COURSE OUTLINE OF RECORD

Number: EDUC G103    TITLE: Technology Proficiencies For Teachers I

ORIGINATOR: Stephanie Campbell    EFF TERM: Fall 2017
FORMERLY KNOWN AS:    DATE OF OUTLINE/REVIEW: 07-26-2017
CROSS LISTED COURSE:    TOP NO: 0801.00

SEMESTER UNITS: 2.0
HRS LEC: 18.0    HRS LAB: 36.0    HRS OTHER: 0.0
CONTACT HRS TOTAL: 54.0
STUDY NON-CONTACT HRS RECOMMENDED: 36.0

CATALOG DESCRIPTION:
Based on the Technology Standards for a CA K-12 Preliminary Teaching Credential, this class focuses on the technology proficiencies required prior to credential candidates being issued a preliminary Multiple or Single Subject Credential. Students successfully completing a portfolio in technology proficiencies related to K-12 curriculum will receive a Proficiency Training Certificate from the Orange County Department of Education. Most, but not all, technology application skills are transferable between the Macintosh and Windows environment. ADVISORIES: CBA G101 and CBA G145.

JUSTIFICATION FOR COURSE:

PREREQUISITES:

COREQUISITES:

ADVISORIES:
- CBA G101: Keyboarding
- CBA G145: Introduction To Computers

ASSIGNED DISCIPLINES:
- Business
- Education
- Office technologies (secretarial skills, office systems, word processing, computer applications, automated office training)

MATERIAL FEE: Yes [ ] No [X] Amount: $0.00
CREDIT STATUS: Noncredit [ ] Credit - Degree Applicable [X] Credit - Not Degree Applicable [ ]
GRADING POLICY: Pass/No Pass [X] Standard Letter [X] Not Graded [ ] Satisfactory Progress [ ]
OPEN ENTRY/OPEN EXIT: Yes [ ] No [X]
TRANSFER STATUS: CSU Transferable[X] UC/CSU Transferable[ ] Not Transferable[ ]
BASIC SKILLS STATUS: Yes [ ] No [X] LEVELS BELOW TRANSFER: Not Applicable
CALIFORNIA CLASSIFICATION CODES: Y - Not Applicable
NON CREDIT COURSE CATEGORY: Y - Not applicable, Credit Course
OCCUPATIONAL (SAM) CODE: E
REPEATABLE ACCORDING TO STATE GUIDELINES: No [X] Yes [ ] NUMBER REPEATS: 0
REQUIRED FOR DEGREE OR CERTIFICATE: No [ ] Yes [X]
Associate in Arts: Liberal Arts: Emphasis in Social Behavior and Self-Development (Associate in Arts)
Associate of Arts: Liberal Arts: Emphasis in Business and Technology (Associate in Arts)
Elementary Teacher Education (Associate in Arts for Transfer)
Elementary Teacher Education (Associate in Arts for Transfer)
Liberal Studies for Elementary Education (Associate in Arts)

GE AND TRANSFER REQUIREMENTS MET:

COURSE LEVEL STUDENT LEARNING OUTCOME(S) Supported by this course:

1. Plan, design, and implement technology projects, such as word processing documents, spreadsheets, databases, and presentations by successfully utilizing Google Applications for Education.
2. Identify, select, and use appropriate publication tools to produce classroom documents/Reports, electronic correspondence, discussion groups, and manage data files/multimedia files on the Internet/Cloud by successfully completing various technology proficiency modules.
3. Design a lesson plan that integrates a variety of instructional technologies aligned with State Content Standards and present the lesson to the class.

COURSE OBJECTIVES:

1. identify, select, and use appropriate publication tools to produce written reports, electronic correspondence, discussion groups, newsgroups; manage data files on the Internet and on network drives.
2. plan, design, and implement technology projects; solve various problems related to the use of technology in the classroom.
3. perform computer maintenance and trouble-shoot problems.
4. identify legal and ethical issues.
5. evaluate and assess appropriate resources for grade level curriculum; design and implement lessons that incorporate a variety of instructional technologies aligned with State Content Standards.
6. use various computer peripherals.

COURSE CONTENT:

LECTURE CONTENT:

A. Communication and Collaboration
   1. Identify, select and use appropriate publication tools to produce written reports.
   2. Use basic proofing tools
   3. Integrate graphics appropriately.
   4. Use email tools to communicate and foster relationships both personally and professionally.
   5. Use email as a tool to interact with and provide information to others.
   6. Select from available collaboration tools for personal/professional development to accomplish tasks.
   7. Implement procedures and management techniques concerning Internet use and network access to data files.
   8. Ensure that all communications include appropriate application of copyright law as it applies to research, product development and use of resources.
B. Preparation for Planning, Designing and Implementing Learning Experiences
   1. Communicate about technology using accurate terminology
   2. Use a variety of appropriate input devices.
   3. Use accurate vocabulary to set procedures and to describe problems to others.
   4. Perform regular maintenance to hardware and operating systems.
   5. Access and change operating system software to control hardware functions.
7. Apply strategies for identifying and solving routine hardware and software problems during everyday use.
8. Judge appropriate level of support required to solve problem and then activate them accordingly.
9. Attempt to identify which component or software issue is causing the problem and articulate this information to support personnel.
10. Identify and explain important issues surrounding legal and ethical use of technology tools.
11. Establish classroom policies to address those issues to elicit appropriate student use.
12. Consider the content to be taught and the value of the given activity for student learning and retention.
13. Examine software products for effective pedagogy, appropriate reinforcement of concepts and problem-solving strategies before implementing use.
14. Identify and select electronic research tools for appropriate match to student activity.
15. Identify and select between Internet search tools.
16. Match appropriate technology infused tasks to student learning style.
17. Develop a plan for utilizing all available resources to meet the needs of students and curricular content.
18. Seek out and identify additional technology learning tools to support the specific learning needs of students.
19. Use technology tools and information resources to increase productivity, promote creativity and facilitate academic learning.
20. Seek lessons which allow students to explore higher order thinking and problem solving.
21. Orchestrate activities to maximize student learning by matching the most appropriate technology setting to instructional and learning needs.
22. Collect and analyze data to ensure purposeful student engagement in learning for project management.
23. Identify, manage and organize resources based on the appropriateness to specific tasks and student needs.

C. Evaluation and Assessment
1. Utilize a database to manage and record student and classroom information.
2. Create relationships between two database files.
3. Examine State and local resource pools to discern appropriate resources for grade level/curriculum.
4. Select and implement evaluation criteria to determine usefulness of media in the classroom.
5. Critically evaluate source of information by examining source, publication date, author, and medium of publication.
6. Design and implement lessons that incorporate a variety of instructional technologies aligned with State Content Standards.
7. Consider the technology tools to be used, level of access, and learning processes involved and match the type of student activity with them. Lab Content: A.

LABORATORY CONTENT:

A. General Computer Knowledge and Skills
1. Basic hardware and software terminology
2. Operation and care of hardware, software
3. Basic troubleshooting
4. Integration of student learning and classroom management
   a. Applications of technology as an educational tool
   b. Technology tools to support teaching and learning
   c. Models for classroom management of technology

B. Internet
1. General knowledge and skills, use of hardware, software (web browsers)
2. Communication and collaboration: using chat, newsgroups, threaded discussions to communicate with members of a group
3. Research tools
   a. Using advanced search features to locate and validate information
   b. Using the Internet as a resource for lesson development
4. Ethics and policies: implementing procedures and management techniques regarding Internet use for classroom instruction
5. Information literacy
   a. Using a wide variety of sources/multiple perspectives (international, multicultural)
   b. Filtering information for relevancy
   c. Incorporating literacy strategies into lesson design
6. Integration, student learning, and classroom management
   a. Using Internet resources for designing lessons
   b. Using the Internet as a resource for classroom management

C. E-mail
   1. General knowledge and skills
   2. Communication and collaboration—email as a tool to interact with and provide information to students, parents, and other community members
   3. Integration, student learning, and classroom management
      a. Email tools to support teaching and learning: e.g. keypals, global classrooms, parallel problem-solving, mentoring, etc.
      B. Curricular lessons which utilize email as a part of the activity
      c. Classroom management techniques using Email
   4. Legal and ethical
      a. Incorporating etiquette in classroom instruction
      b. Implementing student safety and security procedures in instruction

D. Word Processing
   1. General knowledge and skills (e.g. finding and replacing text, saving in other file formats)
   2. Communication through printed media
      a. Creating lesson plans, articles, reports
      b. Making, using templates
      c. Using graphics/drawing tools
   3. Integration, student learning, and classroom management
      a. Creating enhanced word processed documents for classroom use
      b. Designing lessons using word processing as part of the activity

E. Publishing
   1. General knowledge and appropriate use of hardware, software
   2. Communication through printed media
      a. Using elements of basic design
      b. Saving documents in appropriate formats
      c. Integrating various software for desktop publishing graphics, layout)
      d. Incorporating digital images from external sources (e.g. cameras, scanners, WWW)
   3. Integration, student learning, and classroom management
      a. Developing student assignments that use effective design
      b. Planning for classroom management of available resources

F. Databases
   1. General knowledge and appropriate use of hardware, software (e.g. sorting, matching, exporting data from database)
   2. Management of records (e.g. merging database information with word processing document to produce a form letter)
   3. Communication through printed media
      a. Importing data from other applications
      b. Using data base for specific productivity related to curricular goals
   4. Integration, student learning, & classroom management
a. Designing curricular lessons which use databases to enhance/facilitate learning outcomes
b. Developing student assignments that require management and manipulation of a variety of data

G. Spreadsheets
1. General knowledge and appropriate use of hardware, software
2. Management of records (grade book, attendance, etc)
3. Communication through printed media (e.g. importing, exporting charts into a word processing application)
4. Integration, student learning, & classroom management:
   a. Designing lessons requiring use of spreadsheet
   b. Creating charts for a content lesson

H. Presentation Software
1. General knowledge and appropriate use of hardware, software
2. Communication through printed media (e.g. printing handouts that enhance instructional objectives)
3. Integration, student learning and classroom management
   a. Designing curricular lessons using multimedia to enhance learning outcomes
   b. Adding fair use and copyright law for text, graphics, sound

I. Instructional Technology
1. Analyzing best practices and research findings on the use of technology, and designing lessons accordingly
2. Selecting the best technological resources that go with the content to be taught
   a. Using evaluation rubrics
   b. Selecting appropriate technological resources for use in lesson plans
3. Identifying student learning styles and determining appropriate resources (integrating technology resources, lesson plans, classroom practice with results of learning style inventory results)
4. Creating and maintaining effective learning environments using computer based technology
   a. Using technology for whole class, small group, and individual instruction
   b. Designing classroom activities that allow for all students to build their technology skills and increase learning
   c. Implementing management procedures that support assessment of student involvement and achievement
5. Privacy, security, and safety issues (e.g. policies re plagiarism, copyright; implementing polices for safety, privacy, and security)

J. Communication and Collaboration
1. Using computers to communicate through printed media (newsletters, course descriptions, student reports
2. Interacting with others using E-mail (attachments, electronic correspondence)
3. Using a wide variety of computer-based collaborative tools
4. Privacy and safety
5. Copyright issues

K. Preparation for Planning, Designing, and Implementing Learning Experiences
1. Demonstration (through a product designed by the student) of knowledge of basic computer hardware and software terminology
2. Demonstration of competency in the operation and care of computer related hardware
3. Implementation of basic troubleshooting techniques
4. Legal, ethical, appropriate use of technology in the classroom
5. Choice of software based on its relevance, effectiveness, alignment with content standards and value added to student learning
6. Demonstration of competence in the use of electronic research tools
7. Identification of student learning styles and determining appropriate technological resources to improve learning
   a. Assistive technologies for special needs
   b. Sample lessons making use of technologies to meet the needs of all students
8. Matching of content to be taught with the best technological resources to support and manage learning
9. Creation and maintenance of effective learning environments using computer-based technology
   a. Connecting appropriate resources, curriculum content and assessments for specific student populations
   b. Using sample technology-based lessons in a variety of settings (whole class, small group, individual, computer lab)

L. Evaluation and Assessment
   1. Using computer applications to manage records
      a. Using ready made teacher productivity tools
      b. Generating student lists for field trips, labels, certificates
   2. Evaluating a variety of educational digital media using established rubrics
   3. Demonstrating awareness of issues concerning authenticity, reliability, bias in gathered data when using literacy strategies
   4. Analyzing best practices and research findings on the use of technology and related assessment mechanisms

METHODS OF INSTRUCTION:
   A. Lecture:
   B. Lab:
   C. Online:
   D. Independent Study:

INSTRUCTIONAL TECHNIQUES:

COURSE ASSIGNMENTS:
   Out-of-class Assignments
   
   Writing Assignments

Instructor will follow CTAP's portfolio check-off sheet and portfolio requirements as a guide for required writing, problem solving, and skills demonstration.

Reading Assignments

   Text
   Websites

METHODS OF STUDENT EVALUATION:

Final Exam
Short Quizzes
Written Assignments
Projects (ind/group)
Problem Solving Exercises
Oral Presentations
Skills Demonstration

Demonstration of Critical Thinking:

In order to complete the project-based portfolio the student will demonstrate the use of critical thinking and problem solving skills. Exercises provided in the text (NetStuff, cyberclass, EdlIssues, At the Movies Interactive Labs/hands-on exercises) will require the student to demonstrate critical thinking and problem solving skills.

Required Writing, Problem Solving, Skills Demonstration:

Instructor will follow CTAP's portfolio check-off sheet and portfolio requirements as a guide for required writing, problem solving, and skills demonstration.
TEXTS, READINGS, AND RESOURCES:

TextBooks:

LIBRARY:

Adequate library resources include:

Comments:

Attachments:

[Attached Files]