



**Savannah State University**  
**New Programs and Curriculum Committee**  
**Summary Page – Form I**

1. **Submitting College:** SOTE
2. **Department(s) Generating The Proposal:** Choose an item.  
Choose an item. (if needed)
3. **Proposal Title:** Teaching of Technology and Engineering Education
4. **Course Number(s):** ETED 4416
5. **Course Title(s):** Teaching of Technology and Engineering Education
6. **Effective Date:** Spring Year: 2014
7. **Brief Summary of Proposal:** This course is designed to give engineering and technology education students specialty knowledge and professional knowledge in the area of integrating technology into school curriculums. Content, management and teaching strategies are examined.
8. **Type of Proposal:** New Course If other, please describe: Click here to enter text.
9. **Impact on Library Holdings**  
Existing: None  
Additional: None  
Deletions: N/A
10. **Impact on Existing Programs:** None. This course is designed to meet GaPSC Rules for Teacher Preparation and more specifically the technology requirements of all education majors,. The specific rules satisfied by this course are 505-3-.01 REQUIREMENTS AND STANDARDS FOR APPROVING PROFESSIONAL EDUCATION UNITS AND EDUCATOR PREPARATION PROGRAMS and 505-2-.16 CERTIFICATION BY STATE-APPROVED PROGRAMS .
11. **Additional Resources Required**  
Personnel: Click here to enter text.  
Non-personnel: None
12. **Approvals:**
  - Department Curriculum Committee Signature \_\_\_\_\_ Date \_\_\_\_\_
  - Department Chair Signature \_\_\_\_\_ Date \_\_\_\_\_
  - College Curriculum Committee Signature  Date 9/23/13
  - College Dean Signature  Date 9-25-2013
  - Vice President of Academic Affairs Signature \_\_\_\_\_ Date \_\_\_\_\_  
(Chair of the New Programs and Curriculum Committee)
  - Faculty Senate Signature \_\_\_\_\_ Date \_\_\_\_\_



Savannah State University  
New Programs and Curriculum Committee  
Course Addition Page – Form II

1. **Course Number:** ETED 4416
2. **Course Title:** Teaching of Technology and Engineering Education
3. **Catalogue Description:** This course examines the philosophy, mission, vision, goals, content standards, and teaching methods of Engineering and Technology Education. The Georgia State program standards and curricula, teaching and learning strategies, core technologies, performance-based instruction, and student assessment are also covered. Integrating core academic knowledge and skills, and the professional roles and responsibilities of Engineering and Technology Education teachers within the total school community at the secondary level are discussed.
4. **Rationale:** This course will help meet the needs of students who have seeking a B.S. in Civil or Electronics Technology Engineering with the Technology Education Track.
5. **Credit Hours:** 3 Credit Hours
6. **Pre-requisites:** Admittance into Teacher Education  
ETED 3000; ETED 3106
7. **Syllabus:** See Attached
8. **Similarity to or duplication of Existing Courses:** N/A
9. **Textbook Selection:** Manning, Susan and Johnson, Kevin (2011). The Technology Toolbelt for Teaching.  
Petrina, Stephen (2006). Advanced Teaching Methods for the Technology Classroom.
10. **Grading:** A (90-100); B (80-89); C (70-79); D (60-69); F (Below 60)

## ETED 4416 – Teaching of Technology and Engineering Education

Fall 2013

Savannah State University  
School of Teacher Education

**Course Number:** ETED 4416

**Instructor:** Dr. Kisha R. Cunningham  
**Office:** 110 Morgan Hall  
**Phone:** 912-358-3068  
**Email:** [cunninghamk@savannahstate.edu](mailto:cunninghamk@savannahstate.edu)

**Course Title:** Teaching of Technology and Engineering Education

**Office Hours:** Monday- Friday 10am-12pm

**Class Time:** TBA

**Room:** Morgan Hall – Room TBD

### Instructor's Education:

Ph.D. The Pennsylvania State University, 2006

M.S. North Carolina A&T State University, 1996

B.S. North Carolina A&T State University, 1995

### Catalog Course Description:

This course examines the philosophy, mission, vision, goals, content standards, and teaching methods of Engineering and Technology Education. The Georgia State program standards and curricula, teaching and learning strategies, core technologies, performance-based instruction, and student assessment are also covered. Integrating core academic knowledge and skills, and the professional roles and responsibilities of Engineering and Technology Education teachers within the total school community at the secondary level are discussed.

### Course Overview:

This course is designed to give engineering and technology education students specialty knowledge and professional knowledge in the area of integrating technology into school curriculums. The teacher as a cognitive mediator, communicator, researcher, manager, and evaluator will be considered in the content of this course. Content, management and teaching strategies are examined. Emphasis will be placed on lesson delivery, classroom management, and teaching and learning styles. **Course is required for students who are seeking teacher certification.**

### Semester Hours:

3 Credit Hours

### Pre-requisites:

Admittance into School of Teacher Education

ETED 3000; ETED 3106

### Required Texts:

Manning, Susan and Johnson, Kevin (2011). The Technology Toolbelt for Teaching.  
Petrina, Stephen (2006). Advanced Teaching Methods for the Technology Classroom.

### **Course Objective:**

Student Learning Outcomes: Upon Completion of this course, students will be able to:

- Demonstrate knowledge of how learners develop and reason.
- Understand and characterize engineering and technology education content accurately.
- Create STEM based learning environments that are active, effective and properly managed.
- Demonstrate comprehensive, in-depth and contemporary knowledge of engineering and technology education content.
- Create and implement instruction that exemplifies various cultures and provides all students fair access to a high quality technology education in a diverse curriculum.
- Connect content learned from the engineering and technology education curriculum to other disciplines and apply it to global life experiences.
- Reflect and identify ways to improve the teacher candidates' professional performance.
- Display behavior that embodies professional and ethical standards in technology education.
- Demonstrates effective oral and writing communication.
- Design effective instruction integrating the use of technology.

### **Recommended Optional Materials/References**

Further readings from the approved reading list, newsletters and periodical from professional education organizations (e.g. IWITTS, ITEEA, TSA, NSTA, ASEE, JETS, SAE, Technology Teacher, TIES, Tech Directions, CTTE Yearbook, Robotbooks.com, Technology Review & Cambridge University Press).

### **Instructional Methods and Requirements:**

The basic class format will be discussion derived from the backgrounds, special interest, outside reading, and preparation for class. The quality of the class experience will depend largely on thoroughness of preparation, freedom of expression, and participation of individual class members. In addition, classroom teaching specific assignments, online Desire2Learn (D2L) discussions, web seminars, and field trips are scheduled to learn about the variety of teaching strategies in science education. D2L will be used as a web-assisted tool to further enhance the teaching and learning environment.

Post completed assignments, reflections, and other artifacts related to this course in your e-portfolio in TaskStream. Remember, completed assignments will be assessed through your e-portfolio in TaskStream. The e-portfolio is required for all education courses.

### **Expectations**

Students are expected to come to class prepared to discuss readings, and use computer technology and research for course assignments and final research paper.

**ALL CLASS ASSIGNMENTS MUST BE TYPED AND PRESENTED TO THE INSTRUCTOR BEFORE CONCLUSION OF CLASS. ALL ONLINE ASSIGNMENTS MUST BE SUBMITTED BY 11:59PM ON DUE DATE. LATE PAPERS WILL BE DEDUCTED TWO POINTS FOR EACH DAY LATE.**

Assignments stress critical thinking skills and emphasize concepts and ideas rather than memorization of facts.

## Grading

|                      |             |
|----------------------|-------------|
| Reflective Narrative | 10%         |
| Projects             | 20%         |
| Field Experience     | 30%         |
| Discussions          | 10%         |
| Quizzes              | 5%          |
| Midterm              | 10%         |
| Final                | 15%         |
| <b>Total</b>         | <b>100%</b> |

### Reflective Narrative (10%)

Organize evidence and post your narrative comments regarding your CPI proficiencies for Subject Matter Expertise, Facilitator of Learning, and Collaborative Professional. This will include selected work that you've completed in this course (specified above) as well as work completed earlier in the program. Though final revisions of the reflective narrative will be completed toward the end of student teaching, your final task for this course is to write a self-assessment of your competency for all 18 proficiencies, and set some professional growth goals for student teaching.

### Projects (20%)

#### Field Experience (30 %)

The 60 hour field experience is a required component of ETED 4416. It is intended to be one of two practice opportunities prior to student teaching. Teacher candidates will be expected to teach a variety of lessons during this time. In order to be successful in the field experience, the teacher candidate must demonstrate indicators of effective application of instructional strategies and classroom management. The field experience will be assessed using appropriate instruments completed by the teacher candidate, collaborating teacher, and University Supervisor/Field and Clinical Experience Coordinator. A rubric for observations for your field experience will be utilized by your supervising professor and collaborating teacher. You must complete the field experience component of this course in order to receive a passing grade. A teacher candidate may be removed from his/her field experience placement at any time under the recommendation of the collaborating teacher, principal, or university supervisor. SSU teacher candidates are expected to abide by the student code of conduct and Georgia Code of Ethics while representing the institution off campus. If you do not complete the 60 hour field experience you will automatically receive an "F" in the class.

#### Discussions (10 %)

Teacher candidates will engage in class discussion each week. All discussions will not be graded, but your participation is mandatory. Responses and comments must be considerate and concentrated on the topic in order to earn the total amount of points designated for this assignment. Responses must be posted during the week in which the discussion is scheduled. Late responses, received after the deadline on Sunday at midnight will not be graded. **Bonus** points may be awarded by the Instructor at the end of the course for participation in weekly discussion activities on other topics.

Quizzes (5 %)

Quizzes will be given periodically at beginning of class. There is NO make-up for quizzes. See course at a glance for week of Quizzes.

Midterm Exam (10%)

Test covers Week 1-7

Final Exam (20%)

Test covers all objectives

**Evaluation:**

| <b>ASSIGNMENT</b>    | <b>Point Percent</b> | <b>Points Earned</b> | <b>Total</b> |
|----------------------|----------------------|----------------------|--------------|
| Reflective Narrative | 10%                  |                      |              |
| Projects             | 20%                  |                      |              |
| Field Experience     | 30%                  |                      |              |
| Discussions          | 10%                  |                      |              |
| Quizzes              | 5%                   |                      |              |
| Midterm              | 10%                  |                      |              |
| Final                | 15%                  |                      |              |
| <b>Total</b>         | <b>100%</b>          |                      |              |

**Grading Scale**

The grading scale below will be used to determine your final grade:

|          |   |
|----------|---|
| 90-100   | A |
| 80-89    | B |
| 70-79    | C |
| 60-69    | D |
| Below 60 | F |

**Schedule of Course Activities**

Course calendar of activities, rubric, syllabus and related course material are posted in Desire2Learn (D2L) Course Management System.

Week One

Technological Literacy  
Technology and Emotions  
Technology Values and Skills  
Technology and Ethics

Week Two

Learning Theory, Technology and Practice  
Theory of Experience  
Modes of Learning with Technology  
Constructivism

## Schedule of Course Activities Continued

### Week Three

Justifying Technology Studies  
Technology Literacy  
Employability Skills  
Tech Prep for Technology and Engineering Education Professions  
Appropriate Technology and Eco-design  
Craft, Design and Engineering

### Week Four

Technology Content, Process and Standards  
Benchmarks  
Imperatives of Technology Content

### Week Five

Creativity & Ingenuity Design

### Week Six

Problem Solving

### Week Seven

#### **Midterm**

### Week Eight

Curriculum and Instructional Design  
Lesson Planning

### Week Nine

Assessment and Evaluation  
Questionnaires and Scales in Technology Education  
Technological Literacy

### Week Ten

Facility Design and Management  
Facility Evaluation  
Ergonomics of Lab/Workshop

### Week Eleven

Assistive Technology

### Week Twelve

Safety  
Liability

### Week Thirteen

Budget and Inventory

### Week Fourteen

Classroom Management & Safety Plan Project

## Schedule of Course Activities Continued

### Week Fifteen Final Exam

#### Course Policies

1. Late and handwritten assignments will not be accepted.
2. All assignments must be professionally presented and documented according to APA style.
3. Because of the intensity of the course there is no provision for make-up work.
4. Students will adhere to Savannah to Savannah State University's Honor Code. Students committing acts of academic dishonesty is subject to disciplinary action.

#### Tardy Arrival/Early Departure Policy:

You are expected to arrive on time for each class and to remain until class is dismissed. Late arrivals (and early departures) disrupt the class.

#### Course Amendments:

The instructor reserves the right to amend any aspects of the course outline as deemed necessary and useful to the goals of the course as well as the students' progress and success.

#### Absence Policy

Class attendance is important for the benefit of students. Students should attend every class for which the student is scheduled and should be held responsible for all work covered in the courses taken. In each case, the instructor should decide when the class absence constitutes a danger to the student's scholastic attainment and should make this fact known to the student at once. A student whose irregular attendance causes him or her, in the judgment of the instructor, to become deficient scholastically, may run the risk of receiving a failing grade or receiving a lower grade than the student might have secured had the student been in regular attendance. Instructor will provide, within reason, opportunity to make up work for students who miss classes for other legitimate but unavoidable reasons. Legitimate, unavoidable reasons are those such as illness, injury, family emergency, or religious observance. If an evaluative event will be missed due to an unavoidable absence, the student should contact the instructor as soon as the unavoidable absence is known to discuss ways to make up the work. An instructor might not consider an unavoidable absence legitimate if the student does not contact the instructor before the evaluative event. Students will be held responsible for using only legitimate, unavoidable reasons for requesting a make-up in the event of a missed class or evaluative event. Requests for missing class or an evaluative event due to reasons that are based on false claims may be considered violations of the policy on Academic Integrity.

#### Savannah State University Policies

##### Incomplete Grades

Courses in which a student received a grade of "I" MUST be completed within the following semester, excluding summer sessions, otherwise these grades become "F". The responsibility rests with the student in making up the work required, or taking the examination to change an "I" within the allotted time.



### Withdrawal from Course

A student may withdraw from a course during the first week of classes with no entry on his or her official college transcript. From the second through the tenth week of classes, a student may withdraw from a course with a grade of W on the transcript. A student MUST complete the proper form in the Registrar's Office.

### Statement of Non-Discrimination

Savannah State University supports the Civil Rights Act of 1964, Executive Order #11246, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act. No person shall, on the basis of age, race, religion, color, gender, national origin or disability, be excluded from participation in, or be denied the benefits of, or be subjected to discrimination under any program or activity of the college. Any individual with a grievance related to the enforcement of any of the above provisions should contact the Assistant Director of Human Resources, Ombudsperson.

### Affirmative Action Statement

Savannah State University is an equal opportunity employer which assures that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability, be excluded from employment or participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity the institution conducts. Savannah State University complies with all state and federal affirmative action guidelines and criteria in its employment and hiring procedures and practices.

### Academic Dishonesty Policy

This policy is listed in the Student Handbook.

“Students are expected to demonstrate a high standard of academic honesty in all phases of academic work and college life. Academic dishonesty represents an attack on intellectual integrity without which there can be no true education. In taking tests and examinations, completing homework, projectory work, and writing papers, students are expected to perform honestly. Consequently, Savannah State has established the following policies for detected acts of academic dishonesty.

1. All cases of detected academic dishonesty will be reported by the faculty to the Vice President for Academic Affairs.
2. Plagiarism or cheating in any academic work will result in a recorded grade of "F" for that work.
3. A second offense during the course of a student's academic career at Savannah State will result in an "F" for the course in which the academic dishonesty has occurred. In addition, students who have committed a second offense of academic dishonesty during their academic career at Savannah State will be placed on academic probation for a minimum of one semester.
4. A third incidence of academic dishonesty during a student's career at Savannah State will result in immediate dismissal from the College.”

### American With Disabilities Act Statement/Special Services

Savannah State University is committed to providing reasonable accommodations to students with documented disabilities, as required under federal law. If you are a student who is disabled as defined under the Americans with Disabilities Act and require assistance or support services, please seek assistance through the Center for Disability Services. The purpose of disability accommodation is to provide equal access to the academic material and equal access to demonstrate mastery of the material. Students with disabilities must meet all the academic requirements and standards of the class, including the attendance policy. *If you have a disability and need accommodations, please contact Amelia Castilian-Moore, Coordinator of Disability Services at (912) 358 3115 or [moorea@savannahstate.edu](mailto:moorea@savannahstate.edu). The Office of Counseling and Disability Services is located in King Frazier 233.* You will need to meet with Ms. Castilian-Moore, who can help you gather documentation of your disability or refer you to an appropriate resource for assessment. Once documentation of the disability is gathered and approved, Ms. Castilian-Moore will provide you with an Accommodation Letter, detailing the appropriate, approved accommodations, which you should present at the **BEGINNING OF THE TERM** so we can discuss and implement your accommodations.

### Equal Opportunity Statement

Savannah State University is an equal employment opportunity institution. The institution's policy is that all recruiting, hiring, and promotion in all categories will be accomplished without regard to race, creed, color, national origin, sex, sexual orientation, handicap, or age. All personnel policies and employees benefits will be administered in a nondiscriminatory manner. As a part of this policy, an equal employment opportunity/affirmative action office is maintained on campus.

## SYLLABUS ACKNOWLEDGEMENT FORM

- I have received a copy of the ETED 4416 course syllabus in person.
  - I have read and understand the content.

Name \_\_\_\_\_  
(Please print)

Signature \_\_\_\_\_

Date \_\_\_\_\_

**(You must submit this form to the instructor after the first week of class.)**