



# RHODE ISLAND COLLEGE

## FEINSTEIN SCHOOL OF EDUCATION AND HUMAN DEVELOPMENT

### SED 422: STUDENT TEACHING SEMINAR: SCIENCE

**Instructors:** Dr. Rudolf Kraus, Dr. Paul Tiskus

**Department:** Educational Studies, Henry Barnard School 220

#### 1. COURSE INFORMATION

This is an integrative and culminating course in the professional program in secondary education. Students reflect on their initial experience as classroom teachers.

2 credit hours. Pre-requisite: concurrent enrollment in SED 421. Offered spring only.

**Expanded Description:** In this course, teacher candidates make the transition to doing the work of a professional teacher. As their placements progress, they will assume steadily more responsibility until each teacher candidate is doing the work of a full-time teacher. As the semester ends, control of the classroom will transition back to the supervising teacher, and the teacher candidate will have the opportunity to reflect on their performance, both strengths and weaknesses, to improve for the future.

**Relationship to Professional Program:** This course is the capstone for science education at the middle and high school level, building upon FSEHD 346, SED 406, 407, 411, 412, SPED 433, and CEP 315. Naturally, teacher candidates will draw on all of their previous knowledge; including their knowledge of the school and its students, knowledge of their content area, and knowledge of education in order to meet the goals of the FSEHD conceptual framework. Students will have multiple, extended opportunities to plan, act, and reflect on an hourly, daily, weekly, and semester level. This culminates in the Teacher Candidate Work Sample; a portfolio that shows the plan, act, reflect process in depth.

#### Alignment Matrix:

<b>Learning Objective</b> <i>Teacher Candidates will...</i>	<b>Standards</b> <i>(RIPTS, NSES, FSEHD <a href="#">Conceptual Framework</a>)</i>	<b>How is it assessed?</b>
demonstrate, practice, and enforce safe practice when conducting scientific inquiry	RIPTS 11, NSES safety standards, CF Knowledge 4	Safety Assignment, TCWS process 4, observations
plan a wide range of educational experiences that align with inquiry and content standards and respect the diversity of learners in the classroom	RIPTS 2, 3, 4, 5, 8, NSES safety standards, NSES content standards, NSES inquiry standards, CF Knowledge 2, Pedagogy 1,2, Diversity 1,2	TCWS process 1, 2, 4 observations, evaluations
plan, administer, and analyze assessments to monitor student learning	RIPTS 9, NSES content standards, NSES inquiry standards, CF Pedagogy 3,	observations, evaluations, TCWS process 3, 5, 6
reflect on shared experience, formal and informal assessments, to continuously improve practice	RIPTS 10, NSES professional development standards, CF Professionalism 3	observations, evaluations, TCWS process 4, 5, 7
collaborate with the supervising teacher, clinical supervisor, colleagues, and school administration	RIPTS 7, CF professionalism 2	observations, evaluations, TCWS 1, 4
conduct themselves in a professional manner at all	RIPTS 11, CF professionalism, 1,3	observations, evaluations, TCWS 7

times		
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## 2. COURSE TEXTS AND MATERIALS

Teacher candidates are assumed to receive a copy of whatever curriculum their placement currently uses. In addition, previous coursework ensures that teacher candidates are already familiar with the Rhode Island GSEs for the various sciences. However, as the capstone course in science education, it is the responsibility of SED 422 to make students aware of other resources, like national science education standards. Some flexibility is also required, as the teacher candidates, subjects taught, placement schools, and needs can change from semester to semester.

### Recommended texts:

National Research Council (1996). *The National Science Education Standards*. Washington D.C.: National Academy Press.

National Research Council (2000). *Inquiry and the National Science Education Standards*. Washington D.C.: National Academy Press.

Common Core standards for English/Language Arts in science/technical subjects, found at:  
<http://www.corestandards.org/the-standards/english-language-arts-standards>

Chiapetta, E., & Koballa, T. (2010). *Science Instruction in the Middle and Secondary Schools 7<sup>th</sup> edition*. Boston: Allyn & Bacon

Lemov, D. (2010). *Teach like a Champion*. San Francisco, CA: John Wiley and Sons, Inc.

and other readings as assigned, found electronically through course reserve and e-reserve at Adams Library.

## 3. COURSE CALENDAR

<i>Day/week</i>	<i>Class topic</i>	<i>Readings</i>	<i>Assignments</i>
week 1	Safety	Chiapetta and Koballa	Safety assignment
week 2	Classroom context	Infoworks.com	TCWS process 1
week 3	Planning lessons with best practice	school curricula + appropriate outside materials, NSES books	
week 4	Unit workshop	textbook, NSES books	TCWS process 2
week 5	Assessment and evaluation -1	Chiapetta and Koballa	
week 6	Assessment and evaluation -2		TCWS process 3
week 7	What is science? NOS	Lederman article	
week 8	Scientific Inquiry	Science in the news articles	TCWS process 4
week 9	Advanced Instructional Techniques	Lemov	
week 10	Language of science	WIDA standards	
week 11	TBA- meeting teacher candidate needs	readings as assigned	assignments TBA
week 12	TBA- meeting teacher candidate	readings as assigned	assignments TBA

	needs		
week 13	Interviews and jobs	RIC career center	professional resume
week 14	Reflection on experience		TCWS process 5, 6, 7

#### 4. REQUIREMENTS

Teacher candidates are expected to follow the guidelines in the RIC teacher candidate handbook, and follow the policies and procedures of the school in which they have been placed.

Teacher candidates are expected to turn in a portfolio as per the schedule above. This portfolio is meant to showcase a unit that the teacher candidate designed, taught, assessed, and reflected upon: the Teacher Candidate Work Sample.

Teacher candidates will submit other work as assigned, including but not limited to the Safety assignment and the professional resume. Teacher candidates are also expected to work earnestly on any recommendations that come from the observation and evaluation process that is part of their placement.

#### Grading:

Teacher Candidate Work Sample	40%
Participation in class	10%
Safety assignment	20%
Other assignments	10%
Final Exam	20%

#### 5. 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](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.