow as professionals.

Teachers...

- solicit feedback from students, families, and colleagues to reflect on and improve their own teaching
- explore and evaluate the application of current research, instructional approaches and strategies, including technologies to improve student learning
- take responsibility for their own professional development and improvement of their students' learning by participating in workshops, courses, or other individual and collaborative professional development activities that support their plans for continued development as teachers
- take responsibility for learning about and implementing federal, state, district and school initiatives to improve teaching and learning

11. Teachers maintain professional standards guided by legal and ethical principles.

Teachers...

- maintain standards that require them to act in the best interests and needs of students
- follow school policy and procedures, respecting the boundaries of their professional responsibilities, when working with students, colleagues, and families
- follow local, state, and federal law pertaining to educational and instructional issues, including regulations related to students', parents'/guardians', and teachers' rights and responsibilities
- interact with students, colleagues, parents, and others in a professional manner that is fair and equitable
- are guided by codes of professional conduct adopted by their professional organizations

Alignment Matrix

<i>Course outcomes</i>	<i>Key assessments</i>	<i>Standards (RIPTS, SPA or NCATE, Conceptual Framework)</i>
1. Explore positions on current issues and trends in ethical issues of technology	reflections on articles and readings	[NETS-T 4a, 4c] CF: Professionalism: Professional Ethics
2. Incorporate professional self-reflection into all aspects of planning and practice	Teacher essay, reflections on Microteaching I and II	[NETS-T 5c] [RIPTS 10] CF: Professionalism: Professional Development
3. Demonstrate skills in and understanding of instructional planning which includes the integration of technology	Lesson plan I and II	[NETS-T 2a, 2b] [RIPTS 2] CF: Pedagogy: Instructional Uses of Technology, Practice of Teaching & Learning
4. Gain experience teaching, using a variety of instructional strategies	Microteaching I and II	[NETS-T 3a, 3c, 3d] [RIPTS 5] CF: Pedagogy: Theory & Practice of Teaching & Learning
5. Utilize multiple assessment strategies in instruction	Quiz + quiz analysis	[NETS-T 2d] [RIPTS 9] CF: Pedagogy: Assessment as an Aid to Practice
6. Gain knowledge of the instructional process by observing classroom teaching	Reflection on classroom observation	[RIPTS 3,4,6] CF: Pedagogy: Theory & Practice of Teaching & Learning
7. Gain competency in utilizing technology in the design and delivery of instruction, and in building knowledge of current issues in education	Microteaching II	[NETS-T 2a,2b] [RIPTS 1,8] CF: Pedagogy: Instructional Uses of Technology
8. Reinforce a positive attitude toward teaching as a career		[RIPTS 10] CF: Professionalism: Professional Development

3. TEXTS AND MATERIALS

SED 406 serves as an introduction, for many students, to the world of educational and curricular materials. While there is a textbook, students are expected to go beyond a single source, and begin assembling their own collection of educational materials. To this end, SED 406 has its own LibGuide available online through Adams Library. Students are also invited to participate in a tour of the library's Curriculum Resource Center; and to participate in library instruction about how to find high-quality professional literature and resources.

Additional readings are also assigned throughout the semester, to highlight particular themes, reinforce learning, or serve as the starting point for a discussion. As an example, *Wait time: Slowing down may be a way of speeding up!*, by Mary Budd Rowe, is used to introduce the ideas of wait time and teacher research, and begin a discussion of effective question techniques. When students record their own Microteaching lessons, the timer below the screen can be used to directly measure wait time, and help students reflect on their own questioning techniques.

Resources:

Kellough, R. & Carjuzaa, J. (2006). *Teaching in the Middle and Secondary Schools* (8th edition). Upper Saddle River, New Jersey: Pearson, Merrill, Prentice-Hall,

<http://ric.libguides.com/content.php?pid=68324>

A textbook in your field, available through Adams Library and the Curriculum Resource Center

Other readings as assigned, available through Blackboard and library course reserve

4. SCHEDULE, TOPICS, AND ASSIGNMENTS

The schedule for SED 406 is highly structured: several outside deadlines and timelines affect what we do in the classroom. The first of these is the requirement for all students to complete a BCI to allow for in-school observations. Finding locations and scheduling observations across a range of subjects and grade levels is a challenge. As a result, completing the BCI and observation paperwork is emphasized during the first two weeks of class.

Microteaching, the practice of breaking the class into groups of 4-5 and having them teach lessons to each other, is another logistical challenge. Because our students have different schedules and commitments, it is often the case that the only time they can get together and work is during class. So, we make sure to make the most of our Microteaching opportunities. After our teacher candidates have their lesson plans approved, they meet to teach and record their lessons. Teacher candidates are then required to submit a digital recording of their teaching on a USB drive. Teacher candidates are also required to submit an assessment for their lesson, which is posted to our course management software: Blackboard, and taken by the other teacher candidates who served as students.

Blackboard is also used to meet the articulation of the Rhode Island College School of Education: the idea that all of our graduates will become reflective practitioners. Teacher candidates have to reflect on the lessons they participated in as faux students, and then have to complete a reflection on their own practice, and the changes they would make to this lesson before it gets taught again.

Sample Assignments

Podcast review

Find a published lesson plan in your field. Apply the lesson plan checklist, and make a digital audio recording of the results. Post your review to Blackboard as an .mp3 file

Purchasing and budgeting

Create an Excel file that shows how you can reach two new educational objectives with \$500. Write two objectives for your field, and align them with Rhode Island GSEs. Then, write a budget for the things you will need to reach those objectives. Assume that you only have desks, chairs, a file cabinet, overhead projector, chalkboard, and textbooks.

<i>Week</i>	<i>Class topic</i>	<i>Assignments and readings</i>
Week 1	Overview – What is teaching	best teacher essay
Week 2	Who are students?	complete BCI; observation paperwork
Week 3	Writing objectives + Bloom's taxonomy	Objectives assignment
Week 4	Direct Instruction and Indirect Instruction	Lesson plan assignment
Week 5	Integrating Technology	Technology assignment
Week 6	Standards: SPA/Common Core/GSE/GLE/NETS/	Standards assignment
Week 7	Assessment and Evaluation	Write quiz to align with lesson
Week 8	Microteaching I	Teach and record
Week 9	Integrating Technology	Reflect on Microteaching I
Week 10	Web 2.0	work with Web 2.0 tools
Week 11	working with recordings	Lesson plan for Microteaching II
Week 12	Microteaching II	Teach and record

Week 13	Classroom management	Reflect on microteaching II
Week 14	Teachers as Professionals	Reflective Essay

5. REQUIREMENTS

One absence is allowed for emergency situations. With the second absence, 5% will be deducted from your final grade. With the third, an additional 5% will be deducted, and you will likely be dismissed from class. Attendance includes all classes, observations, and microteachings.

6. EVALUATION

- 50% Microteaching: lesson plans, video files, peer feedback, aligned quiz, self-reflection
- 30% Other formal assignments, including: two school observations, PowerPoint presentation, handouts, worksheets, etc.
- 10% In-class participation, including small group activities, reflections, and discussions
- 10% Other assigned exercises and activities, including HW and/or blog posts

7. RIC POLICIES

- Academic Dishonesty Policy (*Rhode Island College Handbook of Policies, Practices, and Regulations* (Spring 2010), Chapter 3: Academic policies and procedures. Pp. 32-34, section 3.9.1.): http://www.ric.edu/administration/pdf/College_handbook_Chapter_3.pdf#28
- Request for Reasonable Accommodations for Students with Disabilities: <http://www.ric.edu/disabilityservices/faq.php>
- The instructor reserves the right to change the syllabus at any point in the semester to accommodate learners' needs and pace of progress. Students will be notified in class of any changes.
- Students' assignments may be duplicated and utilized anonymously for the Department's program folios, for purposes of accreditation. All information that identifies a document as belonging to a particular student will be removed before it is used.