Education and Technology I

Industry Sector: Education, Child Development and Family Services

Pathway: Education

Education and Technology I is designed to provide new and innovative coursework for students interested in becoming educators with a secondary focus on digital citizenship and literacy. Students will explore the career path of an educator, become digitally literate, and have the opportunity to practice their teaching skills through an organized internship program where they will observe and ultimately deliver lessons in digital literacy to K5, middle or high school students.

Last Revised: August 31, 2017

<table>
<thead>
<tr>
<th>Program Information</th>
<th>CTE Certification Elements</th>
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<tbody>
<tr>
<td><strong>Industries / Pathways:</strong> Education, Child Development, and Family Services Industry; Education Pathway</td>
<td><strong>Course Level:</strong> Concentrator</td>
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<tr>
<td><strong>K-12 Subjects:</strong> Technology Education</td>
<td><strong>CALPADS Pathway:</strong> EDU 132</td>
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<tr>
<td><strong>Grade Levels:</strong> 10</td>
<td><strong>CALPADS Course Title:</strong> Education and Technology I</td>
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<tr>
<td><strong>CSU/UC Approval:</strong> No</td>
<td><strong>State Course ID:</strong> 4401</td>
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<td><strong>Community College Course:</strong> No</td>
<td><strong>Total Hours:</strong> 90</td>
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<tr>
<td><strong>Pathway Sequence(s) That Include This Course:</strong></td>
<td><strong>Course Length:</strong> 2 Semesters</td>
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<tr>
<td><strong>Education Pathway Course Sequence:</strong> Introduction to Health and Human Service Careers or Health Professions and Organizations</td>
<td><strong>Local Course Number:</strong> ED8202</td>
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<tr>
<td>First Aid, Emergency Response and CPR</td>
<td><strong>Board Approval:</strong> Pending Board Action on 12/7/17</td>
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<tr>
<td><strong>Labor Market Demand:</strong> High</td>
<td><strong>Course Type:</strong> Career-Technical Preparation</td>
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Standards

California English Common Core Standards

1. **R.CCR.1** Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

2. **R.CCR.7** Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

3. **R.CCR.10** Read and comprehend complex literary and informational texts independently and proficiently.

4. **W.CCR.2** Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

5. **W.CCR.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

6. **W.CCR.6** Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

7. **W.CCR.5** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

8. **W.CCR.7** Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

9. **W.CCR.8** Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

10. **W.CCR.9** Draw evidence from literary or informational texts to support analysis, reflection, and research.

11. **W.CCR.10** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

12. **SL.K.6** Speak audibly and express thoughts, feelings, and ideas clearly.
13. SL.9-10.4a Plan and deliver an informative/explanatory presentation that: presents evidence in support of a thesis, conveys information from primary and secondary sources coherently, uses domain specific vocabulary, and provides a conclusion that summarizes the main points. (9th or 10th grade)

14. SL.9-10.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

15. SL.9-10.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

16. L.CCR.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

17. L.CCR.2 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

18. L.CCR.3 Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

19. L.CCR.4 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

California’s 2013 CTE Standards

1. CTE.ECDFS.C.1.1 Identify the effect of the education industry on state and local economies
2. CTE.ECDFS.C.1.2 Describe the basic structure of public education in California (e.g., prekindergarten through grade twelve, community college, the California State University, the University of California), as well as private institutions.
3. CTE.ECDFS.C.6.2 Define the types of positive guidance techniques that are used in various ages and stages of a child’s development.
4. CTE.ECDFS.C.6.3 Demonstrate how to support the development of a positive self-image and self-esteem as well as independence and respect for oneself and others
5. CTE.ECDFS.C.6.4 Practice strategies for building relationships and effective classroom management, including appropriate guidance and discipline
6. CTE.ECDFS.C.6.5 Develop strategies for building relationships with all stakeholders
7. CTE.ECDFS.C.9.1 Recognize the factors that influence effective communication between the school and home and how to foster familial involvement
8. CTE.ECDFS.C.9.2 Summarize the ways in which age, abilities, language, culture, economics, and educational backgrounds may affect communication within and among families and the school.
9. CTE.ECDFS.C.9.3 Explain issues of diversity and how to exhibit sensitivity to cultural differences
10. CTE.ECDFS.KPAS.1.0 Knowledge and Performance Anchor Standards
11. **CTE.ECDFS.C.1.3** Understand the legislative, economic, and social trends that affect the education industry.
12. **CTE.ECDFS.C.1.4** Explain the differences in organizational structures at educational facilities, including relationships and interactions among personnel.
13. **CTE.ECDFS.C.2.1** Identify the business procedures related to the acquisition of supplies and collection of fees.
14. **CTE.ECDFS.C.2.2** Recognize the main workforce management strategies in education (e.g., shared responsibility and negotiation).
15. **CTE.ECDFS.C.2.3** Implement appropriate procedures at the classroom level (e.g., attendance; observations; evaluations; illness, incident, accident, and injury reports).
16. **CTE.ECDFS.C.4.1** Identify state and federal environmental and safety regulations and the use of Material Safety Data Sheets (MSDS) as they relate to the education industry.
17. **CTE.ECDFS.C.4.2** Recognize the typical hazards at the work site and know the procedures and practices that contribute to a safe and healthy environment.
18. **CTE.ECDFS.C.4.3** Describe the staff procedures, duties, and responsibilities related to safety, emergency, and disaster preparedness plans.
19. **CTE.ECDFS.C.4.4** Demonstrate how to use certified first aid, cardiopulmonary resuscitation (CPR), and other emergency procedures.
20. **CTE.ECDFS.C.8.1** Describe crucial safety and sanitary procedures to follow in the classroom related to good nutrition and health.
21. **CTE.ECDFS.C.8.2** Identify services available to at-risk students and how to link students to resources.
22. **CTE.ECDFS.C.8.3** Apply appropriate sanitation, health, and hygiene procedures for preventing the spread of infections and illnesses and for responding to allergic reactions.
23. **CTE.ECDFS.C.8.4** Research the nutritional needs of children and the allergies commonly associated with food.
24. **CTE.ECDFS.C.8.5** Detect common indicators of nutrition-related disorders and diseases.
25. **CTE.ECDFS.C.5.1** Identify how typical and common atypical developmental patterns affect the educational progress of children and adolescents.
26. **CTE.ECDFS.C.5.2** Explain the role of family involvement in the physical, intellectual, emotional, and social development of children and adolescents.
27. **CTE.ECDFS.C.5.3** Diagram factors in heredity, family, culture, diversity, economic, abilities, and environment that may influence the development of children and adolescents.
28. **CTE.ECDFS.C.5.4** Assess and evaluate evidence-based educational practices for the inclusion of children and adolescents with special needs.
29. **CTE.ECDFS.C.6.1** List common behavior problems, possible causes, and develop potential positive solutions.
Standards: Technology, Digital Citizenship and Literacy

**ISTE-Students** (International Society for Technology in Education) 2016

1. Empowered Learner
2. Digital Citizen
3. Knowledge Constructor
4. Innovative Designer
5. Computational Thinker
6. Creative Communicator
7. Global Collaborator

**ISTE-Teachers**

1. Facilitate and inspire student learning.
2. Design and develop digital age learning experiences and assessments.
4. Promote and model digital citizenship and responsibility
5. Engage in professional growth and leadership

**iNACOL Blended Learning Teacher Competency Framework**

1. Domain 1: Mindsets
2. Domain 2: Qualities
3. Domain 3: Adaptive Skills
4. Domain 4: Technical Skills

**Commission on Teacher Credentialing Multiple Subject and Single Subject Preliminary Credential Program Standards**

1. Standard 9: Equity, Diversity and Access to the Curriculum for All Children
2. Standard 10: Preparation for Learning to Create a Supportive, Healthy Environment for Student Learning
3. Standard 11: Using Technology in the Classroom
4. Standard 14: Learning to Teach through Supervised Fieldwork

**Strategies and Foundational Practices**

- Gradual Release of Responsibility Instructional Framework
- Restorative Practices
- Productive Struggle for Deeper Learning
Competencies / Outcomes

Students will earn Educators Rising Micro-credentials including:

- Classroom Culture (Due as part of Final Competency)
- Anti-bias Instruction (Due as part of Final Competency)

CTE Education Pathway Curriculum Outcomes

1. Students will be able to describe the structure of the education industry and its role in local, state, and global economies.
2. Students will be able to name operational procedures and organizational policies at various levels in education.
3. Students will be able to practice critical emergency and disaster procedures at a school site.
4. Students will be able to summarize important elements of the physical, intellectual, emotional, and social development of children and adolescents.
5. Students will understand positive interaction, guidance, and discipline in the educational environment.
6. Students will be able to compare basic principles and practices of good nutrition and health and wellness for children.
7. Students will understand the elements of and need for effective communication with families and community groups.

Technology, Digital Citizenship and Literacy Outcomes (International Society for Technology in Education Student Standards (ISTE-S) 2016

1. Empowered Learner: At a basic level, Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.
2. Digital Citizen: At a basic level, Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.
3. Knowledge Constructor: At a basic level, students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.
4. Innovative Designer: At a basic level, students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.
5. Computational Thinker: At a basic level, students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.
6. Creative Communicator: At a basic level, students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
7. Global Collaborator: Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

Strategies and Practices Outcomes

1. Students will demonstrate an understanding of restorative practices in their social interactions with staff, peers and students.
2. Students will demonstrate an understanding of productive struggle and make attempts to use in their approach to tasks including effort, enthusiasm, motivation, persistence and a growth mindset.

## Units

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<tr>
<th>Unit 1: Introduction to Education as a Career; Establishing Aspirations &amp; Goals; Defining Digital Citizenship &amp; Literacy</th>
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<tr>
<td><strong>Description</strong></td>
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<tr>
<td>In Unit 1 students be introduced to education as a career and establish their career aspirations and goals. Students will be introduced to the CTE Education Pathway Curriculum Outcomes, California Commission for Teacher Credentialing Preliminary Program Standards, ISTE Student and Teacher Standards and the Blended Learning Teacher Competency Framework. In this unit, students will be introduced to the Educator's Rising Classroom Culture and Anti-Bias Micro-Credentials. Lastly, students will be introduced to restorative practices and the idea of productive struggle and their applications in the classroom.</td>
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<tr>
<td><strong>Key Topics/Activities</strong></td>
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<td>Students will be trained in &quot;Roles and Responsibilities&quot; in and out of the classroom, &quot;Inclusive Practices and People First Language,&quot; Growth Mindset and Classroom Management. Additionally, students will learn four co-teaching models and identify which model they will incorporate in their own teaching practices. As students prepare to be placed at their internship sites they will create their resume, cover letter and prepare and interview for positions identified on the job listings at a variety of internship sites available to them. After they have been placed at their internship site, students will take a tour of the school and be introduced to their internship site teacher. Interns will identify their personal career goals and aspirations using the Naviance Family Connections tool and begin to leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals. Interns will work toward articulating and setting personal learning goals, developing strategies and leveraging technology to achieve them. Interns will begin to build networks and customize their learning environments in ways that support the learning process and use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways. They will begin to understand the fundamental concepts of using technology in the classroom. As part of developing their digital portfolio, students will begin to critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. These lessons support the goals of this class by pairing students' personal goals, aspirations and content introduced in this unit to their applications in the classroom.</td>
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In Unit 2, students will learn about the basic structure of public education, how a school operates and the government regulations that affect how a school is run. Internet safety will be the technology focus for this unit. Students will expand on their learning from Unit 1 including the government regulations supporting of confidentiality and safety such as (FERPA), Child Internet Protection Act (CIPA) and Individuals with Disabilities Education Act (IDEA). Students will learn about the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and how to act and model in ways that are safe, legal and ethical.

Key Topics/Activities
During this unit, students will begin to complete Critical Component #2 "Thoughtful Classroom and Structure" and Critical Component #5 "Values-based Classroom Management" of the Educator's Rising Micro-Credential Program. Students will conduct two "fly-on-the wall" observations, taking detailed notes through the lens of critical practices to support school structure and classroom culture.

As students begin their internships students will learn about purpose statements, expectations for lesson delivery and classroom management. They will then work with their site teacher and how these practices are applied in their classroom. Interns will begin think about how to enhance these practices within a digital format.

As students continue to develop their digital portfolio, they will begin to use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.

Students will begin to demonstrate an understanding of productive struggle and make attempts to use in their approach to tasks including effort, enthusiasm, motivation, persistence and a growth mindset.

Students will engage in curriculum through Common Sense Media to learn about Digital Citizenship and Safety and begin to think about applications in their internship site classrooms.

Description

Unit 3 will introduce state and federal environmental and safety regulations as they relate to the education industry. Students will participate in a blood-borne pathogens training, review their CPR and First Aid certification training from 9th grade and practice critical emergency and disaster procedures at a school site. Students will learn about food groups, nutrition and importance to student growth and development. Students will learn about how their online digital footprint affects their identity and reputation both online line and off.

Key Topics/Activities

Interns will learn about school-based safety and emergency procedures including fire and earthquake drills, school check-in and out procedures, and learn to model appropriate behavior during these safe-school, emergency and disaster events.

At their internship sites, students will begin to transition students from the classroom to their nutrition break, lunch or play/break activities. Based on their learning, interns will assist students with food choices and encourage healthy eating practices. Interns will learn about child diseases and illness such as diabetes, allergies, asthma, vision and other impairments.

Students will learn and model the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical. Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. Curriculum from Common Sense Media will engage students in learning about how their online interactions affect their online and offline credibility, identity, reputation and digital footprint.
Unit 4: Introduction to the Physical, Intellectual, Emotional & Social Development of Children & Adolescents; Relationships, Communication & Cyberbullying

Description
In Unit 4 students will be introduced to the important elements of the physical, intellectual, emotional, and social development of children and adolescents. They will learn how developmental patterns and the role of family involvement affect the educational progress of children and adolescents. Students will learn about the effective use of technology in establishing positive online relationships and communication. Identifying and dealing with cyberbullying are also included in this unit.

Key Topics/Activities
In this unit, students will complete Critical Component #1 "Honoring Student Experience", Critical Component #4 "Social and Emotional Safety" in the Educator's Rising Micro-Credential Program. Students will explore how restorative practices are applied in the elementary, middle and secondary settings. They will look at programs such as Interactions for Peace and PeaceBuilders. Students will read the book "Touching Spirit Bear" by Ben Mikaelsen.

Students will engage in curriculum directed to learn strategies to communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. They will learn about positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices. Minimally, students will research and complete at least one "Cyberbullying" lesson from Common Sense Media.

Unit 5: Introduction to Positive Interaction, Guidance, and Discipline in the Education Environment; Searching, Evaluating & Citing

Description
In Unit 5 students will be introduced to positive interaction, guidance and discipline in the educational environment. In addition to learning about established strategies to develop positive relationships and classroom management concepts, students will learn more about how restorative practices can be integrated in the classroom setting. In this unit students will learn how to conduct online searches and evaluate online resources. Students will learn how to appropriately use and cite online resources.
Key Topics/Activities
In this unit students will complete Critical Component #3 "Shared Inquiry and Dialogue" from the Classroom Culture Micro-Credential Program and Critical Component #1 "Critical Engagement with Material" from the Anti-Bias Credential. Students will demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

Students will learn to evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources; and plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits. Students will explore and complete one lesson from Common Sense Media's Creative Credit and Copyright resources.

Unit 6: Introduction to Effective Communication & Interaction with Students and Families; Changing your Community through Digital Citizenship

Description
In Unit 6 students will learn about the importance of building effective communication between the school and home and how language, culture, and socioeconomics influence this communication. Students will study how they can improve communication with their community through positive digital citizenship practices.

Key Topics/Activities
In this unit students will complete Critical Component #2 "Differentiated Instruction" in the Anti-Bias Micro-credential. As interns learn effective communication and how to interact positively with students and their families they will begin to apply the concepts from the micro-credential.

Interns will begin to look at how digital tools can be used to communicate with students and families and positively affect their community. They will begin to use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints. Students will explore and complete one lesson from Common Sense Media's "Relationships and Communication" resources.
### Description
In Unit 7 students will finalize their digital portfolio which will showcase their competency of the stated course outcomes. They will develop and present a digital literacy lesson that could be used in a K-12 classroom.

### Key Topics/Activities
Interns will complete Critical Component #4 "Real World Connections and #5 "Values-based Assessment, Evaluation and Grading" in the Anti-Bias Micro-credential. Additionally, interns will complete "Submission Requirements" for both the Classroom Culture and Anti-Bias Micro-credentials and complete the submission process.

Interns will begin to contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal. As part of the Micro-credential process interns will create and share a bit.ly collaboration site with other Educators Rising Members.