# FSU-Teach Student Handbook

**Revised 8/2019** 

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#### **FSU-Teach Program Summary**

FSU-Teach is a collaborative double-major teacher preparation program of the Colleges of Arts and Sciences and Education at Florida State University. The FSU Program is modeled after the highly successful UTeach program at the University of Texas, Austin (<a href="http://www.uteach.utexas.edu/">http://www.uteach.utexas.edu/</a>) – a program that has dramatically increased the number of secondary science and math teaching graduates primarily by attracting science and math majors into the teaching profession.

FSU-Teach works to meet the need for qualified and skilled teaching professionals in the secondary classroom by actively recruiting and preparing excellent students to become reform-minded science and mathematics teachers, then supporting these teachers after graduation to facilitate retention. FSU-Teach includes the aggressive recruitment of science and math majors largely via an array of student benefits, including paid tuition for the first two courses; paid work opportunities that provide experience in education, research, and/or community outreach. FSU-Teach seeks to contribute to the research base on preparing and retaining math and science teachers.

FSU-Teach students will complete courses that build the content and pedagogical preparation necessary to begin the life-long learning process that defines a successful teacher through a double major (one in the content disciplines and one in education). Students begin with intensive early field experiences via Step 1 and Step 2 courses using STEM high quality curricula and for the elementary and middle school students to have an opportunity to further develop their math and science content knowledge. These field experiences begin early in the students' coursework.

Additional FSU-Teach education coursework beyond the Step courses is streamlined, including three methods courses (each with a field experience), followed by the apprentice teaching experience (internship). Upon graduation students will have earned double majors in their content area and secondary teaching.

FSU-Teach has at its core a close mentoring of students, through the dedicated Master teachers that help them work in the schools, through mentor teachers in the schools, and through university faculty committed to excellence in science and math teacher preparation. This mentoring relationship extends into an induction program in their first two years of teaching.

FSU-Teach engages in rigorous, continuing program evaluations that focus on data collection on all of its aspects including, but not limited to, student recruitment and retention, teaching success and retention of its graduates, program quality and success, student demographic data, and graduation rates.

FSU-Teach goals are for its graduates to be well-prepared:

- In their teaching content area and in pedagogy.
- To practice research-based pedagogical techniques for science or mathematics teaching and to achieve the goals of the NSES or NCTM as appropriate in their classrooms.
- To meet the challenges of the modern secondary-school environment.
- To become reflective science or mathematics teaching practitioners who engage in extensive, life-long professional development and who will understand ongoing content and pedagogical development as an integral part of their profession.
- To understand and involve their students in inquiry in their content discipline.

## **FSU-Teach Phone Directory**

FSU-TEACH Line	209 MCH	644-1935
Andrews-Larson, Christy	<u>cjlarson@fsu.edu</u>	645-9546
Chalfant, Logan	lchalfant@fsu.edu	645-9877
Dyar, Cindy	cdyar@fsu.edu	645-8901
Gardner, Vicki	vagardner@fsu.edu	645-9463
Granger, Ellen	egranger@fsu.edu	644-6747
Harper, Kristine	kcharper@fsu.edu	644-5888
Jaber, Lama	<u>ljaber@fsu.edu</u>	645-4717
Kelso, MaLynn	mkelso@bio.fsu.edu	645-9462
Rose, Karen	kr04@fsu.edu	645-8927
Smith, Robin	smith@bio.fsu.edu	645-4667
Southerland, Sherry	ssoutherland@fsu.edu	645-9464
Tekkumru-Kisa, Miray	mtekkumrukisa@fsu.edu	644-2570
Faculty Offices Line	203 MCH	645-9464
Student Resource Room Line	218 MCH	645-9488
Affiliated Faculty:		
Bellenot, Steve	bellenot@math.fsu.edu	644-7405
Chanton, Jeff	jchanton@fsu.edu	644-7493
Cottle, Paul	cottle@phyics.fsu.edu	644-5777
Goldsby, Ken	kagoldsby@fsu.edu	644-3204
Hurdal, Monica	mhurdal@math.fsu.edu	644-7183
Kercheval, Alec	akercheval@fsu.edu	644-8701
Miller, Tom	tmiller@fsu.edu	644-9823
Travis, Joseph	travis@bio.fsu.edu	644-5434
Winn, Alice	awinn@fsu.edu	644-9833
OASIS		
Hagan,Tala	thagan@fsu.edu	644-0031
Higgins, Meredith	mhiggins@fsu.edu	644-0031
55 /		
Department Advising		
Biology	bgarcia@bio.fsu.edu	644-3099
Chemistry	jcummings@chem.fsu.edu	644-1897
Computer Science	lhigbee@fsu.edu	644-8700
Environmental Science	tmcgann@fsu.edu	644-8580
Geoscience	tmcgann@fsu.edu	644-8582
Math	anderson@math.fsu.edu	644-5868
Physics	fsuteachphysics@gmail.com	644-5777
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## Advising Timeline for "/FSU-Teach" Majors\*

Advisor:	Advisee	signature	
Student Na	ame:Y	ear:	Hours:
Major:	Dai	te:	
Prereguisi	te Coursework:		
•	grade	SMT 1053	grade
Student Initial	Early Core Coursework (Requires LiveTe		
	Before beginning the first early core (us appropriate major for your content area "Pre-" or NFA majors. See your content	(e.g., Biology/	FSU-Teach, Biological Science). No
	Receive advising by the COE and bring p second week of the course. Purchase the of the second week of the course (https://www.html.)	roof to your FS ne Field Experie	U-Teach Advisor by the end of the nce edition of LiveText by the end
	TSL 4324 ESOL Instruction in the Conte		
	RED 4335 Content Area Reading		
	HIS 3505 Perspectives on Science and N	lathematics	grade(Upper Div. Writing)
	ISC 3523C Research Methodsgrad	e(comp	outer comp. /nat. science for math)
	MAT 3503 Functions and Modeling prereq)	grade	_ (math majors only, Calculus II is a
	By the end of the early core coursework must have passed all 4 subsections of the retake the test every 30 days until you pregister (http://www.fl.nesinc.com/test	e <b>FTCE Genera</b> bass. Be sure to	Knowledge (GK) test. You may have scores sent to FSU when you
Student Initial	Core Coursework (Requires admission t	o Educator Pre	paration)
	Before you can register for SMT 4301 (we must apply and be admitted to Educator (http://education.fsu.edu/admissions/uprogram at FSU. This requires that you FCTE GK Test, have completed at least 1 and earned 52 credit-hours.	r Preparation ndergraduate-a have a 2.5 GPA	admissions/teacher-education ) have passed all 4 sections of the
	SMT 4301 Classroom Interactions	grade	
	SMT 4664 Project Based Instruction This course is taken the semester imme have passed the Professional Ed. and the Within the first two weeks, apply for A (https://education.fsu.edu/student-resteaching).	grade diately precedi ne Subject Area pprentice Teacl	e (oral competency course) ng Apprentice Teaching. You must FTCE exams before registering. ning through OASIS
	SMT 4945 Apprentice Teaching & SMT	1930 Apprentic	e Teaching Seminar
	Apply for graduation with College of Art	s and Sciences f	First 2 weeks of the course.

## Check your Major

• Your primary major must be an approved major to register for the first early core course (usually SMT 3100). See your content department advisor to change your major (e.g., biology advisor).

## Enroll in SMT 3100

- Receive advising by the COE and bring proof to your FSU-Teach Advisor by the end of the **second week** of the course.
- Purchase the Field Experience edition of LiveText (https://education.fsu.edu/student-resources/livetext) by the end of the second week of the course.
- •Continue with early core courses until you are ready for SMT 4301.

# Register for FTCE

- By the end of the early core coursework (or before SMT 4301), you
  must have passed all 4 subsections of the FTCE General Knowledge
  (GK) test (http://www.fl.nesinc.com/testPage.asp?test=GK).
- You may retake the test every 30 days until you pass.

## Enroll in SMT 4301

- •To enroll, you must have passed the FTCE General Knowlege Test to register.
- You also must have 52 completed hours, 2.5 GPA, and be admitted to Educator Preparation (http://education.fsu.edu/admissions/undergraduate-admissions/teacher-education).

## Complete all FTCE exams

 By the end of all core coursework except SMT 4664 you must have taken and passed the remaining FTCE Exams: Professional Education and Subject Area.

## Enroll in SMT 4664

• After enriolling in SMT 4664, apply for student teaching within the first two weeks. You will receive details from the Office of Academic Services and Interns Support (https://education.fsu.edu/student-resources/student-academic-services-oasis/student-teaching).

#### \*FSU-Teach Advisors

Cindy Dyar-Math & CS majors A-L	Logan Chalfant –Math & CS majors M-Z & all physics
MaLynn Kelso-Science majors A-L	Karen Rose-Science majors M-Z

# FSU-Teach Dress Code for Students Participating in Field Experiences (Teaching in a school)

- Dresses and all outer garments shall fit properly and be of an acceptable length.
- Halters, tank tops, see-through garments, or clothing with revealing/ provocative necklines, bare backs, bare midriff, or spaghetti straps shall not be permitted. In addition, clothing with symbols, phrases, or slogans advertising tobacco, alcohol products, or any controlled substances are unacceptable.
- If shirttails are made to be worn tucked in, they must be tucked in. If shirttails are worn in, and pants are designed to be worn with a belt, a belt or suspenders shall be worn.
- No hats, caps or other head coverings shall be worn inside the building.
- Hair shall be clean, neatly trimmed, and well groomed.
- Beards and mustaches shall be allowed if they are neatly trimmed.
- Footwear shall exclude flip flops and slippers.
- Clothing that reveals undergarments shall not be worn.
- Hemlines for skirts and dresses should be long enough not to be distracting.
- Shorts, leggings, warm-ups, spandex or similar tight pants, exercise clothes, or any garment that may appear to be an undergarment are unacceptable.
- Jeans may be worn on days designated by the principal or supervisor, designated spirit days, and teacher in-service days.
- All administrative staff are expected to dress in a professional manner. Male administrative staff are encouraged to wear shirts and ties.
- Male instructional staff shall be expected to wear slacks and collared shirts or other appropriate professional attire. Ties are encouraged and may be required by the principal. Acceptable alternatives for shirt and tie are shirt and pullover sweater or turtleneck sweater and sport coat.
- Jewelry shall not be worn in a visible pierced area other than the ear.

## FSU-Teach Announces:

Preparing and Supporting Equitable Teaching in Mathematics and Science Classrooms: The FSU-Teach Noyce Phase II Program



What's this? Money for FSU-Teach students? Sweet! So what are those post-grad requirements?

### The Program:

The Noyce Scholarship Program was designed to attract a diverse representation of students into mathematics or science teaching and to support these students as they prepare for and begin teaching secondary science or mathematics. Scholarship recipients either commit to a period of teaching in a high-needs school, or to repay the full dollar amount of the loan.

Whoa! Worried about what high-needs means? Don't be; it just means that on average the students at that school are not achieving at the levels they should be and the school needs my help!

## The Scholarship:

Juniors and Seniors can receive \$10,000 for each scholarship/academic year.



For more information and an application go to: http://fsu-teach.fsu.edu/Robert-Noyce-Programs

or contact Robin Smith at Phone: 850-645-8927 Email: smith@bio.fsu.edu

### **NSF Robert Noyce Scholarship Program**

#### What is a forgivable loan?

The Noyce Scholarship Program is considered to be a forgivable loan because you can repay the loan by agreeing to teach in a high need school for two years for each year of support you receive. Recipients of scholarships must commit to completion of two years of service as a mathematics or science teacher for each year the scholarship is received. Service must be completed within 6 years after graduation from the program for which the scholarship was awarded and must be performed in a high-need local educational agency.

## If I receive a scholarship, do I get to select my school or does the Noyce Program pick a school for me?

You get to select the schools to which you would like to apply for a job, and which offer of employment you want to accept. The Noyce only requires that the school meets the definition of being a high needs school.

#### What is the definition of high needs again?

The term "high need local educational agency" means a local educational agency that serves an elementary or secondary school located in an area in which there is:

- A. a high percentage (>50%) of individuals from families with incomes below the poverty line;
- B. a high percentage (>33%) of secondary school teachers not teaching in the content area in which the teachers were trained to teach; or
- C. a high (15% over 3 years) teacher turnover rate.

#### What if I decide that I do not want to teach in a high need school or teach at all?

If you teach in a school that is not high need, or if you do not go in to teaching at all, then the scholarship becomes an interest-free loan. The entire amount of the loan will have to be repaid in full within 6 years of graduation from college. It is expected that failure to satisfy the academic requirements of the program or to complete the service requirement will result in forfeiture of the scholarship or stipend award, which will revert to a loan with repayments prorated accordingly to reflect partial service completed. The repayment plan will be arranged with the Noyce Scholarship Program directors and compliance will be monitored. Collection procedures will be initiated if repayment is not completed.

#### What if I don't complete the whole 2 years of teaching?

If you fail to complete the teaching obligation, the forgivable loan will revert to a loan with repayments pro-rated accordingly to reflect partial service completed. The repayment plan will be arranged with the Noyce Scholarship Program directors and compliance will be monitored. Collection procedures will be initiated if repayment is not completed.

## Are there any other obligations besides teaching in a high need setting for 2 years per year of award?

Each recipient of the scholarship or stipend accepts the terms of the scholarship or stipend and agrees to provide the institution with annual certification of employment and up-to-date contact information and to participate in surveys provided by the institution of higher education and program evaluators as part of project-level and program evaluation efforts.

#### What if it becomes impossible for me to teach, such as an illness?

FSU-Teach will make allowances for extreme hardship or other circumstances for which it is not in the best interests of the school district or not feasible for the scholarship/stipend recipient to fulfill the service obligation. FSU-Teach may establish procedures for waiving or suspending repayment of scholarships or stipends in cases of extreme hardship or other circumstances that would preclude the fulfillment of the service obligation.

#### Can my FSU-Teach instructors provide my references?

Your master teachers may not serve as references, as well as other current or former instructors at FSU or at other colleges or high school and employers may provide references.

#### Do I have to use the reference form? What if my reference prefers to write a letter?

No, you do not have to use the form. It is for your references' convenience, but if they prefer to write a letter, they should address it to the Noyce Selection Committee, Florida State University,1021 Atomic Way, 209 MCH, Tallahassee, FL 32306-4482.

#### What if I don't finish the FSU-Teach program when I graduate?

If you do not graduate with the FSU-Teach double major and become certified to teach science or mathematics at the secondary level, the scholarship would revert to a loan with a repayment plan will be arranged with the Noyce Scholarship Program directors. Compliance will be monitored and collection procedures will be initiated if repayment is not completed.

#### What if I want to go to graduate school first?

You should have time to complete a graduate degree before completing your teaching obligation. The teaching must be completed within 6 years after graduation from the program for which the scholarship was awarded and must be performed in a high-need local educational agency.

## **Other Student Financial Support**

## **STEM Scholarships:**

The FSU-Teach program has funding from an anonymous donor for scholarships for \$1000 a semester for up to two semesters. The scholarships are primarily need-based, but academic record is also considered. Requirements include a 2.5 GPA, copies of all transcripts, and two reference forms. Master teachers are eligible as recommenders. See <a href="http://www.fsu-teach.fsu.edu/Financial-Support">http://www.fsu-teach.fsu.edu/Financial-Support</a> for the application. Submit to Robin Smith.

#### **Apprentice Teaching Scholarships:**

The FSU-Teach program has funding from an anonymous donor for scholarships for \$500 students in their Apprentice Teaching semester to help with expenses associated with Apprentice Teacher (e.g., gas, clothes for teaching). See <a href="http://www.fsu-teach.fsu.edu/Financial-Support">http://www.fsu-teach.fsu.edu/Financial-Support</a> for the application. Submit to Robin Smith.

#### **College of Education Scholarships & Aid:**

The FSU College of Education offers over \$400,000 in scholarship and fellowship opportunities - more than any other public College of Education in Florida. To find out what types of aid are offered, go to <a href="https://education.fsu.edu/student-resources/scholarships-and-aid">https://education.fsu.edu/student-resources/scholarships-and-aid</a>.

#### **Federal Financial Aid:**

Federal financial aid for students majoring in many of the sciences and mathematics. See <a href="https://studentaid.ed.gov/sa/PORTALSWebApp/students/english/SmartGrants.jsp">https://studentaid.ed.gov/sa/PORTALSWebApp/students/english/SmartGrants.jsp</a> for more information.

#### **TEACH Grants:**

The TEACH Grant (Teacher Education Assistance for College and Higher Education) is a Federal student grant program created to assist in the development and recruitment of teachers for high need programs in public or private elementary or secondary schools that serve low income families. Receive up to \$4000 annually for full-time enrollment. For more information, go to <a href="https://studentaid.ed.gov/sa/types/grants-scholarships/teach">https://studentaid.ed.gov/sa/types/grants-scholarships/teach</a>.

## **Peer Mentorships:**

Peer mentors serve as resources for students who are in the beginning stages of the FSU-Teach program. Peer mentors have had successful experiences; they can give advice on coursework, lesson planning, FTCE, Research Methods, etc. They are also experts in the classroom field experiences they've had in FSU-Teach courses. Requirements to be a peer mentor include:

• a GPA of 2.5 or above

- completion of SMT 3100, Knowing & Learning
- current enrollment in an FSU-Teach course
- a plan for remaining coursework in the program
- reliable and punctual attendance
- attendance at monthly WeTEACH meetings

See <a href="http://www.fsu-teach.fsu.edu/Financial-Support">http://www.fsu-teach.fsu.edu/Financial-Support</a> to download and print the application and return to Vicki Gardner in 209 MCH by the end of the first week of classes.

#### **Dispositions: Attitudes and Professional Attributes**

#### 1. COMMUNICATION

- 1a. Active Listening The ability to listen, interpret, and respond appropriately to others.
- **1b. Nonverbal Communication** The ability to appropriately send and receive wordless, mostly visual cues (body language).
- **1c. E-mail and Electronic Communication** The ability to use e-mail and other electronic communication (e.g., Blackboard, social media) in a professional manner.
- **1d. Verbal Communication** The ability to effectively use oral language when communicating with others, including professional language.

#### 1. ETHICS

- **2a. Integrity** The quality of being honest and fair; and conducting oneself in accordance with the Code of Ethics and Principles of Professional Conduct for the Education Profession in Florida.
- **2b. Confidentiality -** Follows FERPA guidelines and maintains confidentiality of student information and data.

#### 1. COLLABORATION AND COLLEGIALTY

- **3a. Approachability** Easy to talk to, responds in a positive manner, non-threatening or intimidating, trusting.
- **3b. Patience -** Demonstrating the willingness to understand students & others by actively listening to concerns or problems.
- **3c. Dependability -** Reliable, prepared, and punctual.
- **3d. Emotional Maturity -** The ability to recognize and manage emotions as well as recognize how one's own emotions might affect others.
- **3e. Cooperative Nature -** The ability to work and collaborate with colleagues by sharing ideas and seeking input.
- **3f. Professional Protocol** Employing appropriate methods for expressing concerns or problems.
- **3g.** Appearance Grooming and dressing appropriately for professional education settings.

#### 4. COMMITMENT TO STUDENT LEARNING

4a. Organization - Establishes order and provides structure for instructional materials and personal

belongings.

- **4b. Flexibility** Adapts to unexpected changes with a calm demeanor.
- **4c. Initiative -** The energy and desire needed to complete tasks.
- **4d. Independence** The ability to handle matters and make decisions.
- **4e. Resourcefulness -** The ability to find appropriate solutions to problems.
- **4f. Problem Solving -** The application of critical thinking skills to reach a desired goal or solution.
- 4g. Work Ethic Demonstrates diligence, self-discipline, and dedication to completing a task.
- **4h. Role Model -** Upholds personal standards and appropriate behavior, earns the admiration of others, the kind of individual that others aspire to be like.
- **4i. Commitment to Teaching -** The desire to be a teacher, liking the job and working with students, having a passion for education/teaching, seeing teaching as more than just a job.

#### 5. RESPECT FOR DIVERSITY

- 5a. Empathy Thoughtfulness, compassion, and understanding toward students & others.
- **5b. Acceptance -** Respects and tolerates diversity, is non-judgmental, sensitive or empathetic to diversity, including people with disabilities.
- **5c.** Equity Creates opportunities for all students to be successful.
- **5d. Social Consciousness** Seeks out information from multiple sources, including family and community resources as well as more formal sources, such as research and professional organizations.

#### 6. CONTINUOUS IMPROVEMENT AND PROFESSIONAL LEARNING

- **6a.** Use of feedback for continuous improvement The ability to willingly receive professional feedback and apply when needed in order to maximize student progress.
- **6b. Critical Thinking -** The ability to objectively analyze an issue in order to form a judgment or make a decision.
- **6c. Reflective Practice -** The ability to reflect upon one's own classroom instruction and management in order to utilize the process of continuous learning.
- **6d. Perseverance** The continued effort to achieve a result despite challenges.

## Code of Ethics & Principles of Professional Conduct for the Education Profession in Florida

#### 6A-10.080 Code of Ethics of the Education Profession in Florida.

- 1. The educator values the worth and dignity of every person, the pursuit of truth, devotion to excellence, acquisition of knowledge, and the nurture of democratic citizenship. Essential to the achievement of these standards are the freedom to learn and to teach and the guarantee of equal opportunity for all.
- 2. The educator's primary professional concern will always be for the student and for the development of the student's potential. The educator will therefore strive for professional growth and will seek to exercise the best professional judgment and integrity.
- 3. Aware of the importance of maintaining the respect and confidence of one's colleagues, of students, of parents, and of other members of the community, the educator strives to achieve and sustain the highest degree of ethical conduct.

Rulemaking Authority 1001.02, 1012.51, 1012.53 FS. Law Implemented 1012.32, 1012.34, 1012.51, 1012.53, 1012.795, 1012.796 FS. History-New 3-24-65, Amended 8-9-69, Repromulgated 12-5-74, Amended 8-12-81, 7-6-82, Formerly 6B-1.01, 6B-1.001.

#### 6A-10.081 Principles of Professional Conduct for the Education Profession in Florida.

- 1. The following disciplinary rule shall constitute the Principles of Professional Conduct for the Education Profession in Florida.
- 2. Violation of any of these principles shall subject the individual to revocation or suspension of the individual educator's certificate, or the other penalties as provided by law.
- 3. Obligation to the student requires that the individual:
  - a. Shall make reasonable effort to protect the student from conditions harmful to learning and/or to the student's mental and/or physical health and/or safety.
  - b. Shall not unreasonably restrain a student from independent action in pursuit of learning.
  - c. Shall not unreasonably deny a student access to diverse points of view.
  - d. Shall not intentionally suppress or distort subject matter relevant to a student's academic program.
  - e. Shall not intentionally expose a student to unnecessary embarrassment or disparagement.
  - f. Shall not intentionally violate or deny a student's legal rights.
  - g. Shall not harass or discriminate against any student on the basis of race, color, religion, sex, age, national or ethnic origin, political beliefs, marital status, handicapping condition, sexual orientation, or social and family background and shall make reasonable effort to assure that each student is protected from harassment or discrimination.
  - h. Shall not exploit a relationship with a student for personal gain or advantage.

- i. Shall keep in confidence personally identifiable information obtained in the course of professional service, unless disclosure serves professional purposes or is required by law.
- 4. Obligation to the public requires that the individual:
  - a. Shall take reasonable precautions to distinguish between personal views and those of any educational institution or organization with which the individual is affiliated.
  - b. Shall not intentionally distort or misrepresent facts concerning an educational matter in direct or indirect public expression.
  - c. Shall not use institutional privileges for personal gain or advantage.
  - d. Shall accept no gratuity, gift, or favor that might influence professional judgment.
  - e. Shall offer no gratuity, gift, or favor to obtain special advantages.
- 5. Obligation to the profession of education requires that the individual:
  - a. Shall maintain honesty in all professional dealings.
  - b. Shall not on the basis of race, color, religion, sex, age, national or ethnic origin, political beliefs, marital status, handicapping condition if otherwise qualified, or social and family background deny to a colleague professional benefits or advantages or participation in any professional organization.
  - c. Shall not interfere with a colleague's exercise of political or civil rights and responsibilities.
  - d. Shall not engage in harassment or discriminatory conduct which unreasonably interferes with an individual's performance of professional or work responsibilities or with the orderly processes of education or which creates a hostile, intimidating, abusive, offensive, or oppressive environment; and, further, shall make reasonable effort to assure that each individual is protected from such harassment or discrimination.
  - e. Shall not make malicious or intentionally false statements about a colleague.
  - f. Shall not use coercive means or promise special treatment to influence professional judgments of colleagues.
  - g. Shall not misrepresent one's own professional qualifications.
  - h. Shall not submit fraudulent information on any document in connection with professional activities.
  - i. Shall not make any fraudulent statement or fail to disclose a material fact in one's own or another's application for a professional position.
  - j. Shall not withhold information regarding a position from an applicant or misrepresent an assignment or conditions of employment.
  - k. Shall provide upon the request of the certificated individual a written statement of specific reason for recommendations that lead to the denial of increments, significant changes in employment, or termination of employment.
  - 1. Shall not assist entry into or continuance in the profession of any person known to be unqualified in accordance with these Principles of Professional Conduct for the Education Profession in Florida and other applicable Florida Statutes and State Board of Education Rules.
  - m. Shall self-report within forty-eight (48) hours to appropriate authorities (as determined by district) any arrests/charges involving the abuse of a child or the sale and/or possession of a controlled substance. Such notice shall not be

considered an admission of guilt nor shall such notice be admissible for any purpose in any proceeding, civil or criminal, administrative or judicial, investigatory or adjudicatory. In addition, shall self-report any conviction, finding of guilt, withholding of adjudication, commitment to a pretrial diversion program, or entering of a plea of guilty or Nolo Contendre for any criminal offense other than a minor traffic violation within forty-eight (48) hours after the final judgment. When handling sealed and expunged records disclosed under this rule, school districts shall comply with the confidentiality provisions of Sections 943.0585(4)(c) and 943.059(4)(c), Florida Statutes.

- n. Shall report to appropriate authorities any known allegation of a violation of the Florida School Code or State Board of Education Rules as defined in Section 1012.795(1), Florida Statutes.
- o. Shall seek no reprisal against any individual who has reported any allegation of a violation of the Florida School Code or State Board of Education Rules as defined in Section1012.795(1), Florida Statutes.
- p. Shall comply with the conditions of an order of the Education Practices Commission.
- q. Shall, as the supervising administrator, cooperate with the Education Practices Commission in monitoring the probation of a subordinate.

Rulemaking Authority 1001.02, 1012.51, 1012.53 FS. Law Implemented 1012.32, 1012.34, 1012.51, 1012.53, 1012.795, 1012.796 FS. History-New 7-6-82, Amended 12-20-83, Formerly 6B-1.06, Amended 8-10-92, 12-29-98, Formerly 6B-1.006.

## Florida Teacher Certification Examination Series

The FTCE is a three-part examination required by Florida law for college students planning to become teachers to demonstrate mastery of basic skills, professional knowledge, and content area of specialization.

Information about the Florida Teacher Certification Exam (FTCE) can be found at <a href="http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce/">http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce/</a>. For Registration information: <a href="http://www.fl.nesinc.com/">http://www.fl.nesinc.com/</a>. Test prep guides are also available for check out in the FSU-Teach office, 209 MCH or can be downloaded for free at <a href="http://www.fl.nesinc.com/FLTIGS.asp">http://www.fl.nesinc.com/FLTIGS.asp</a>.

The following fees for first-time examination were approved by the State Board of Education:

General Knowledge Test	\$130.00
Professional Education Test	\$150.00
Subject Area Examination	\$150.00

It is important that you prepare for these exams and pass them on the first attempt. The fee to retake a specific exam is \$20.00 more than the first time.

All testing is computer-based testing (CBT) and administered at Pearson VUE professional testing. The testing site in Tallahassee is:

#### **Tallahassee Pearson VUE Test Center**

Capital Circle Commerce Center 508 Capital Circle SE, Suite D–1 Tallahassee, FL 32301 **850**-656-2574

FSU-Teach recommends the following schedule for taking the three parts of the FTCE. This schedule allows enough time to retake the exam before applying for Student Teaching.

General Knowledge Take by the end of SMT 3100 Knowing and Learning\*

Professional Education Take right AFTER completing RED 4335

Subject Area Take one full semester BEFORE SMT 4664 Project-Based

Instruction

The General Knowledge exam MUST be *passed* before applying to Educator Preparation and the Subject Area and Professional Education exams must also be *passed* before applying for student teaching.

<sup>\*</sup>Or provide evidence of registration for the General Knowledge exam.

## Adding Second Major in Secondary Science or Math Teaching

In order to add the second major, you will need to

- 1) complete at least 18 hours of your liberal studies course work,
- 2) have a primary STEM major that is approved to pair with the teaching major,
- 3) be certified to upper division (52 credit hours total),
- 4) take and pass the General Knowledge portion of the Florida Teacher Certification Exam (FTCE), and
- 5) apply to the School of Teacher Education (STE), the umbrella organization for teacher preparation programs like FSU-Teach.

See page 24 of this handbook for information about the FTCE. You will also need to have your FSU EMPLID, a unique, nine-digit number that was issued to you when you applied to Florida State University. (If you don't know your EMPLID, go to

https://apps.its.fsu.edu/MyProfile/DuoLogin/Login?FINALURL=https://apps.its.fsu.edu/MyProfile/MyProfile.html and choose your authentication method.)

Once you have your EMPLID, you may now apply online to STE by going to <a href="https://fsu.qualtrics.com/jfe/form/SV\_0kqpP1dhZaBXJ3f">https://fsu.qualtrics.com/jfe/form/SV\_0kqpP1dhZaBXJ3f</a> and complete the online application to. The deadline for Fall entry is July 1 and the deadline for Spring entry is November 1.

Other requirements that you may hear about that **do not** apply to FSU-Teach are:

- Completion of FSU Liberal Studies curriculum (For FSU-Teach students it is only 18 hours of liberal studies) or have earned an AA degree.
- Completion of state mandated education prerequisites (EDF 1005, EDF 2085, and EME 2040) (These courses are not required for FSU-Teach students.)

#### APPLICATION DEADLINES

Your application and all supporting documents (including official GK scores) must be submitted by the application deadline. **No late applications will be accepted**. The College reserves the right to deny any application that is incomplete or submitted after the deadline. If you have any questions, please contact the <u>Office of Academic Services and Intern Support (OASIS)</u> at (850) 644-3760 to speak with an academic advisor.

Program	Fall	Spring	Summer
FSU-Teach	July 1	Nov 1	Not available

#### **SMT 3100**

## Signature Assessment #1: Early Lesson Plan

## **Description:**

The teacher candidate will create a developmentally appropriate lesson plan that includes objectives that are clearly written and aligned with appropriate Florida standards; concepts and/or skills that are logically sequenced throughout the lesson; and opportunities for students to demonstrate a variety of applicable skills and competencies within the instruction activities. During the introduction portion of the lesson plan, candidates should describe how they will convey high expectations to the students.

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
1a1. The candidate aligns instruction with state-adopted standards at the appropriate level of rigor.	The candidate does not align objectives with state-adopted standards.	The candidate develops objectives for state-adopted standards.	The candidate aligns objectives with state-adopted standards.	The candidate aligns objectives with state-adopted at appropriate levels of rigor for all students.
1b1. The candidate sequences concepts and skills within learning experiences.	The candidate does not sequence concepts and skills to ensure coherence and required.	The candidate identifies required major concepts and skills in a targeted learning area.	The candidate sequences concepts and skills within lessons in a targeted learning area.	The candidate sequences concepts and skills within learning experiences.
1f1. The candidate develops learning experiences that require students to demonstrate a variety of applicable skills and competencies.	The candidate cannot develop activities that demonstrate a variety of applicable skills and competencies.	The candidate identifies learning experiences that allow all students to demonstrate a variety of applicable skills and competencies.	The candidate selects learning experiences that allow all students to demonstrate a variety of applicable skills and competencies.	The candidate develops learning experiences that allow all students to demonstrate a variety of applicable skills and/or competencies.
2c1. The candidate conveys high expectations to all students.	The candidate does convey high expectations.	The candidate identifies various methods for conveying high expectations.	The candidate selects appropriate strategies for conveying high expectations.	The candidate consistently conveys high expectations.

#### **SMT 3100**

## Signature Assessment #2: Early Teaching Philosophy

## **Description:**

Teacher candidates will write a teaching philosophy based on their beliefs about teaching and learning. Within the philosophy, teacher candidates must address how they would address various cultural, linguistic, and family background differences in their classrooms; describe appropriate information and communication technologies they would use; and reflect on ways they can apply content learning and improved future practice. Finished products must reflect teacher candidates' ability to effectively communicate ideas.

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
2d1. The candidate respects students' cultural, linguistic, and family background.	The candidate does not demonstrate respect for students' cultural, linguistic, or family background.	The candidate identifies strategies for demonstrating respect for various student cultural, linguistic, and family background differences.	The candidate selects strategies for demonstrating respect for various student cultural, linguistic, and family background differences.	The candidate consistently demonstrates respect for students' cultural, linguistic, or family background.
2e1. The candidate models clear, acceptable oral and written communication skills.	The candidate fails to use clear, acceptable communication skills.	The candidate inconsistently demonstrates clear and acceptable written and verbal communication skills.	The candidate's written and verbal communication is consistently clear and acceptable.	The candidate models clear, acceptable oral and written communication skills to students.
2g1. The candidate Integrates current information and communication technologies.	There is no evidence the candidate uses current information and communication technologies for instruction.	The candidate identifies current information and communication technologies.	The candidate selects the appropriate information and communication technologies.	The candidate integrates current information and communication technologies.
5e1. The candidate applies information obtained from professional learning experiences to his/her own needs and the needs of learners, school, and system.	The candidate does not apply information obtained from professional learning experiences to his/her own needs and the needs of learners, school, and system.	The candidate identifies information obtained from professional learning experiences that can be applied to his/her own needs and the needs of learners, school, and system.	The candidate selects information obtained from professional learning experiences that can be applied to his/her own needs and the needs of learners, school, and system.	The candidate applies information obtained from professional learning experiences to his/her own needs and the needs of learners, school, and system.
5e2. The candidate engages in reflection by analyzing decisions made and articulating ways to improve future practice.	The candidate does not engage in reflection.	The candidate engages in reflection by analyzing decisions made.	The candidate engages in reflection by analyzing decisions made and recognizing the need to improve future practice.	The candidate engages in reflection by analyzing decisions made and articulating ways to improve future practice.
5f1. The candidate implements knowledge and skills learned in professional development in the teaching and learning process.	The candidate does not use a variety of strategies to analyze and reflect on his/her practice and for adaptions/adjustments.	The candidate identifies a variety of strategies to analyze and reflect on his/her practice and for adaptions/adjustments.	The candidate selects a variety of strategies to analyze and reflect on his/her practice and for adaptions/adjustments.	The candidate uses a variety of strategies to analyze and reflect on his/her practice and for adaptions/adjustments.

## Florida State University – Educator Preparation Unit Rubrics for FEAPs Measurable Criteria

#### **SMT 4301**

#### Signature Assessment #3: Unit-Wide Ethics Module

#### **Description:**

Candidates will complete a professional responsibility and ethical conduct module within their first semester. The goal is to help candidates better understand ethics in education as well as the high level of professionalism required by the field. The unit-wide module will include the following components: Code of Ethics and Principals of Professional Conduct to rpe-professional and person situations; statutory grounds and procedures for disciplinary action and penalties that can be imposed by the Educational Practices Commission against certificate holders as well as the appeals process available; legal responsibilities and procedures for reporting abuse, neglect, and other signs of distress; appropriate use of student records; and policies and procedures related to the safe and ethical use of technology.

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
6a1. The candidate applies the Code of Ethics and Principals of Professional Conduct to preprofessional and personal situations.	The candidate does not apply the Code of Ethics and Principals of Professional Conduct to pre-professional and personal situations.	The candidate identifies specific ethics and principles in the Code of Ethics and Principals of Professional Conduct.	The candidate selects ways to apply the Code of Ethics and Principals of Professional Conduct to pre-professional and personal situations.	The candidate applies the Code of Ethics and Principals of Professional Conduct to pre-professional and personal situations.
6b1. The candidate identifies statutory grounds and procedures for disciplinary action, the penalties that can be imposed by the EPC against a certificate holder, and the appeals process available to the individual.	The candidate does not identify statutory grounds and procedures for disciplinary action, the penalties that can be imposed by the EPC against a certificate holder, and the appeals process available to the individual.	The candidate identifies statutory grounds and procedures for disciplinary action, but does not correctly identify penalties that can be imposed or the appeals process available to individuals.	The candidate identifies statutory grounds and procedures for disciplinary action and penalties that can be imposed, but does not correctly identify the appeals process available to individuals.	The candidate identifies statutory grounds and procedures for disciplinary action, the penalties that can be imposed by the EPC against a certificate holder and the appeals process available to the individual.
6c1. The candidate applies laws related to learners' rights and teacher responsibilities, e.g. educational equity, appropriate education for learners with disabilities, confidentiality, privacy, appropriate treatment of learners, reporting in situations related to possible child abuse.	The candidate does not apply laws related to learners' rights and teacher responsibilities, e.g. educational equity, appropriate education for learners with disabilities, confidentiality, privacy, appropriate treatment of learners, reporting in situations related to possible child abuse.	The candidate identifies some of the laws related to learners' rights and teacher responsibilities, e.g. educational equity, appropriate education for learners with disabilities, confidentiality, privacy, appropriate treatment of learners, reporting in situations related to possible child abuse.	The candidate identifies all of the laws related to learners' rights and teacher responsibilities, e.g. educational equity, appropriate education for learners with disabilities, confidentiality, privacy, appropriate treatment of learners, reporting in situations related to possible child abuse in planning.	The candidate applies laws related to learners' rights and teacher responsibilities, e.g. educational equity, appropriate education for learners with disabilities, confidentiality, privacy, appropriate treatment of learners, reporting in situations related to possible child abuse in student teaching.
6d1. The candidate applies policies and procedures for the safe and ethical use of technologies.	The candidate does not apply policies and procedures for the safe and ethical use of technologies.	The candidate identifies some of the policies and procedures for the safe and ethical use of technologies.	The candidate identifies all of the policies and procedures for the safe and ethical use of technologies.	The candidate applies policies and procedures for the safe and ethical use of technologies in student teaching.

## Florida State University – Educator Preparation Unit Rubrics for FEAPs Measurable Criteria

## **SMT 4301**

## **Signature Assessment #4 Classroom Management Assignment**

## **Description:**

Teacher candidates will create a plan for equitably organizing and allocating resources, as well as communicating with home. Areas of the plan can include classroom arrangement, rules, procedures, and communication with home.

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
2a1. The candidate equitably organizes resources.	The candidate does not organize resources equitably.	The candidate identifies multiple ways to allocate resources equitably.	The candidate selects ways to organize resources equitably.	The candidate equitably organizes resources.
2a2. The candidate equitably allocates resources.	The candidate does not equitably allocate resources.	The candidate identifies multiple ways to organize resources equitably.	The candidate selects ways to equitably allocate resources.	The candidate equitably allocates resources.
5d1.The candidate works collaboratively with learners and their families to establish expectations and ongoing communication that support learner development and achievement.	The candidate does not collaboratively work with learners and their families to establish expectations and ongoing communication that support learner development and achievement.	The candidate identifies ways to collaboratively work with learners and their families to establish expectations and ongoing communication that support learner development and achievement.	The candidate selects ways to collaboratively work with learners and their families to establish expectations and ongoing communication that support learner development and achievement.	The candidate works collaboratively with learners and their families to establish expectations and ongoing communication that support learner development and achievement.

#### **SMT 4301**

## **Signature Assessment #5: Assessment Case Study Assignment**

## **Description:**

Given a set of student data from multiple assessments, the candidate will analyze data to diagnose students' learning needs and to inform the development of lesson plans. The candidate will use a variety of assessment tools to monitor student progress and to inform the modification of instruction. The candidate will develop a plan for communicating assessment outcomes with students and their caregivers.

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
1e1. The candidate applies diagnostic student data to plan lessons.	The candidate does not identify or use sources of diagnostic student data to plan lessons.	The candidate identifies diagnostic student data that are consistent with development and learning theories for the grade/age to plan lessons.	The candidate interprets diagnostic student data that is consistent with development and learning theories at the age/grade-appropriate level of rigor to help plan lessons.	The candidate applies diagnostic student data that is consistent with development and learning theories at the appropriate level of rigor to plan lessons.
4a1. The candidate analyzes a variety of assessment data to diagnose student learning needs.	The candidate does not analyze assessment data.	The candidate identifies student learning needs based on analyzed assessment data.	The candidate selects analyzed assessment data to diagnose student learning needs.	The candidate analyzes data from a variety of sources to diagnose student learning needs.
4a2. The candidate applies data from multiple assessments to modify or inform instruction.	The candidate does not apply assessment data to modify or inform instruction.	The candidate identifies assessment data that can be used to modify or inform instruction.	The candidate selects assessment data that can be used to modify or inform instruction.	The candidate applies data from multiple assessments to modify or inform instruction.
4c1. The candidate uses a variety of assessment tools to monitor student progress, i.e. learning gains, mastery of content, student gaps, etc.	The candidate does not use a variety of assessment tools to monitor student progress.	The candidate identifies a variety of assessment tools to monitor student progress.	The candidate selects a variety of assessment tools to monitor student progress.	The candidate uses a variety of formative and summative assessment tools to monitor student progress.
4e1. The candidate communicates outcomes of assessment data with students and students' caregivers.	The candidate does not communicate the outcomes of assessment data with students and caregivers.	The candidate describes how outcomes will be communicated to students and caregivers.	The candidate designs methods for communicating outcomes of student assessment data to students and caregivers.	The candidate communicates the outcomes of student assessment data with the students and caregivers.

## Florida State University – Educator Preparation Unit Rubrics for FEAPs Measurable Criteria

#### **SMT 4664**

## **Signature Assessment #8: Field Experience Instructional Impact Analysis**

## **Description:**

A detailed assignment description is available. Components of this impact analysis include:

- Design Unit Plan
  - o Teach a minimum of 2 lessons
  - o Classroom Teacher Evaluation form
- Pre and Post Assessment
- Analysis of Data
- Reporting of Data
- Reflection

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
2b1. The candidate manages individual and class behaviors through a well-planned management system.	The candidate does not manage classroom behaviors.	The candidate describes multiple classroom management models.	The candidate selects strategies for classroom management.	The candidate consistently manages classroom behaviors.
2f1. The candidate applies standards for behavior equitably, consistently, and in a fair manner.	The candidate does not show an understanding of how rules and standards for behavior may be applied equitably, consistently, and in a fair manner.	The candidate identifies standards for behavior equitably, consistently, and in a fair manner.	The candidate applies standards for behavior equitably, consistently, and in a fair manner.	The candidate creates procedures, rules, and standards of behavior and applies them consistently, equitably, and in a fair manner.
2f2. The candidate provides opportunities for students to share diverse perspectives, experiences, and opinions in a supportive and open climate.	The candidate does not show an understanding of how to provide opportunities for students to share diverse perspectives, experiences, and opinions in a supportive and open climate.	The candidate summarizes existing ways to provide opportunities for students to share diverse perspectives, experiences, and opinions in a supportive and open climate.	The candidate formulates plans for providing opportunities for students to share diverse perspectives, experiences, and opinions in a supportive and open manner.	The candidate creates opportunities for students to share diverse perspectives, experiences, and opinions, and implements these opportunities in a supportive and open classroom environment.
2h1. The candidate differentiates instruction to accommodate the differing needs and diversity of students (e.g., learning styles, abilities, preferences, needs, gender, race and culture).	There is no evidence the candidate differentiates instruction.	The candidate identifies ways in which instruction may be modified to accommodate differing needs and diversity of students.	The candidate selects strategies to differentiate the learning environment to accommodate the differing needs and diversity of students.	The candidate uses strategies to differentiate the learning environment to accommodate the differing needs and diversity of students.
2i1. The candidate uses available assistive technologies to support students to achieve educational goals.	There is no evidence that the candidate uses available technologies to support students' educational goals.	The candidate identifies available assistive technologies to support students to achieve educational goals.	The candidate selects available assistive technologies to support students to achieve educational goals.	The candidate utilizes available assistive technologies to support students to achieve educational goals.

# Florida State University – Educator Preparation Unit Rubrics for FEAPs Measurable Criteria

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
3a1. The candidate delivers engaging and challenging lessons.	The candidate does not deliver lessons that are engaging and challenging.	The candidate identifies strategies (voice modulation, circulation, questioning, etc.) that engage and challenge students.	The candidate selects strategies that engage and challenge students.	The candidate delivers lessons that are engaging and challenging for all students.
3c1. The candidate identifies gaps in students' subject matter knowledge.	The candidate does not use strategies to identify gaps in students' subject matter knowledge.	The candidate identifies strategies to identify gaps in students' subject matter knowledge.	The candidate selects a variety of strategies to identify gaps in students' subject matter knowledge.	The candidate uses a variety of strategies to identify gaps in students' subject matter knowledge.
3d1. The candidate modifies instruction to respond to student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).	The candidate does not modify instruction to respond to student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).	The candidate identifies ways to modify instruction to respond to student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).	The candidate selects strategies to modify instruction to respond to varied student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).	The candidate modifies instruction to respond to varied student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).
3f1. The candidate asks questions to stimulate discussion (verbal and/or written) that serves different purposes (e.g., probing for learner understanding, helping learners articulate their ideas and thinking processes, stimulating curiosity, and helping learners to question).  INTASC Standard 8i	The candidate does not ask questions to stimulate discussion.	The candidate identifies questions to stimulate discussion.	The candidate selects questions to stimulate discussion.	The candidate asks questions to stimulate discussion.
3g1. The candidate applies a variety of instructional strategies and resources to promote student understanding of subject matter.	The candidate does not apply a variety of instructional strategies and resources to promote student understanding.	The candidate identifies a variety of instructional strategies and resources to promote student understanding.	The candidate selects a variety of instructional strategies and resources to promote student understanding.	The candidate applies a variety of instructional strategies and resources to promote student understanding.
3h1. The candidate differentiates instruction based on an assessment of differing needs and diversity of students (e.g., cultural linguistic, SES, disability, etc.).	The candidate is unable to differentiate instruction based on an assessment of student needs.	The candidate identifies ways to differentiate instruction based on an assessment of student needs.	The candidate selects ways to differentiate instruction based on an assessment of student needs.	The candidate differentiates instruction based on an assessment of student needs.
3i1. The candidate provides immediate and specific feedback to promote student understanding.	The candidate does not provide immediate and specific feedback to promote student understanding.	The candidate identifies practices for providing immediate and specific feedback to promote student understanding.	The candidate selects practices for providing immediate and specific feedback to promote student understanding.	The candidate provides immediate and specific feedback to promote student understanding.
3j1. The candidate utilizes student feedback collected from formal and informal formative and summative assessments (e.g., graded class work/exams, IEP goal attainment if	The candidate does not utilize student feedback to monitor and adjust instruction.	The candidate identifies practices for utilizing student feedback to monitor and adjust instruction.	The candidate selects practices for utilizing student feedback to monitor and adjust instruction.	The candidate utilizes student feedback to monitor and adjust instruction.

# Florida State University – Educator Preparation Unit Rubrics for FEAPs Measurable Criteria

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
appropriate, behavior, verbal expressions, etc.) to monitor and adjust instruction.				
4d1. The candidate modifies assessment and testing conditions to accommodate differences, i.e. learning styles, levels of knowledge, disabilities, etc.	The candidate does not modify assessments and/or testing conditions to accommodate student differences.	The candidate identifies methods for modifying assessments and/or testing conditions based on a student's differences.	The candidate selects methods for modifying assessments and/or testing conditions based on differences within the student population.	The candidate modifies assessments and/or testing conditions based on differences within the student population.
4f1. The candidate analyzes assessment information using available technology tools.	The candidate does not analyze assessment information using available technology tools.	The candidate identifies available technology tools that can be used to analyze assessment information.	The candidate selects available technology tools that can be used to analyze assessment information.	The candidate analyzes assessment information using available technology tools.
5a1. The candidate designs professional goals to improve his/her instructional practice.	The candidate does not design professional goals to improve his/her instructional practice.	The candidate recognizes the importance of identifying professional goals.	The candidate identifies areas of strength and weakness in his/her instructional practice.	The candidate designs professional goals to improve his/her instructional practice based on students' needs.

## Florida State University – Educator Preparation Unit Rubrics for FEAPs Measurable Criteria

#### **SMT 4930 and SMT 4945**

## **Signature Assessment #9: Capstone Instructional Impact Analysis**

## **Description:**

A detailed assignment description is available. Components of this impact analysis include:

- Unit Plan
- Pre and Post Assessment
- Analysis of Data
- Reporting of Data
- Reflection

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
2f1. The candidate applies standards for behavior equitably, consistently, and in a fair manner.	The candidate does not show an understanding of how rules and standards for behavior may be applied equitably, consistently, and in a fair manner.	The candidate identifies standards for behavior equitably, consistently, and in a fair manner.	The candidate applies standards for behavior equitably, consistently, and in a fair manner.	The candidate creates procedures, rules, and standards of behavior and applies them consistently, equitably, and in a fair manner.
2f2. The candidate provides opportunities for students to share diverse perspectives, experiences, and opinions in a supportive and open climate.	The candidate does not show an understanding of how to provide opportunities for students to share diverse perspectives, experiences, and opinions in a supportive and open climate.	The candidate summarizes existing ways to provide opportunities for students to share diverse perspectives, experiences, and opinions in a supportive and open climate.	The candidate formulates plans for providing opportunities for students to share diverse perspectives, experiences, and opinions in a supportive and open manner.	The candidate creates opportunities for students to share diverse perspectives, experiences, and opinions, and implements these opportunities in a supportive and open classroom environment.
2h1. The candidate differentiates instruction to accommodate the differing needs and diversity of students (e.g., learning styles, abilities, preferences, needs, gender, race and culture).	There is no evidence the candidate differentiates instruction.	The candidate identifies ways in which instruction may be modified to accommodate differing needs and diversity of students.	The candidate selects strategies to differentiate the learning environment to accommodate the differing needs and diversity of students.	The candidate uses strategies to differentiate the learning environment to accommodate the differing needs and diversity of students.
2i1. The candidate uses available assistive technologies to support students to achieve educational goals.	There is no evidence that the candidate uses available technologies to support students' educational goals.	The candidate identifies available assistive technologies to support students to achieve educational goals.	The candidate selects available assistive technologies to support students to achieve educational goals.	The candidate utilizes available assistive technologies to support students to achieve educational goals.
3a1. The candidate delivers engaging and challenging lessons.	The candidate does not deliver lessons that are engaging and challenging.	The candidate identifies strategies (voice modulation, circulation, questioning, etc.) that engage and challenge students.	The candidate selects strategies that engage and challenge students.	The candidate delivers lessons that are engaging and challenging for all students.
3c1. The candidate identifies gaps in students' subject matter knowledge.	The candidate does not use strategies to identify gaps in students' subject matter knowledge.	The candidate identifies strategies to identify gaps in students' subject matter knowledge.	The candidate selects a variety of strategies to identify gaps in students' subject matter knowledge.	The candidate uses a variety of strategies to identify gaps in students' subject matter knowledge.

# Florida State University – Educator Preparation Unit Rubrics for FEAPs Measurable Criteria

Measurable Criteria	Unacceptable	Developing 1	Developing 2	Target
3d1. The candidate modifies instruction to respond to student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).	The candidate does not modify instruction to respond to student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).	The candidate identifies ways to modify instruction to respond to student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).	The candidate selects strategies to modify instruction to respond to varied student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).	The candidate modifies instruction to respond to varied student needs (e.g., gaps in knowledge, preconceptions or misconceptions, etc.).
3f1. The candidate asks questions to stimulate discussion (verbal and/or written) that serves different purposes (e.g., probing for learner understanding, helping learners articulate their ideas and thinking processes, stimulating curiosity, and helping learners to question).  INTASC Standard 8i	The candidate does not ask questions to stimulate discussion.	The candidate identifies questions to stimulate discussion.	The candidate selects questions to stimulate discussion.	The candidate asks questions to stimulate discussion.
3g1. The candidate applies a variety of instructional strategies and resources to promote student understanding of subject matter.	The candidate does not apply a variety of instructional strategies and resources to promote student understanding.	The candidate identifies a variety of instructional strategies and resources to promote student understanding.	The candidate selects a variety of instructional strategies and resources to promote student understanding.	The candidate applies a variety of instructional strategies and resources to promote student understanding.
3h1. The candidate differentiates instruction based on an assessment of differing needs and diversity of students (e.g., cultural linguistic, SES, disability, etc.).	The candidate is unable to differentiate instruction based on an assessment of student needs.	The candidate identifies ways to differentiate instruction based on an assessment of student needs.	The candidate selects ways to differentiate instruction based on an assessment of student needs.	The candidate differentiates instruction based on an assessment of student needs.
3i1. The candidate provides immediate and specific feedback to promote student understanding.	The candidate does not provide immediate and specific feedback to promote student understanding.	The candidate identifies practices for providing immediate and specific feedback to promote student understanding.	The candidate selects practices for providing immediate and specific feedback to promote student understanding.	The candidate provides immediate and specific feedback to promote student understanding.
3j1. The candidate utilizes student feedback collected from formal and informal formative and summative assessments (e.g., graded class work/exams, IEP goal attainment if appropriate, behavior, verbal expressions, etc.) to monitor and adjust instruction.	The candidate does not utilize student feedback to monitor and adjust instruction.	The candidate identifies practices for utilizing student feedback to monitor and adjust instruction.	The candidate selects practices for utilizing student feedback to monitor and adjust instruction.	The candidate utilizes student feedback to monitor and adjust instruction.
5a1. The candidate designs professional goals to improve his/her instructional practice.	The candidate does not design professional goals to improve his/her instructional practice.	The candidate recognizes the importance of identifying professional goals.	The candidate identifies areas of strength and weakness in his/her instructional practice.	The candidate designs professional goals to improve his/her instructional practice based on students' needs.

# Student Teaching Application Directions for FSU-Teach Students

Information about student teaching can be found at (<a href="https://education.fsu.edu/student-resources/student-academic-services-oasis/student-teaching">https://education.fsu.edu/student-resources/student-academic-services-oasis/student-teaching</a>)

To be eligible to student teach, you must meet the following criteria:

- You **must** be admitted to Educator Preparation
- For undergraduate programs, you must have a GPA of 2.5 in all upper division coursework. A higher GPA may be required by some academic programs for particular core courses.
- Successfully meet standards and complete a diversity of specific early clinical experiences set by the program or the University
- Successfully complete all Signature Assessments associated with coursework completed up to this point (SA #1-SA # 8)
- Successfully complete all coursework in your program
- Receive recommendation from your program for admission.
- Present evidence of current health insurance. Professional liability insurance is strongly recommended.
- Present official passing scores for all Florida Teacher Certification Examinations, including General Knowledge (all subtests), Subject Area Examination, and Professional Education test. *Be sure to report your scores to FSU when you register for the exams*.

You will receive an invitation to apply for student teaching via email by the third week of the semester for student teaching the following semester. The email will have a link to an online application. The online submission will be due less than a week later.

"Dear,	
Based on your program's recor	mmendation and a review of your official Student Teaching
records on file in OASIS, I wo	uld like to invite you to apply for Student Teaching placement.

Prior to beginning your Student Teaching semester, it appears you must meet the following requirements:

[Any missing requirements are noted here]

Here is the essence of the email you will receive:

As part of the Student Teaching Application (due: September 20), you must upload a professional resume. Please have your resume finalized and available when you access the online application."

Be sure to check your email frequently around the third week so you will not miss the deadline!

# JP Morgan Chase Bank/National Math & Science Initiative FSU-Teach Induction Program

The FSU-Teach Induction program plan is based on the elements of the UTeach Induction program that have met with success. Program Mission: The FSU-Teach Induction program is committed to the successful transition by its graduates into teaching mathematics or science at the secondary level. Objectives: 1) provide a multi-level support system to transition students, 2) enhance retention, 3) provide professional development, and 4) encourage the pursuit of advanced degrees.

Materials and other support for FSU-Teach induction will include:

- 1. A kit of teaching supplies that will allow the inductee to start the year using the teaching practices emphasized in the program.
- 2. One classroom visit per semester (for graduates within a day's drive): These visits will be from a master teacher or program faculty member for mentoring and collaborative professional development.
- 3. Have access to lesson plan resources (e.g., GEMS and other FSU-Teach planning resources) electronically (scanned and emailed) when requested, as well as planning advice electronically and via phone.
- 4. Receive advice and strategies to assist with classroom management issues such as student engagement, classroom routines, consistency, etc. through one-one one or group communications.
- 5. Receive advice and mentoring to help investigate, plan, and pursue opportunities for advanced degrees.
- 6. Be able to peer network to share ideas and experiences on an ad hoc basis on Facebook (request to join FSU-Teach Alumni private group), and the graduate listserv: <a href="https://lists.fsu.edu/mailman/listinfo/fsuteachgrads">https://lists.fsu.edu/mailman/listinfo/fsuteachgrads</a>.
- 7. Professional organization membership: Dues will be paid for one year of new teacher membership in the appropriate professional organization (either National Council of Teachers of Mathematics or National Science Teachers Association). This provides the opportunity for networking, teaching materials, professional organizational support, etc. for inductees.
- 8. Curriculum or lesson manual for their subject area: This tool is an essential lesson planning tool for inductees in their early classroom years.
- 9. Travel reimbursed up to \$250 for a professional conference (e.g., the regional association of science teachers or mathematics teachers conference): This provides professional development and networking opportunities for inductees.
- 10. Membership in National UTeach Alumni Network: <a href="https://alumni.uteach.utexas.edu">https://alumni.uteach.utexas.edu</a>. Potential to interact with more than 3300 UTeach model alumni, participate in an annual conference in Austin, take part in UTeach-developed online professional development (more at <a href="https://pd.uteach.utexas.edu/">https://pd.uteach.utexas.edu/</a>). Join the alumni network for free at: <a href="https://jfe.qualtrics.com/form/SV\_7aoy9kwjyPTLhOZ">https://jfe.qualtrics.com/form/SV\_7aoy9kwjyPTLhOZ</a>

## **Academic Program Guides and Maps**

The program guides and maps for the STEM content area majors that have been approved as majors that can pair with the Secondary Science or Mathematics Teaching major in the FSU-Teach are:

Academic Program Guide	Academic Map	
Applied Geoscie	nces/FSU-Teach	
http://undergrad1.its.fsu.edu/academic guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=fsu-teach-	map-display.php?program=fsu-teach-applied-	
applied-geosciences	geosciences	
Bioche	emistry	
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=biochemistry	map-display.php?program=biochemistry	
Biologica	al Science	
http://undergrad1.its.fsu.edu/academic guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=biological-	map-display.php?program=biological-science	
science		
Biology/F	SU-Teach	
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic guide/	
guide-display.php?program=fsu-teach-	map-display.php?program=fsu-teach-biology	
<u>biology</u>		
Chemical Scien	nce/FSU-Teach	
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=fsu-teach-	map-display.php?program=fsu-teach-	
<u>chemical-science</u>	<u>chemical-science</u>	
Chen	nistry	
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=chemistry	map-display.php?program=chemistry	
Computer	Science, BA	
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=computer-	map-display.php?program=computer-science-	
science-ba	<u>ba</u>	
Computer Science-Math BA/FSU-Teach		
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=fsu-teach-	map-display.php?program=fsu-teach-	
computer-science-math	computer-science-math	
Environmen	ıtal Sciences	
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=environmental-	map-display.php?program=environmental-	
science-bs	science-bs	

Environmental Sciences/FSU-Teach		
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=fsu-teach-	map-display.php?program=fsu-teach-	
environmental-science	environmental-science	
Mathematics		
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=mathematics-	map-display.php?program=mathematics-pure	
pure		
Mathematics/FSU-Teach		
http://undergrad1.its.fsu.edu/academic guide/	http://undergrad1.its.fsu.edu/academic guide/	
guide-display.php?program=fsu-teach-	map-display.php?program=fsu-teach-	
mathematics	mathematics	
Physics		
http://undergrad1.its.fsu.edu/academic_guide/	http://undergrad1.its.fsu.edu/academic_guide/	
guide-display.php?program=physics	map-display.php?program=physics	

Use the major comparison guide to compare up to three majors:

https://undergrad1.its.fsu.edu/major-comparison/#/index

#### Note:

- Major Comparisons are guides and all graduation requirements are not listed. Program information subject to change.
- What courses will I need before I start? refers to courses students must complete to be admitted and/or certified into the major's upper-division status.
- Please contact each major's respective advising office with questions and for more details on eligibility for that major.

## **FSU-Teach Course of Study**

## **Step 1: Inquiry Approaches to Teaching**

Step 1 invites students to explore teaching as a career at no cost. In Step 1, students teach science or math lessons in elementary classrooms to obtain firsthand experience with planning and implementing inquiry-based curriculum. Master teachers teach Step 1, so students have direct access to people who love teaching and who believe that teaching is a rewarding career choice. A low-socioeconomic-status elementary classroom provides the future teachers with a first taste of teaching in a supportive, diverse environment.

An introduction to the theory and practice necessary to design and deliver excellent inquiry-based science and mathematics instruction provides the scaffold for the early field experience. The FSU-Teach instructor or master teacher and the elementary school mentor teacher emphasize both inquiry and classroom management techniques.

**Course Objectives: Step 1** 

<b>Evidence (Student Products)</b>
A paragraph in each lesson plan that provides
background information on the concepts presented
Content accuracy throughout a lesson plan
Observations by the mentor teacher and the master
teacher
Participation in model lessons presented in class
Sources of lessons cited in each lesson plan
Performance objectives and corresponding
assessments included in each lesson plan
Three inquiry-based lesson plans
Written feedback by the mentor teacher for three
inquiry-based lessons
Written feedback by a master teacher for at least
one inquiry-based lesson
Completion and analysis of survey instruments
Participation in class discussions on the
implications of personality and learning styles for
teaching and learning

Use probing questions to elicit feedback to determine students' acquisition of knowledge	Participation in class discussions on questioning strategies Extensive examples of possible questions and expected responses listed in each lesson plan Written feedback for every lesson from the mentor teacher
Implement safe classroom	Safety issues addressed in each lesson plan
practices	Observations by the mentor teacher and master
	teacher
Assess commitment to pursue	Participation in a class discussion on intentions to
teaching as a career path	pursue teaching as a career path

## **Step 2: Inquiry-Based Lesson Design**

In Step 2 students who want to explore teaching careers become familiar with the middle school environment by observing and discussing middle school culture and by teaching several lessons to a middle school class. They build on and practice lesson design skills developed in Step 1 and also become familiar with excellent science or mathematics curricula for the middle school setting. A significant number of FSU-Teach students enjoy their teaching experiences in middle schools to the extent that they decide to pursue teaching in the middle grades. As a result of the Step 2 experiences, students generally are able to make a decision about whether they want to pursue a pathway to teacher certification through the FSU-Teach program.

The Step 2 course emphasizes writing good 5E lesson plans, with a focus on the importance of using appropriate questioning strategies throughout the lesson. Students develop pre- and post-assessments for performance objectives. For their final product, students analyze and modify one of the lessons they taught, taking into account the results of the assessments, their reflection on how successful the lesson was, and feedback from their mentor teachers and the course instructor who observed the lesson.

**Course Objectives: Step 2** 

Students Will Be Able To:	<b>Evidence (Student Products)</b>
Use content knowledge to plan and teach three middle school lessons	One paragraph in each lesson plan that provides background information on the concepts presented Content accuracy throughout the lesson plan Observations by the mentor teachers and the master teacher
Use exemplary sources of inquiry-based science and mathematics lessons	Participation in model lessons presented in class Sources of lessons cited in each lesson plan
Experience teaching adolescents to understand their unique attributes and implement teaching strategies that are effective in the middle school environment	One paragraph in each lesson plan that indicates why the instructional strategies are effective for adolescents  Participation in a class session that addresses attributes of adolescents  Observations by the mentor teachers and master teacher who observe lessons
Design and teach three inquiry-based lesson plans using safe practices and the 5E model	Three inquiry-based lesson plans with the 5E template that includes safety recommendations Written feedback by the mentor teacher for three inquiry-based lessons taught in a middle school Written feedback by the master teacher for at least one inquiry-based lesson taught in a middle school
Design and teach a lesson that incorporates the use of technology	Participation in technology activities during class A minimum of one lesson plan that incorporates the use of technology Written feedback from the mentor teacher

	indicating that a minimum of one lesson incorporated the use of technology
Use probing questions to elicit feedback on students' acquisition of knowledge	Participation in class discussions on questioning strategies Extensive examples of possible questions and expected responses listed in each lesson plan Written feedback for every lesson from the mentor teacher, indicating the effective use of questioning strategies
Use pre- and post-assessments to evaluate student learning, to provide instructive feedback to middle school students, and as a basis for revising a lesson plan	Analysis of the use of pre- and post-assessments to evaluate student learning Pre- and post-assessments with written comments for instructive feedback for lesson plans. Use of pre- and post-assessments to revise one lesson plan
Provide instructive feedback to peers	Written feedback provided to peers who present their lessons during class
Reflect on teaching experiences to revise lesson plans	Student essays produced after observation and teaching experiences One revised lesson plan submitted as a final project Essay providing rationale for revisions to the lesson plan
Evaluate commitment to pursue teaching as a career path	Survey indicating intention to pursue teaching as a career path

## **Knowing and Learning in Mathematics and Science**

A traditional certification program typically includes, early on, a general-purpose educational psychology course. While similarly placed in the FSU-Teach program, the Knowing and Learning course was developed as a significant alternative to such an all-inclusive, all-things-to-all-people course. Rather than pursue very general claims about knowing and learning across disciplines and ages and rather than being based on only one formal perspective (educational psychology), FSU-Teach's Knowing and Learning course is intended to focus on knowing and learning in secondary mathematics and science as understood from a multidisciplinary perspective. The course stands on the premise that formal research on knowing and learning in mathematics and science has emerged, in itself, as a robust line of inquiry and design. This line of inquiry has tended to be situated relative to classroom practice and draw on significant insights from many fields of inquiry, including psychology, anthropology, critical literacy, sociology, biology, linguistics, neuroscience, philosophy, developmental theory, artificial intelligence, and the domains of mathematics, science, and computer science proper. Some now call this integration of domains a "learning science" perspective.

This course is not simply a general survey of theories of mathematical knowing and learning. Instead, the primary goal of Knowing and Learning is to provide students with the opportunity to identify theories and employ these theories to guide their own practice. FSU-Teach is committed to the idea that practice and theory build on each other. Any teaching practice is guided by some theory of how people learn. If students are not aware of this, they are likely to adopt teaching practices without considering the full implications of theory behind them. FSU-Teach wants its students to be thoughtful and reflective practitioners.

### **Course Objectives: Knowing and Learning**

Students Will Be Able To:	Evidence (Student Products)
Articulate various standards for	Meaningful contributions to class discussions
knowing science and mathematics and	Comments posted about analysis of readings
articulate the implications of these	Analysis of clinical interviews
standards for assessment, especially	Written examinations
standardized assessment	
Describe how knowing and learning	Meaningful contributions to class discussions
are structured and how what people	Comments posted about analysis of readings
know changes and develops	Analysis of clinical interviews
	Written examinations
Describe various paradigms for	Meaningful contributions to class discussions
evaluating science and mathematics	Comments posted about analysis of readings
understanding	Written examinations
Describe the links between knowing	Meaningful contributions to class discussions
and developing in learning theory and	Comments posted about analysis of readings
the content and evolution of scientific	Analysis of clinical interviews
ideas	Written examinations
Complete three mini clinical	Report including transcription and analysis of

interviews with an expert/novice	clinical interviews
pairing on a topic	Rubric given to students before clinical interview to
	clarify what will be assessed
Express informed opinions on current	Meaningful contributions to class discussions
issues and tensions in education,	Comments posted about analysis of readings
especially as they relate to	Analysis of clinical interviews
mathematics and science instruction	Written examinations

# **Functions and Modeling**

Functions and Modeling is a requirement for math majors in the UTeach program. In this exploration of secondary mathematics concepts, prospective mathematics teachers are expected to do the following:

- Deepen and broaden function-related mathematical content knowledge from algebra through calculus
- Make connections between college mathematics and secondary school mathematics
- Build preliminary knowledge of professional and state mathematics curriculum standards
- Use reflective and collaborative learning and develop a stronger sense of professionalism and leadership
- Become efficient seekers and presenters of mathematics content knowledge and history
- Explore and learn appropriate use of technology in the mathematics classroom

A point is made to cover content that is traditionally glossed over by secondary teachers but is essential to preparing students for university mathematics courses. This slighted content includes parametric and polar objectives, linear and matrix algebra, regression aspects of statistics, and growth and decay exponential models.

### **Course Objectives: Functions and Modeling**

Students Will Be Able To:	<b>Evidence (Student Products)</b>
Deepen and broaden function-related	Classroom activities
mathematical content knowledge	Assessments
	Discussions
Generate relevant data and use	Classroom activities
regression, matrix, function pattern, and	Classroom labs
systems methods to model the data	
Present mathematics ideas and topics in	Classroom presentations of findings
a knowledgeable and effective manner	Discussions
Explore and learn appropriate use of	Classroom activities
technology in the mathematics	Classroom labs
classroom	Assessments
	Discussions
Identify connections between the	Classroom activities
various levels of secondary mathematics	Discussions
curriculum and between secondary and	
university level curriculum	

### **Classroom Interactions**

The Classroom Interactions course continues the process of preparing students to teach mathematics and science in upper elementary and secondary settings. The specific objectives of this course are to:

- Demonstrate to students how learning theories (from the Knowing and Learning course) manifest themselves in instructional settings (usually classrooms), allow students to design and implement instructional activities from their own understanding of knowing and learning mathematics and science, and evaluate the outcomes of those activities based on evidence from student artifacts
- Provide students with frameworks for thinking about equity issues in the classroom and larger school settings and their effects on learning and provide students with strategies for teaching diverse students equitably

Classroom Interactions begins with the assumption that students have conducted and analyzed a number of clinical interviews in science and mathematics as part of Knowing and Learning. Students must understand that the process of concept acquisition must encompass learners' prior formal and informal knowledge, the importance of task construction in eliciting student thinking, and the critical role of reflection and language in the construction of knowledge. Whereas in Knowing and Learning, students study the meaning behind understanding a particular content area from an individual perspective, in Classroom Interactions, the perspective shifts to studying how classroom events might promote or discourage learning mathematics and science and student equity.

In Classroom Interactions, students typically participate in several learning activities and consider how the activities reveal and change their own understanding before implementing similar activities in high school classrooms. These activities allow students to evaluate their own learning and understanding of a subject. Bringing together students from different disciplines (for example, science, math, and computer science) allows them to see their subjects from the perspective of a novice and to consider how different perspectives might affect the same curriculum. Participating in learning activities also allows students to consider equity issues. For example, is it fair for only the fastest students to contribute to an activity? How would learning be different if all students were not only allowed but required to participate? Is it fair that some students are learning in a language that is not their first? The class considers the implications of deficit thinking (for example, blaming the student) in classroom outcomes.

The culminating activities of the course are the opportunities for students to teach in a high school and to learn whether they enjoy and are good at it. A major component of the Classroom Interactions course is the opportunity for students to reflect on and evaluate their own work as teachers.

# **Course Objectives: Classroom Interactions**

Students Will Be Able To:	<b>Evidence (Student Products)</b>
Compare models of teaching and use various models of teaching, including direct instruction, inquiry, and cooperative groups, as appropriate, to design three high school lessons	Written justification of lesson plans Participation in discussions evaluating teaching Use of various models (both in class and during field teaching) Observations by mentor teacher and class instructor
Plan (with a partner or partners) multiple-day lesson plans on assigned subjects in high school math and science	Lesson plans, including essays justifying the plans and responses to reviewer comments  Peer and instructor evaluations of practice teaching in the Classroom Interactions class  Completion of appropriate sections of the preliminary portfolio
Teach (with a partner or partners) multiple-day lessons in high school math or science classes	Videotapes of teaching Observer (i.e., classroom teacher, Classroom Interactions instructor, Classroom Interactions teaching assistants, and master teachers) comments on teaching
Analyze their own and others' teaching in terms of how the instruction develops the content understanding of the students involved	Written analyses of teaching with video samples and other student artifacts Presentation and discussion of video samples and other student artifacts in the Classroom Interactions class Development of a knowledge map for assigned lessons in high school math and science classrooms Completion of appropriate sections of the preliminary portfolio
Analyze their own and others' ability to address equity issues in their teaching (e.g., effects of instruction on all students, including those learning in a second language, those with disabilities, those from minority cultures)	Written analyses of teaching with video samples and other student artifacts with regard to equity issues Presentation and discussion of video samples and artifacts of teaching Completion of appropriate sections of the preliminary portfolio
Become familiar with policies and classroom strategies regarding students of all kinds, in particular the Texas Essential Knowledge and Skills and	Participation in discussion and Internet postings regarding policies concerning students who have diverse needs

national science and math standards	
Read selected articles documenting theory and research regarding classroom interactions and broader educational policies and their effects on content understanding and equity for all students	Participation in discussions of readings Posting of commentaries on the Internet Written analyses of readings
Become familiar with relevant types of teaching technology and analyze how technology can affect classroom interactions	Artifacts produced by the use of such technology in the Classroom Interactions classroom Participation in discussions of the effectiveness of technology Written analyses of the uses of technology Completion of appropriate sections of the preliminary portfolio

### **Project-Based Instruction**

Project-Based Instruction (PBI) is the capstone course in the sequence of required education courses and is required before UTeach students take Apprentice Teaching. PBI is the course in which the major themes of the UTeach program—integrated content of mathematics and science learning, infusion of technology in representation, analysis, modeling, assessment and contextualization of the content, field-based experiences, and equity—converge into an exciting and intellectually challenging culminating experience. When students complete PBI, they are fully prepared for Apprentice Teaching.

Whereas in Classroom Interactions, students gain experience designing a sequence of several lessons that they teach to a high school class, in PBI, students design full units of connected lessons—a skill that is required in Apprentice Teaching. PBI also provides students with the experience of managing lessons and students outside a classroom, in a field setting.

Despite its name, PBI emphasizes choosing from a variety of appropriate teaching styles, depending on the type of material and the learning objectives, with project-based instruction being just one possible alternative. In addition, PBI requires students to incorporate various technologies into the units they plan.

### **Course Objectives: Project-Based Instruction**

Students Will Be Able To:	<b>Evidence (Student Products)</b>
Discuss the importance of project-based	A project-based unit that includes a
instruction in terms of students' cognitive	rationale and objectives
development, equity, and motivation	A grant proposal to implement a project-
	based unit that includes a rationale and
	potential impact
Reflect on applications of educational	Online discussions
theory as it relates to classroom practice in	A grant proposal to implement an inquiry-
the area of inquiry-based instruction	based unit that includes a rationale and
	potential impact
Distinguish among project-based and other	Online discussions
instructional approaches and decide which	A project-based unit that includes
approach best fits instructional goals based	benchmark lessons and an appropriate
on the benefits and limitations of each	lesson sequence based on the best fit of
	different instructional approaches
Evaluate the usefulness of technology	An annotated list of relevant resources and
(e.g., concept mapping software, video	technological tools for a project-based unit
editing software, the Internet, simulations)	Classroom presentation utilizing
in achieving learning objectives and select	technology tools
appropriate resources for student use,	
based on the relationship of salient	
features of the technology to learning	
objectives	
Compare and contrast observations of	Online discussions of class readings and

"real" project-based classrooms with those presented in readings and with theoretical models	field observations of project-based classes
Critically analyze a lesson that they have taught and revise and re-teach it	Mini-lesson study that includes lesson plans, videotapes of the two lessons,
	reflections on what was planned, how the
	lesson went each time it was taught, and the rationale for the changes
Demonstrate skill in setting up and managing wet lab and field project-based environments	Assessment of videotape showing the student setting up and managing wet lab and field project-based environments
Work collaboratively to design a four- to six-week project-based unit for secondary	A project-based unit consisting of a calendar, a rationale, objectives, a
math and/or science courses	theoretical basis for the project, a concept map, benchmark lessons, investigations, alternative assessment strategies, related resources, and technological tools
For science students, read and discuss the	Participation in class discussion on safety
Texas Safety Standards Manual (e.g., material safety data sheets, OSHA regulations, how to dispose of chemicals safely)	and liability issues A project-based unit that includes safety precautions

## **Perspectives on Science and Mathematics**

Many math and science students are surprised to learn that math and science *have* a history at all; so far as they know, math and science have simply been handed down in textbooks. To discover that science has been accomplished by different kinds of people, for different kinds of reasons, in different kinds of places, can be truly mind-boggling, and, for many students, illuminating. Science is not just a matter of finding out the predetermined right answer! While some students are irked or even frightened by this discovery, others find it liberating. Perspectives has several interlocking purposes:

- It is intended to help future math and science teachers learn how to think about math and science "from the outside"—to ask questions about what scientists and mathematicians do and why, about where science and technology came from and how they got to be so important in the world today, and about what kinds of questions scientists and mathematicians have tried to answer and why.
- It is designed to teach students skills of the liberal arts, including sophisticated research and information analysis, fluent writing, and substantive argument.
- It requires students to put to work all the perspectives and skills they have learned in science and math pedagogy.

Four common elements show up in Perspectives: thinking about science and math "from the outside," improving students' writing skills, improving students' research skills, and incorporating history and/or philosophy of science and math into pedagogy.

**Course Objectives: Perspectives** 

Students Will Be Able To:	Evidence (Student Products)
Develop an overview of the	Two quizzes on historical material
development of modern science and	Weekly writing assignment responding to an
mathematics from the seventeenth	issue or question raised
through the twentieth centuries	Two historical papers requiring research and analysis
	Participation in class and weekly section discussions
Examine the underpinnings of modern	Two quizzes on historical material
science and mathematics by analyzing	Participation in class and weekly section
the contributions of key individuals,	discussions
including Newton and Darwin	Weekly writing assignment responding to an
	issue or question raised
	Two research papers on aspects of the
	development of science and math
Express ideas and opinions clearly and	Weekly writing assignment responding to an
effectively using a formal writing style	issue or question raised
	1,700-word research paper
	3,500-word research paper

Develop skills in searching for,	One research-skills quiz
retrieving, and evaluating the	Annotated bibliographies for two historical
provenance and reliability of source	papers
materials, including specific resources	Research skills workshop with university
available to teachers	librarian
Integrate approaches and material	One 5E lesson plan designed for middle or
learned in the course with independent	high school students that addresses standards
research and science or math content to	and integrates approaches and material
design middle and high school science	learned in the course with independent
and math lessons	research and science or math content
	5E lesson taught to peers
	Feedback on 5E lessons provided by peers

### **Research Methods**

Most scientists agree that learning about science has two aspects: learning material that has already been established (for example, the structure of DNA, how to find forces on blocks being pushed up a ramp, the definition of an acid) and learning how scientists gained this knowledge (for example, how new discoveries gain authority and are adopted by the scientific community, how to evaluate scientific claims when they conflict, how to design and carry out investigations to answer new questions). Most high school and college science courses are mainly devoted to presenting the first type of knowledge. Education in the second aspect of science has traditionally been left mainly to graduate school. UTeach believes it should become part of high school and college curricula as well because this second aspect of science is the most important in the long run for most citizens to know. Research Methods simultaneously provides students specific techniques needed to address scientific questions and an example of how to provide this sort of training for students through individualized instruction.

The purpose of this course is to present UTeach students with the tools scientists use to solve scientific problems. These tools enable scientists to develop new knowledge and insights, the most important of which are eventually presented in textbooks and taught in conventional science classes. These tools include use of experiments to answer scientific questions, design of experiments to reduce systematic and random errors, use of statistics to interpret experimental results and deal with sampling errors, mathematical modeling of scientific phenomena, and oral presentation of scientific work.

Research Methods is primarily a laboratory course, and most of the topics covered are developed in connection with four independent inquiries UTeach students design and carry out. It is also a substantial writing component class, and the written inquiries students produce are evaluated as examples of scientific writing.

**Course Objectives: Research Methods** 

Students Will Be Able To:	<b>Evidence (Student Products)</b>
Use experiments to answer scientific questions	Four papers on four separate independent inquiries, designed and carried out by the student: (1) brief home inquiry, (2) laboratory inquiry using high school equipment, (3) survey involving human subjects, and (4) extended laboratory inquiry
Design experiments to reduce systematic and random errors	Papers on inquiries 2, 3, and 4 Proposals for inquiries 2 and 4
Use statistics to interpret experimental results and deal with sampling errors	Two homework assignments Two brief in-class papers Class performance Write-ups for inquiries 2, 3, and 4
Use probes and computers to gather and analyze data	Instructor observations during inquiry 2 or 4 or both

Ethically treat human subjects	Certificate demonstrating completion of human subjects training Satisfactory completion of inquiry 3, which
	involves human subjects
Apply safe laboratory procedures	Instructor observations during inquiries 2 and 4
Find and read articles in the current	Two homework assignments
scientific literature	Performance assessment during debate
Model scientific phenomena	Two homework assignments
mathematically (Expectations depend	Personalized modeling assignments as part of
upon mathematical skills of student	inquiries 2 and 4
and are greatest for math majors.)	
Apply scientific arguments in matters	Debates carried out in class in teams at end of
of social importance	semester
Write scientific papers	Four written inquiries, with inquiries 2 and 4
	involving at least two drafts
Review scientific papers	Student evaluations of each other, in pairs
Oral presentation of scientific work	In-class oral reports on inquiries 2 and 4
	Debate presentation

### **Apprentice Teaching**

An underlying philosophy of the FSU-Teach program is that with extensive, individualized, and ongoing coaching, preservice teachers' skills will improve at an accelerated rate. The FSU-Teach Apprentice Teaching program is an important part of this coaching. In addition to the mentoring provided by the classroom teacher to which the apprentice teachers are assigned, trained observers with considerable teaching experience observe and provide extensive feedback a minimum of 10 times during the semester. All observations of an apprentice teacher throughout the semester focus on parts the Florida Educator Accomplished Practices

Because apprentice teachers have taught at various levels in previous FSU-TeachTeach courses, they assume teaching responsibilities quickly in Apprentice Teaching, which is their final teaching semester, and maintain their role as teacher for the equivalent of two six-week grading periods. Furthermore, each required weekly seminar on campus focuses on two of the state standards for new teachers. Apprentice teachers concentrate on teaching lessons each week in which they demonstrate competency of the particular state standards.

The purpose of Apprentice Teaching is to offer FSU-Teach students a culminating experience that provides them with the tools needed for their first teaching jobs. In Apprentice Teaching, students are immersed in the expectations, processes, and rewards of teaching. When making placements, UTeach staff consider each apprentice teacher's characteristics and abilities as well as the cooperating teacher's teaching and mentoring styles. The hope is that the complementary strengths of the UTeach apprentice teacher and cooperating teacher will generate a synergism that benefits both people professionally.

Apprentice Teaching reinforces and augments teaching strategies that students have developed through their coursework and field experiences. The program also attempts to fill in any gaps in students' professional development. In particular, Apprentice Teaching focuses on classroom management and time management strategies, parent/teacher communication strategies, school culture and school dynamics that make up an effective middle school and high school system, legal and logistical issues in teaching, the final portfolio, and state certification examinations.

FSU-Teach apprentice teachers explore professional development opportunities beyond the classroom, including attending conferences, subscribing to education journals, joining professional organizations, and conducting presentations in educational settings. The goal of Apprentice Teaching is to provide the experiences, information, and coaching that will enable these students to be successful teachers who are leaders in their schools and communities.

### **Course Objectives: Apprentice Teaching**

Students Will Be Able To:	<b>Evidence (Student Products)</b>
Design instruction appropriate for all	Weekly lesson plans and daily agendas
students that reflects an	Sample assessments and student artifacts
understanding of relevant content	Videotapes of teaching
and is based on continuous and	Completion of appropriate sections of the final

appropriate assessments	portfolio
	Observer written feedback on teaching from the
	cooperating teacher, the university facilitator, and
	university instructors
	Appropriate evaluations
Create a classroom environment of	Written classroom rules and procedures
respect and rapport that fosters a	Videotapes of teaching
positive climate for learning, equity,	Completion of appropriate sections of the final
and excellence	portfolio
	Observer written feedback on teaching from the
	cooperating teacher, the university facilitator, and
	university instructors
	Appropriate evaluations
Promote student learning by	Weekly lesson plans and daily agendas
providing responsive instruction that	Student work containing apprentice teacher written
makes use of effective	feedback
communication techniques,	Videotapes of teaching
instructional strategies that actively	Completion of appropriate sections of the final
engage students in the learning	portfolio
process, and timely high-quality	Observer written feedback on teaching from the
feedback	cooperating teacher, the university facilitator, and
	university instructors
	Appropriate evaluations
Fulfill professional roles and	Participation in campus professional development
responsibilities and adhere to legal	days
and ethical requirements of the	Reflection submission on the Code of Ethics and
profession.	Standards Practices for Texas Educators
	Submission of artifacts associated with
	parent/teacher contacts
	Completion of appropriate sections of the final
	portfolio

Name(s):					Mentor Tead	cher:		
School/Grade	:	Date:						
Observer:								
Lesson Descri	ption:							
Lesson:	1	2	3	Techn	ology Lesson?	Yes	No	
Engagement/	Pre-Assessment				Not at all	To some	extent	Yes
Introduced les	sson in a creative	and inviting ma	nner					
Solicited stude	ent ideas and/or	prior knowledge	9			•	·	

Exploration	Not at all	To some extent	Yes
Addressed safety issues where appropriate			
Gave clear instructions for the activity.			
Asked probing questions to elicit student responses			
and clarify meaning of student statements			
Active participation of the students was encouraged			
Monitored students during the activity			
Teacher acted as a resource and promoted student talk			

Comments:

Explanation	Not at all	To some extent	Yes
Students had an opportunity to share what they learned			
during the exploration			
Teacher had a solid grasp of the subject matter			
Questioning strategies fostered the development of			
students' conceptual understanding			

Comments:

Elaboration	Not at all	To some extent	Yes
Used prior knowledge and conceptual understanding to			Х
make connections to other disciplines or situations			

Comments:

Evaluation	Not at all	To some extent	Yes
Provided corrective feedback to students			

Classroom Management	Not at all	To some extent	Yes
Lesson was well organized			
The teacher had an effective way of getting students'			
attention and monitors student individual and class			
behaviors			
An appropriate amount of time was devoted to each			
part of the lesson; time was used efficiently			
Addressed students by name; used name tags or tents			

Comments:

Professionalism	Not at all	To some extent	Yes
Teacher was appropriately dressed			
Teacher arrived with enough time to set up and begin on			
schedule			

Comments:

# **Step 2 FSU-Teach Math and Science Teaching Evaluation (FMSTE)**

Adapted from the Reformed Teaching Observation Protocol (Piburn et al., 2000), the UTeach Observation Protocol (Marder, 2009), and Inside the Classroom Observation and Analytic Protocol (Horizon Research, 2000).

### 4. LESSON DESIGN AND IMPLEMENTATION

===================================	
4.2 Student exploration preceded formal presentation.	Score
Not at all.	0
To some extent (i.e., the exploration was too short or not really meaningful).	1
Yes.	2

Comments:

4.3 The students shared what they have learned with their peers and had an opportunity to answer their classmates' questions.	Score
There was no sharing of information with peers.	0
The communication was of a single mode (i.e., presentations, brainstorming, critiquing, sharing answers to questions).	1
The lesson promoted rich dialogue between students that fosters the social construction of knowledge.	2

### Comments:

4.11 The lesson incorporated an assessment that made all students' thinking visible and was aligned with instructional objectives.	
Not at all	0
To some extent	1
Yes (as appropriate)	2

# 5. THE CONTENT

5.1 The teacher had a solid grasp of the subject matter.	Score
Not at all.	0
To some extent.	1
Yes.	2

Comments:

5.2 The objectives/content of the lesson was appropriate for the particular group of students.	Score
The lesson is not based on next generation science standards, common core standards or state standards.	0
The lesson content is based on National and /or state standards. However, the teacher has not sufficiently adjusted	1
instruction to accommodate the student's current level of understanding.	
The lesson content is based on National and /or state standards and takes into account the student's current level of	2
understanding.	

Comments:

# 7. CLASSROOM MANAGEMENT AND CLASSROOM ROUTINES

7.2 The teacher circulated the room in order to keep students on task, to listen, and to challenge students	Score
with questions.	
Not at all.	0
To some extent.	1
Yes.	2

Comments:

TOTAL SCORE /12

# FSU-Teach Math and Science Teaching Evaluation (FMSTE)

Classroom Interactions

Adapted from the Reformed Teaching Observation Protocol (Piburn et al., 2000), the UTeach Observation Protocol (Marder, 2009), and Inside the Classroom Observation and Analytic Protocol (Horizon Research, 2000).

### 1. BACKGROUND INFORMATION

Teacl	hers:		
Distr	ict:	School:	
Subj		Grade:	
Obse	erver:	_ Date:	
Start	time:	_ End time:	
PRO 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8	Organized and prepared to teach. Punctual and prompt. Dresses appropriately and professionally. Returns borrowed equipment on time. Leaves the room in good condition. Seeks feedback from Mentor Teacher. Addresses students BY NAME. Speaks audibly (volume, pace, enunciation).	apply.	
	RUCTIONAL MATERIALS pes of instructional materials did the teacher use before and during the	e lesson? This is a measure of teacher prepare	edness.
3.1 3.2 3.3 3.4 3.5 3.6	Type of Material  Lesson Plan Handouts Assessments Visuals, manipulatives, or other "hands on" materials Technology Textbook or other reading	Used by the Teacher?  Yes No  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
LESS	SON TOPIC		

# LESSON DESIGN AND IMPLEMENTATION

4.1 The lesson incorporated students' prior knowledge and challenged their alternative conceptions.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

4.2 Student exploration preceded formal presentation.	Score
Not at all.	0
To some extent (i.e., the exploration was too short or not really meaningful).	1
Yes.	2
Comments:	

4.3 The students shared what they have learned with their peers and had an opportunity to answer their classmates' questions.	Score
There was no sharing of information with peers.	0
The communication was of a single mode (i.e., presentations, brainstorming, critiquing, sharing answers to questions).	1
The lesson promoted rich dialogue between students that fosters the social construction of knowledge.	2
Comments:	

4.4 Students were encouraged to generate alternative solution strategies, alternative modes of investigation,	Score
or different ways to interpret evidence.	
There were no examples of students being encouraged to generate ideas, questions, conjectures, or propositions, and	0
these behaviors did not occur.	
There were several examples of students generating ideas and questions during the lesson and the teacher was making some moves to encourage these contributions.	1
Students generated ideas and questions during the lesson, with the teacher regularly making moves to encourage students to contribute. The students also occasionally offered conjectures or propositions and were engaged in the content.	2
Comments:	

4.6 Students used a variety of representations (models, graphs, manipulatives, drawings, etc.) to help make sense of the content or to communicate their ideas about the content.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

4.7 The teacher involved all students (hesitant learners, ELL students, etc.) in the lesson.	Score
Not at all.	0
To some extent.	1
Consistently (as appropriate). [Observer: A score of 2 cannot be assigned unless the teacher has noted ELL, ESOL, and ESE student needs in their teaching binder.]	2
Comments:	

4.8 The teacher monitored student thinking throughout the lesson.	Score
The teacher did not monitor students at all during the lesson.	0
The teacher monitored students by walking around and looking at student work. The teacher might also stop to point out problems with work or to answer questions.	1
The teacher monitored students by walking around, looking at student work, and asking students to explain their thinking or what they are doing (i.e., asking probing questions) or to challenge alternative conceptions.	2
Comments:	

4.9 The enactment of the lesson explicitly focused on mathematical practices or scientific and engineering practices.	Score
No.	0
To some extent.	1
Yes.	2
Comments:	

4.10 The teacher adjusted instruction based on student needs during the lesson.	Score
Not at all.	0
To some extent.	1
Yes (as appropriate).	2
Comments:	

4.11 The lesson incorporated an assessment that made all students' thinking visible and was aligned with instructional objectives.	
Not at all	0
To some extent	1
Yes (as appropriate)	2

# LESSON DESIGN AND IMPLEMENTATION SUBSCORE

/20

### THE CONTENT

5.1 The teacher had a solid grasp of the subject matter.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

5.2 The objectives/content of the lesson was appropriate for the particular group of students.	Score
The lesson is not based on next generation science standards, common core standards or state standards.	0
The lesson content is based on National and /or state standards. However, the teacher has not sufficiently adjusted instruction to accommodate the student's current level of understanding.	1
The lesson content is based on National and /or state standards and takes into account the student's current level of understanding.	2
Comments:	

5.3 The teacher stressed the development of a conceptual understanding of the content rather than the memorization of facts or the use of a specific procedure.	Score
No (students are encouraged to memorize facts or to follow a procedure)	0
To some extent.	1
Yes (students understand the reasons for the procedures or why something happens).	2
Comments:	•

5.4 The teacher provided an opportunity for students to be reflective about their understanding of the content or how they participated in a mathematical or scientific practice.	Score
Students never discussed their ideas about the content.	0
There was discussion about what students understood from the lesson and/or how they learned it or students identified anything unclear to them.	1
There was reflection on and evaluation of students' own progress toward understanding.	2
Comments:	

5.6 The importance of the mathematical and scientific content, including how it fits into the "big picture" of the discipline, was made explicit.	Score
The lesson/unit content is activity focused or focuses on discrete topics or procedures and skills without regard for connections or conceptual understanding.	0
The lesson/unit suggests some attendance to the importance of the content and how the topics are related.	1
The lesson/unit content explicitly addresses why this content is important and how it connects to the overarching principles of the discipline.	2
Comments:	

THE CONTENT SUBSCORE	/10

# **CLASSROOM INTERACTIONS**

<b>6.1</b> The teacher's questioning strategies fostered the development of the students' conceptual understanding of the content.	Score
The teacher only asked factual questions in order to have interaction with students and keep the lesson moving, and these questions were not successful at developing student conceptual understanding.	0

The teacher included factual questions along with using more advanced questioning strategies. The majority of questions were factual, but there was some evidence that the teacher's questioning strategies are developing	1
students' conceptual understanding.	
The teacher emphasized higher-order questions and/or used questions to assess students' misconceptions. The teacher typically used an appropriate amount of wait time and their questioning often developed student conceptual understanding. A minor issue or missed opportunity as a result of the teacher's questioning may have occurred.	2
Comments:	

6.2 There was a high proportion of student talk and a significant amount of it occurred between students.	Score
Student talk was primarily off topic or not constructive or the teacher did most of the talking during the lesson.	0
Students did a lot of talking but it was often off topic or not constructive.	1
The lesson fostered rich dialogue between students (or discussion among students) that characterizes qualities of knowledge construction.	2
Comments:	

6.6 The metaphor "teacher as listener" was very characteristic of this classroom.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

	Score
diversity for students.	
A major issue relating to equity or diversity and that significantly negatively impacts the classroom environment and student(s) opportunity to learn was observed.	0
There were no major issues or moves made by the teacher relating to equity, diversity, and access that either positively or negatively impacted the classroom environment. [Note: This item may earn a score of 2 if the positive moves made by the teacher were balanced out by other negative moves or missed opportunities.]	1
The teacher took no actions relating to equity and diversity that negatively impacted the classroom environment; the teacher's actions relating to equity and diversity overall had a positive impact on student learning, access, and engagement.	2
Comments:	

### CLASSROOM INTERACTIONS SUBSCORE

/8

# CLASSROOM MANAGEMENT AND CLASSROOM ROUTINES

7.1 The teacher's classroom management style or the management strategies used by the teacher enhanced	Score
the quality of the lesson.	
The classroom was poorly managed; the lack of classroom management significantly disrupted the lesson, making it	0
difficult for students to learn.	
The classroom was managed adequately; there were some disruptions that the teacher did or did not deal with appropriately, but overall learning was not negatively impacted by management issues.	1
The classroom was well-managed; the teacher's management actions enhanced the classroom environment and positively impacted students' opportunity to learn. There may have been minor or very occasional disruptive behavior that the teacher did not handle appropriately.	2
Comments:	•

0
1
_
2

7.3 Students listen to the teacher when he or she is talking and the teacher does not try to "talk over" the	Score
students.	
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

7.4 The majority of class time was spent devoted to academic tasks.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

CLASSROOM MANAGEMENT SUBSCORE	/8
TOTAL SCORE	/46

FSU-Teach Math and Science Teaching Evaluation (FMSTE)

Adapted from the Reformed Teaching Observation Protocol (Piburn et al., 2000), the UTeach Observation Protocol (Marder, 2009), and Inside the Classroom Observation and Analytic Protocol (Horizon Research, 2000).

1. E	BACKGROUND INFORMATION		,			
Tead	cher:	Was the observat	ion announced?	☐ Yes	□ No	
Distr	rict:	School:				
Subj	ect:	Grade:				
Obs	erver:	Date:				
Star	t time:	End time:				
	Type of Goal  Identifying prior student knowledge Addressing alternative conceptions Introducing new concepts Developing conceptual understanding Reviewing mathematics/science concepts or preparing for Developing problem-solving skills Learning mathematics/science processes, algorithms, or procedures (or the requirements for a project) Learning vocabulary or specific facts Developing ability to discuss and apply core ideas in mathematics/science Teaching students about historical perspectives, philosopsignificance of mathematics/science Assessing student understanding	or a specific test procedures, includant thematics/science tudy of core ideas	ding lab in	on interview with  Intended	the teacher.  Observ	
	NSTRUCTIONAL MATERIALS pressor instructional materials did the teacher use before and during the leading the leadi	esson? This is a measu	ıre of teacher preparedn			
	Type of Material	·	he Teacher?		r Generat	
3.1 3.2 3.3 3.4 3.5 3.6	Lesson Plan Handouts Assessments Visuals, manipulatives, or other "hands on" materials Technology Textbook or other reading	Yes	No	Yes	No	

LESSON TOPIC\_\_\_\_\_

# 4. LESSON DESIGN AND IMPLEMENTATION

4.1 The lesson incorporated students' prior knowledge and challenged their alternative conceptions.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

4.2 Student exploration preceded formal presentation.	Score
Not at all.	0
To some extent (i.e., the exploration was too short or not really meaningful).	1
Yes.	2
Comments:	

4.3 The students shared what they have learned with their peers and had an opportunity to answer their	Score
classmates' questions.	
There was no sharing of information with peers.	0
The communication was of a single mode (i.e., presentations, brainstorming, critiquing, sharing answers to questions).	1
The lesson promoted rich dialogue between students that fosters the social construction of knowledge.	2
Comments:	

4.4 Students were encouraged to generate alternative solution strategies, alternative modes of investigation,	Score
or different ways to interpret evidence.	
There were no examples of students being encouraged to generate ideas, questions, conjectures, or propositions, and	0
these behaviors did not occur.	
There were several examples of students generating ideas and questions during the lesson and the teacher was	1
making some moves to encourage these contributions.	
Students generated ideas and questions during the lesson, with the teacher regularly making moves to encourage	2
students to contribute. The students also occasionally offered conjectures or propositions and were engaged in the	
content.	
Comments:	

l	4.5 The students were given an opportunity to apply a fundamental concept or practice in a new situation or to	Score
	use it to solve a problem.	
	Not at all.	0
	To some extent.	1
	Yes.	2
	Comments:	

4.6 Students used a variety of representations (models, graphs, manipulatives, drawings, etc.) to help make sense of the content or to communicate their ideas about the content.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

4.7 The teacher involved all students (hesitant learners, ELL students, etc.) in the lesson.	Score
Not at all.	0
To some extent.	1
Consistently (as appropriate). [Observer: A score of 2 cannot be assigned unless the teacher has noted ELL, ESOL, and ESE student needs in their teaching binder.]	2
Comments:	

4.8 The teacher monitored student thinking throughout the lesson.	Score
The teacher did not monitor students at all during the lesson.	0
The teacher monitored students by walking around and looking at student work. The teacher might also stop to point out problems with work or to answer questions.	1
The teacher monitored students by walking around, looking at student work, and asking students to explain their thinking or what they are doing (i.e., asking probing questions) or to challenge alternative conceptions.	2
Comments:	

4.9 The enactment of the lesson explicitly focused on mathematical practices or scientific and engineering practices.	Score
No.	0
To some extent.	1
Yes.	2
Comments:	

4.10 The teacher adjusted instruction based on student needs during the lesson.	Score
Not at all.	0
To some extent.	1
Yes (as appropriate).	2
Comments:	

0
1
2
(

### LESSON DESIGN AND IMPLEMENTATION SUBSCORE

/22

# 5. THE CONTENT

5.1 The teacher had a solid grasp of the subject matter.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

5.2 The objectives/content of the lesson was appropriate for the particular group of students.	Score
The lesson is not based on next generation science standards, common core standards or state standards.	0
The lesson content is based on National and /or state standards. However, the teacher has not sufficiently adjusted instruction to accommodate the student's current level of understanding.	1
The lesson content is based on National and /or state standards and takes into account the student's current level of understanding.	2
Comments:	

5.3 The teacher stressed the development of a conceptual understanding of the content rather than the memorization of facts or the use of a specific procedure.	Score
No (students are encouraged to memorize facts or to follow a procedure)	0
To some extent.	1
Yes (students understand the reasons for the procedures or why something happens).	2
Comments:	

5.4 The teacher provided an opportunity for students to be reflective about their understanding of the content or how they participated in a mathematical or scientific practice.	Score
Students never or discussed their ideas about the content.	0
There was discussion about what students understood from the lesson and/or how they learned it or students identified anything unclear to them.	1
There was reflection on and evaluation of students' own progress toward understanding.	2
Comments:	

5.5. Connections with the history and nature of mathematics or science, how mathematics or science affects people or societies, and/or a real world phenomenon were explored or valued.	Score
There was no discussion about the content topic's role in history, current events, or real world application during the lesson, or if there was a discussion, it was inappropriate or incorrect; if the teacher made a general, brief comment about a possible connection to history or current events it was not expanded upon.	0
The teacher explicitly called attention to how the content is specifically connected to history, the real world, or current events but does not fully expand upon this idea with students; if the exploration uses real world connections, these connections are not discussed.	1
The teacher explicitly called attention to how the content is connected to history, real world application, or current events and engages students in a discussion about the connection.	2
Comments:	

5.6 The importance of the mathematical and scientific content, including how it fits into the "big picture" of the discipline, was made explicit.	Score
The lesson/unit content is activity focused or focuses on discrete topics or procedures and skills without regard for connections or conceptual understanding.	0
The lesson/unit suggests some attendance to the importance of the content and how the topics are related.	1
The lesson/unit content explicitly addresses why this content is important and how it connects to the overarching principles of the discipline.	2
Comments:	

# THE CONTENT SUBSCORE /12

# 6. CLASSROOM INTERACTIONS

of the content.	
The teacher only asked factual questions in order to have interaction with students and keep the lesson moving, and	0
these questions were not successful at developing student conceptual understanding.	
The teacher included factual questions along with using more advanced questioning strategies. The majority of	1
questions were factual, but there was some evidence that the teacher's questioning strategies are developing	
students' conceptual understanding.	
The teacher emphasized higher-order questions and/or used questions to assess students' misconceptions. The	2
teacher typically used an appropriate amount of wait time and their questioning often developed student conceptual	
understanding. A minor issue or missed opportunity as a result of the teacher's questioning may have occurred.	
Comments:	

6.2 There was a high proportion of student talk and a significant amount of it occurred between students.	Score
Student talk was primarily off topic or not constructive or the teacher did most of the talking during the lesson.	0
Students did a lot of talking but it was often off topic or not constructive.	1
The lesson fostered rich dialogue between students (or discussion among students) that characterizes qualities of knowledge construction.	2
Comments:	

6.3 Students challenged each other's ideas but there was also a climate of respect.	Score
Student talk or group work occurred during the lesson, but the group work was highly unproductive. Lack of	0
productivity includes behavior where the majority of the groups are socializing, off-task, arguing, or ignoring each	
other, as well as regular instances of students copying other group members' work and/or certain group members	
doing all of the work.	
Student talk or group work occurred during the lesson and the groups are adequately productive. There were	1
examples of off-task conversation and group members not contributing.	
Student talk or group work occurred during the lesson and most (but not necessarily all) of the groups worked together	2
productively (throughout this portion of the lesson. The groups discussed ideas and asked each other questions before	
seeking out the teacher. Participation of all group members was encouraged.	
Comments:	

6.4 Active intellectual engagement by the students was encouraged and valued by the teacher.	Score
There was no evidence that students were intellectually engaged in the lesson. Although students may have followed along, it was clear they were not thinking through the content and were passively receiving information.	0
There were some examples of intellectual engagement during the lesson and some students showed evidence that they were thinking critically about the content. The teacher made occasional moves to encourage intellectual rigor and intellectual engagement rather than only surface-level engagement.	1
The majority of students showed evidence that they were intellectually engaged in the content and the teacher made regular moves to encourage intellectual engagement; minor missed opportunities may have occurred.	2
Comments:	
	C
6.5 The teacher acted as a resource person, working to support and enhance student investigations or problem-solving activities.	Score
	Score 0
problem-solving activities.	
problem-solving activities.  The teacher only asked and answered procedural questions related to completing a task.  The teacher combined procedural and factual questions and answers with more advanced questioning strategies. The majority of questions were factual and the teacher gave procedural instructions; there was some evidence that the	0

6.6 The metaphor "teacher as listener" was very characteristic of this classroom.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

6.7 The classroom environment established by the teacher reflected attention to issues of access, equity, and diversity for students.	Score
A major issue relating to equity or diversity and that significantly negatively impacts the classroom environment and student(s) opportunity to learn was observed.	0
There were no major issues or moves made by the teacher relating to equity, diversity, and access that either positively or negatively impacted the classroom environment. [Note: This item may earn a score of 2 if the positive moves made by the teacher were balanced out by other negative moves or missed opportunities.]	1
The teacher took no actions relating to equity and diversity that negatively impacted the classroom environment; the teacher's actions relating to equity and diversity overall had a positive impact on student learning, access, and engagement.	2
Comments:	

### CLASSROOM INTERACTIONS SUBSCORE

/14

# 7. CLASSROOM MANAGEMENT AND CLASSROOM ROUTINES

7.1 The teacher's classroom management style or the management strategies used by the teacher enhanced	Score
the quality of the lesson.	
The classroom was poorly managed; the lack of classroom management significantly disrupted the lesson, making it	0
difficult for students to learn.	
The classroom was managed adequately; there were some disruptions that the teacher did or did not deal with	1
appropriately, but overall learning was not negatively impacted by management issues.	
The classroom was well-managed; the teacher's management actions enhanced the classroom environment and	2
positively impacted students' opportunity to learn. There may have been minor or very occasional disruptive behavior	
that the teacher did not handle appropriately.	
Comments:	

7.2 The teacher circulated the room in order to keep students on task, to listen, and to challenge students with questions.	Score
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

7.3 Students listen to the teacher when he or she is talking and the teacher does not try to "talk over" the	Score
students.	
Not at all.	0
To some extent.	1
Yes.	2
Comments:	

7.4 The majority of class time was spent devo	oted to academic tasks.	Score
Not at all.		0
To some extent.		1
Yes.		2
Comments:		·
CLASSROOM MANAGEMENT SUBSCO	DRE	/8
TOTAL COORE		/r./
TOTAL SCORE		/56
	_	
Apprentice teaching binder:	Accessible? $\square$ Yes $\square$ No	
	Up-to-date? ☐ Yes ☐ No	
Comments		
Comments:		