Department of Teaching and Learning
*Inquire * Educate * Innovate.*

Course Information

Prefix & Number	CIT 649
Title	Instructional Methods Computer Applications
Credits	3 Credit Hours
Semester	Summer 2020
Instructor	Kendall Hartley, PhD
Office/Phone/ Email	CEB 340; 702-895-1176
Office Hours	By appointment
Prerequisites	None
Course Description	CIT 649: Study of research-based practices and methods for teaching computer applications. Emphasis on developing project-based instructional activities for teaching digital technologies in the elementary/secondary classroom or professional development settings.

Standards Addressed

Computer Science Teachers Association's CS Standards for Teachers
https://www.csteachers.org/page/standards-for-cs-teachers

1. Knowledge of computer science for teaching
   a. Knowledge of relevant CS concepts (see CS K-12 Standards)
      i. Computing systems
      ii. Networks & the internet
      iii. Data & analysis
      iv. Algorithms & programming
      v. Impacts of computing
   b. Demonstrate cs practices
      i. Professional cs practices
         1. Fostering an inclusive computing culture
         2. Collaborating around computing
         3. Communicating about computing
      ii. Computational thinking practices
         1. Recognizing and defining computational problems
         2. Developing & using abstractions
         3. Creating computational artifacts.

4.   Testing and refining computational artifacts
            c.   Use student CS standards
            d.   Make interdisciplinary connections
            e.   Use computer science tools and technology
2. Equity advocate
            a.   Disrupt systemic barriers
            b.   Use data for decision-making to improve equity
            c.   Recruit underrepresented students to cs
            d.   Advocate for accessibility of cs opportunities:
            e.   Collaborate with stakeholders
3. Professional Growth And Identity
            a.   Cultivate a professional identity as part of a broader cs community
            b.   Refine teaching philosophy to focus on cs for all students
            c.   Recognize bias in content and perspective
            d.   Set professional development goals and create a plan for purposeful, ongoing learning
                 to meet these goals
            e.   Become actively engaged in cs professional learning communities
            f.   Collaborate with the local community to support students' learning of CS
4. Educator As CS Instructional Designer
            a.   Use inclusive and empowering practices
            b.   Analyze the content of curricula
            c.   Design classroom communication and collaboration opportunities
            d.   Connect computer science across disciplines
5. CS Classroom Practitioner
            a.   Model the role of lead learner
            b.   Apply high-leverage practices to facilitate student learning
            c.   Cultivate an engaging, equitable, and inclusive classroom environment
            d.   Enable student communication about computing:
            e.   Inform classroom instruction through effective assessment

Course Objectives

Knowledge

After successful completion of this course students will:
   ● Demonstrate a sound understanding of technologies and concepts to guide
     learners in effective use of digital tools,
   ● Use a variety of digital media and formats to collaborate, publish, and
     interact with peers, and
   ● Evaluate and select computer applications and digital technologies based on
     their appropriateness to specific learning tasks.

Performance Skills

After successful completion of this course students will:
   ● Use computer applications and digital technologies to increase productivity,
     promote creativity, meet diverse learning needs and facilitate academic
     learning,
   ● Design and develop instructional materials with assessments using digital
     tools to facilitate higher order and complex thinking skills, including problem
     solving, critical thinking, informed decision making, knowledge construction,
     and creativity in content area lessons,
   ● Collaborate with colleagues to design and develop a web-based lesson
     promoting educational use of a digital tool to engage students in learning.

Dispositions

After successful completion of this course students will:

- Exhibit positive attitudes toward technology uses that support collaboration and an ongoing commitment to professional growth as software and hardware continue to evolve,
- Develop an appreciation for using computer applications and digital technologies as cognitive tools to promote learning for all students.

Results

Students will demonstrate their knowledge, performance, and dispositions through their assignments, active participation in group activities and discussions, and their commitment to designing engaging, high-quality lessons using computer applications and digital technologies.

Required Books and Materials

There is no required textbook for this course. All reading material is available electronically via the online course schedule. The following are required in order to successfully complete this course:

- **A computer with Internet access** either personally or through University computer labs, and basic computing skills. There are open computer labs in CEB 212, CEB309A the Library and other locations on campus.
- **Rebelmail Account** -UNLV e-mail address - Much of our communication will be done by email. Students are required to use only WebCampus or their UNLV Rebel Mail e-mail address for such communication. In addition, all official UNLV announcements are sent to this address. To activate your e-mail address, connect to the Internet and click on the following link: http://rebelmail.unlv.edu/

Supplemental Texts And/Or Materials

Additional links and resources and links are posted in WebCampus

Course Structure

Because this is an online course, students are expected to log on to WebCampus a minimum of 4-5 times weekly. Although proponents of Internet-based courses sometimes talk of "any place, any time" access--and that is certainly possible--this course will employ an approach known as **scheduled asynchronous** in which participants can take advantage of the flexibility of asynchronous communication (i.e., not in real time together), but do so as a group in a prescribed sequence of learning activities. Thus, while our discussions will allow you to participate at any hour and from wherever you like, the course is designed for students to keep up with the readings, discussions and learning activities on a weekly basis. Assignments, activities, and discussion/reading topics will be posted, and it is expected that they will be completed and submitted as outlined by the course schedule.

- Assistance is also available through the University's Student Computing Support Center - Phone: 702-895-0761 Location: MSU 231 Website: http://oit.unlv.edu/students/ E-mail: StudentHelp@unlv.edu
- In addition, numerous other tutorials for all applications addressed in this course are available via the Web at sites such as code.org.

Instructor presence on WebCampus

I will be online several times during the day Monday through Friday monitoring messages and providing feedback in as timely a manner as possible. When you're stuck

on a project and it takes the instructor a while to respond, it can be very frustrating. For this reason, the *Help* forum will serve as a first point of contact when you're in need of help. If colleagues can help answer your questions, then instructor intervention is not necessary. You are encouraged to work together as much as possible to minimize frustration and feedback delays.

Student Expectations

You need to be prepared to complete this class online. In order to do this you should go to the UNLV Distance Education website to determine that you have the correct browser, software, and hardware necessary to complete the class. If this is your first Distance Education class from UNLV, you should begin at the How to Succeed website: http://distance_ed.unlv.edu/info/before_you_begin.html

Course Tools in WebCampus Various tools in WebCampus will be used for course delivery.

Course Content Page is the home page and contains the Schedule with due dates and links to all course readings, a link to the syllabus, and the *New to Distance Education* link that will help you become familiar with Web Campus tools.

Learning Modules are posted sequentially for course content as noted in the schedule. These modules provide important information and description on reading discussions and assignments. They also provide links to all course activities for the module and contain links to additional online resources and tutorials that can help in completing assignments.

Assignments page is where you will submit your work. Additional information on the assignments is listed later in this syllabus.

Mail is where you can send messages to me or other students in the course. If you have not used it before, please view the tutorial in Student Orientation in the "*New to Distance Education*" link to see how to use it.

Calendar contains all due dates for the assignments.

Discussions page links the discussion forums for this course. There are two forum areas that serve different functions.

1. *General Forums*
   a. *Introductions* - is seen by all and can be used by anyone to share information targeting the entire group. Post a message introducing your self. Please include your full name, year in school, the grade level you want to teach, where you're from, how many online courses you have taken, and an interesting factoid. Be sure and respond to at least 4 other colleagues as they post their introductions. *b) Help* – is seen by all and can be used to post questions about applications, seek clarifications about assignments or get help with difficulties you may encounter. This will be more expeditious than asking only me because chances are one of your classmates has already faced and solved the same problem. This is a better alternative than asking me via WebCampus email because the entire class can then see the response. Assisting others via the Help forum is greatly appreciated by your classmates and me.
2. *Online Discussions* are seen by all and will be used to discuss the assigned readings for each module.

Assignments

The course learning activities/assignments and their point values are listed below:

Activity	Number	Points Each	Total Points
Introduction	1	30	30
Online discussions	4	30	120
Methods Exercises	3	50	150
Lesson Plan Assignments	3	150	450
Unit Project web site	1	150	150
Total			**1000**

Learning Activities (1000 points)

Below is a list of course activities. Late submission will incur a 10% penalty. Assignments and Exercises more than two days late will not be accepted unless arrangements have been made with the instructor prior to the due date. Details for the assignments and exercises and assessment criteria are posted in WebCampus.

Introduction (30 pts.)

Post your introduction in the appropriate discussion area and respond to at least four colleague's introductions.

Online Discussions for Reading Assignments (4 @ 20 pts. = 80 pts.)

The discussion topics and links to relevant readings are posted in the Learning Modules. See Webcampus for details.

Methods Exercises (3 @ 50 pts. = 150 points)

The three methods exercises are designed to explore tutorial resources on the web and practice computer applications in the context of real classroom projects. Note the variety of approaches for creating tutorials to help learners use application features – text-based instruction, screen shots, videos, etc. You will post your review of a web-based tutorial resource in the "Methods Exercise Discussion area in WebCampus.

Lesson Plan Assignments (3 @ 150 = 450 pts.)

You will design and develop three unique technology -integrated lesson plan projects after having practiced with the methods exercises. Lesson plan projects may extend over several class sessions. These are your opportunity to demonstrate understanding of integrating computer applications or digital technologies in the context of teaching, and to apply your creativity in the development of unique, motivational lesson plans for the various applications. You are highly encouraged to expand your knowledge and explore lessons available on the web and adapt them to your setting. Be sure and list the URL if you use web resources. **Preparing instructional handouts for students to follow as they use the applications are a key component of these assignments.** You will submit your lesson plans in Assignments.

Resources Website (150 pts.)

You will design and develop a resources web or wiki site that can be used in the classroom or in a professional development setting. It should be a unique and motivating thematic unit incorporating a minimum of three different computer applications or digital technologies. The goal is to share the lessons you have developed and identify other related resources.

Performance Assessments

Course assessment is based on rubrics or checklists for each learning activity. Details on assessments are posted with the assignments.

Grading Policy

All grades will be posted online in WebCampus accounts. All points earned/grades will be posted online in WebCampus accounts. The number of points earned during the course determines the final grade. The grades of A and A- are reserved for students who consistently show exemplary performance in their assignments and class participation. If you have questions about the grading standard, please refer to the Academic Policies in the UNLV Graduate catalog: http://catalog.unlv.edu/content.php?catoid=3&navoid=119

A	940 -1000			A-	900-939
B	830 - 869	B+	870 - 899	B-	800 - 829
C	730 - 769	C+	770- 799	C-	700 - 729
D	630 - 669	D+	670 - 699	D-	600 - 629
F	< 600				

Computer Issues   Students with computer problems should contact the Student Computing Services Help Desk at 702-895-0777. The Help Desk can assist with passwords and access issues. The SCS website is especially helpful regarding WebCampus, computer labs, software (including virus protection and anti-spyware), and browser problems: http://oit.unlv.edu/help/student/

Technical assistance for WebCampus is available from http://webcampus.unlv.edu/new-webcampus-support-may-2012
Students can also contact the Student Help Desk at (702) 895-0777, in the Student Union Room 231, or send requests by e-mail: scrhelp@unlv.edu

The Help Desk does not address any content issues of WebCampus courses — those questions must be directed to the instructor.

Server Down Time The WebCampus server will be down every Saturday from midnight to 6 a.m. for maintenance.

Class Schedule (see last page)

College of Education Policies

College Accreditation

Assignments completed for this course may be used as evidence of candidate learning in national, regional and state accreditation reports of COE programs. Names and other identifying elements of all assignments will be removed before being included in any report. Students who do not wish their work to be used for accreditation purposes must inform the instructor in writing by the end of late registration. Your participation and cooperation in the review of COE programs is appreciated.

Teacher Licensure

Misdemeanor or felonious conviction(s) may bar teacher licensure in Nevada or other states. If you have any questions, please direct them to the Director of Teacher Education, CEB 301, 895-4851.

UNLV Policies

Academic Misconduct

"Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution."

An example of academic misconduct is plagiarism: "Using the words or ideas of another, from the Internet or any source, without proper citation of the sources." See the "Student Academic Misconduct Policy" (approved December 9, 2005) located at: http://studentconduct.unlv.edu/misconduct/policy.html.

Copyright

The University requires all members of the University Community to familiarize themselves and to follow copyright and fair use requirements. **You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws.** Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: http://provost.unlv.edu/copyright/statements.html.

Disability Resource Center (DRC)

The Disability Resource Center (DRC) determines accommodations that are "reasonable" in promoting the equal access of a student reporting a disability to the general UNLV learning experience.   In so doing, the DRC also balances instructor and departmental interests in maintaining curricular standards so as to best achieve a fair evaluation standard amongst students being assisted. In order for the DRC to be effective it must be considered in the dialog between the faculty and the student who is requesting accommodations. For this reason faculty should only provide students course adjustment after having received an "Academic Accommodation Plan." If faculty members have any questions regarding the DRC, they should call a DRC counselor.

UNLV complies with the provisions set forth in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The DRC is located in the Student Services Complex (SSC-A), Room 143, phone (702) 895-0866, fax (702) 895-0651. For additional information, please visit: http://drc.unlv.edu/.

Religious Holidays Policy

Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor no later than the end of the first two weeks of classes, September 7, 2012, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. This policy shall not apply in the event that administering the test or examination at an alternate time would impose an undue hardship on the instructor or the university which could have been avoided. For additional information, please visit: http://catalog.unlv.edu/content.php?catoid=4&navoid=164.

Rebelmail

By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. Students can contact the Student Help Desk at (702) 895-0777, in the Student Union Room 231, or by e-mail: scrhelp@unlv.edu. See http://rebelmail.unlv.edu/ for additional information.

Tutoring

The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex, #22 on the current UNLV map. Students may learn more about tutoring services by calling (702) 895-3177 or visiting the tutoring web site at: http://academicsuccess.unlv.edu/tutoring/

UNLV Writing Center

One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: http://writingcenter.unlv.edu/

Class Schedule (for summer session)

Week	Topics	Assignments
1	Overview & Text-based multimedia applications in lessons	Post introduction 1.Methods Exercise 2. Online discussion 3. Lesson plan
2	Spreadsheet/database lessons applications in lessons	1.Methods Exercise 2. Online discussion 3. Lesson plan

3	Audio/Visual lessons applications in lessons	1.Methods Exercise 2. Online discussion 3. Lesson plan
4	Web 2.0 tools and Wiki group project	1. Online discussion 2. Group wiki-based mini-lesson
5	Unit Project on the Web	Web-based Unit Project