TEED 3203: The Technology of Communicating

University of Arkansas College of Education and Health Professions
Department of Curriculum and Instruction

I. **Program Affiliation:** Career and Technical Education, Technology Education concentration

Catalog Description: Conceptual foundations and methodologies for teaching information and communications technology and using instructional technology in the classroom.

Prerequisites: None

Instructor: Vinson Carter
Office: Peabody 314
Phone: 479-575-3076
E-Mail: vcarter@uark.edu

II. **Relationship to Knowledge Base**: This foundational course supports the "Specialty Studies" component of the Scholar-Practitioner model by providing the technology teacher education candidate with an in-depth study of information and communications technology. The course includes an intense overview of the history, science, methods, and theories of information and communications technology and the use instructional technology.

III. **Goals**: This course is designed to provide the candidate with an understanding of the information and communications technologies as well as instructional strategies for teaching these subjects.

IV. **Scholar-Practitioner Tenets:** The following tenets are to be interwoven throughout all areas of the class and practicum. Scholar-practitioners are teachers, administrators, and counselors who value theory and research, comprehend theory and practice as being complementary and mutually reinforcing, and are committed to the enhancement of teaching, learning, and professional practice.

The scholar-practitioner is one who:

1. *accesses, uses, and/or generates knowledge.
2. *plans, implements, and models best practice.
3. *understands, respects, and values diversity.
4. *is a developing professional and a life-long learner.
5. *is knowledgeable about teachers and teaching, learners and learning, schools and schooling.
6. *communicates, cooperates, and collaborates with others.
7. *makes decisions based upon professional standards and ethical criteria

V. **Competencies:**

Upon successful completion of this course, students will demonstrate knowledge, skills, and competencies in the following areas:

1. Demonstrate the ability to use the communication model and the ability to describe the development and functionality of current technologies (SP 1, 5);

2. Understand and use the systems model and describe how it applies to information and communications technology (SP 1, 5);

3. Demonstrate an understanding of the historical progression of communications technologies (SP 1, 5);

4. Understand and describe the impacts of information and communications technology on society (SP 1, 3, 5);

5. Demonstrate the ability to teach the differing structures of information and how their formats relate to communication technologies (SP 1, 6, 7);

6. Apply and utilize informational forms and structures within a given domain of information and communications technologies (SP 1);

7. Demonstrate an understanding of the basic graphic communication processes and how they are applied to print media (SP 1);

8. Describe the electronics, methods of transmissions, encoding and decoding information of a communications system (SP 1);

9. Describe the role of print media and the publishing industry (SP 1);

10. Demonstrate the ability to teach materials related to the World Wide Web function within information and communications technology (SP 1, 5, 7);

11. Demonstrate the ability to describe and utilize currently available curricula related to information and communication technologies (SP 5, 6, 7);

12. Demonstrate the ability to develop standards-based curricula for information and communications technology (SP 5, 6, 7);

13. Demonstrate the ability to incorporate the various instructional methods and strategies that are used to effectively teach information and communication technologies for all students(SP 3, 5, 7); and,

14. Develop, deliver, and assess selected instructional units related to information and communication technologies (SP 5, 6, 7).

VI. Content:

1. Communication Technologies Past and Present

a. Communication model
b. The Development of early communication technologies
c. The Development of modern communication technologies

d. Major paradigm shifts in communications technologies
e. Impacts of Information and Communication technologies

2. The Structure of Information

a. Binary Information
b. Graphic Information
c. Analog Information
d. Digital Information
e. Sound
f. Video
g. Radio

3. The science behind information and communications technology

a. RGB and CMYK
b. Ink technology
c. Laser technology
d. 3D Modeling

4. The function of Communication Technologies

a. The electronics behind communication technologies
b. Encoding a signal
c. Methods of transmission
d. Receiving transmissions
e. Decoding information
f. Print media and the publishing industry
g. The role of computers in communication technologies
h. The World Wide Web

5. Information and Communication Curriculum

a. National technology and engineering curricula
b. The role of the Standards for Technological Literacy
c. Development of Information and Communications Technology Curriculum

VII. Evaluation:

Learning assessments (portfolio, assignments, and quizzes) are designed to prepare the student to deliver course related to information and communication technology in the secondary technology education classroom. These assessments will also serve as continued technical preparation to teach general technology education as well as technical courses in the field. Grades for participating students will be calculated based on completion of the following assignments and activities:

1. Class Attendance and Participation/Daily Assignments: Students are expected to come to every class and participate in all discussions and ongoing design activities, quizzes, and assignments. Full participation in these activities will result in **300 points**.

2. Curriculum Development/Delivery: Each student will develop two lessons related to information and communication technologies through the course of the semester. **(200 points)**.

3. Student Curriculum Portfolio: Each student will keep a digital portfolio of materials useful for teaching courses related to information and communication technologies developed through the course. This portfolio will be assessed at the completion of the course **(400 points)**.

VIII. Grading Scale:

A=100-90; B=89-80; C=79-70; D=69-60; F-below 60.

IX. Academic Honesty: As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail.

Each University of Arkansas student is required to be familiar with and abide by the University's Academic Integrity Policy that may be found at http://provost.uark.edu/ Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

X. Attendance Policy and Late Work Policy: Because this course involves processes of education, students must attend class every day to receive the maximum benefit. It is also important that students arrive on time to class. **Late work will not be accepted.**

XI. Accommodations

Students with disabilities requesting reasonable accommodations must first register with the Center for Educational Access (CEA). The CEA is located in the Arkansas Union, room 104 and on the web at: http://www. http://csd.uark.edu/. The CEA provides documentation to students with disabilities who must then provide this documentation to their course instructors. Students with disabilities should notify their course instructors of their need for reasonable accommodations in a timely manner to ensure sufficient time to arrange reasonable accommodation implementation and effectiveness. A typical time frame for arranging reasonable accommodations for students who are registered with the CEA is approximately one to two weeks.

XII. Classroom Behavior

Appropriate classroom behavior is expected of the instructor and all students. Inappropriate and disruptive classroom behavior (including the use of cell phones and laptops) will not be tolerated and will result in possible removal from the class and or disciplinary action as per the student handbook.

Due to the increased use of cell phones, I require your phones to be turned off during class. If your cell phone rings please turn it off. Please do not answer your phone or text message during class.

XIII. Syllabus Change: The instructor reserves the right to make changes as necessary to this syllabus. If changes are made, advance notification will be given to the class.

XIV. Required Text:

International Technology Education Association. (2000). *Standards for technological literacy: Content for the study of technology*. Reston, VA: Author.

Available online at: http://www.iteea.org/TAA/Publications/TAA_Publications.html

XV. Inclement Weather

Class will not meet if the University is closed for inclement weather. University closing announcements are also made on KUAF Radio, 91.3 as well as local radio and television stations. The University's inclement weather site is updated frequently on both UARKINFO and at: http://emergency.uark.edu/14701.php. If Fayetteville Schools are closed we will not meet for class.