**Title: TECHNOLOGIES IN THE CLASSROOM**

**Guiding Learning Theory**:

*Cognitive and Constructivism -* a combination of two learning theories will be utilized and it will serve as a guide for the development and implementation of this course. The student will tap on their current knowledge, existing idea and information, and apply it to the information that will be presented in the course. From the learning materials, the student will learn specific goals and work on different content materials and project to learn the concept, topic, and technologies presented in the course. The instructor will serve as a facilitator, guide and will clarify any issues the student will encounter. By using these two learning theories, the student should be able to construct their knowledge of technology and from the experience (hands on) it will enable them to create schemes on how to use and incorporate the presented materials to their own classroom (University of Houston, n.d.). By utilizing the definition given by the Graduate Division of the University of California at Berkeley, “knowledge systems of cognitive structures are actively constructed by learners based on pre-existing cognitive structures” (University of California – Berkeley, n.d.), the student will be able to apply the technologies of the course to their own classroom. All activities in the course will be using the cognitive constructivism techniques.

**Purpose:**

The purpose of this project is to inform and educate instructors what different technologies they can incorporate into their courses, whether they are teaching face-to-face, blended/hybrid, or online. A lot of instructors are having a difficult time trying to find new or current technology to use in their classroom. Others have an idea of the technology, but find it difficult to incorporate into their courses because they don’t know how. Groff & Mouza (2008) stated that it is still a challenge creating an effective learning environment with technology. Even with the push to integrate technology in the classroom, many instructors still struggle and find it difficult to incorporate technology. One issue is that teachers don’t have any idea how to incorporate the technology. With this course, different applications, websites, and software will be introduced to the learner and they will have the opportunity to practice and learn how to use it. The end goal is for the learner to take the new knowledge they have about the technology and incorporate these technologies to make learning more engaging and better.

**Topic:**

The working title of this course is **Technologies in the Classroom**. This course will introduce different applications, websites, and software that can be used in different types of courses: face-to-face, hybrid, blended and fully online. The apps, websites, and software are technologies that instructor can use to teach concepts, promote learning and enhance the classroom experience.

**Audience:**

The target audiences will be instructors from K12 to Higher Education who teach with different learning format: Face-to-face, blended/hybrid and online learning format.

**Format:**

This course will be delivered fully online. Different multimedia will be used to deliver the course materials. Canvas is the Course Learning Management System that will be used to develop and deploy the course materials.

**Technologies Required:**

* Computer access
* Internet connection
* Headset with microphone
* Video camera, any types are acceptable as long as you can create a high-quality video.
* Access to the Learning Management System (Canvas).

*Computer skills*

* Ability to download and install applications
* Navigate web pages
* Create accounts and/or current account in Social Media, Google, and other websites

**Measurable Learning Goals and Objectives:**

At the end of this course students will be able to successfully:

***G.1:*** Learn new or current technologies to use for classroom improvement and integration.

***O.1.1***: Student will learn how to research information about technologies to use for classroom activities.

***O.1.2***: Student will be able to distinguish the right technology to use for their courses.

***O.1.3***: Students will discover new and relevant articles about technology and will be able to collaborate with classmates.

***G.2***: Teach how to use the different apps, websites, and software for instructional and learning improvement in the classroom.

***O.2.1***: Student will be able to do hands-on activities to create materials using the technology to learn the usability.

***O.2.2***: Student will be able to produce learning materials using the assigned technology every week.

***G.3***: Teach to design learning materials using the technology (apps, website, and software) provided.

***O.3.1***: Students will be required to create a weekly reflection using the apps/software, create videos, use collaborate tools to learn how it can be used in their course.

***G.4***: Provide an opportunity to be familiar with the technology to incorporate in their courses (screencast-o-matic, social media, google tools, podcast, vblog, kahoot, and grammarly).

***O.4.1***: Students will be required to show their knowledge of the different technology by developing materials using the apps, websites, and/or software assigned for the week.

***G.5***: Provide an opportunity to critique materials created and presented by other students.

***O.5.1***: Student will share the materials they created and will have the opportunity to give constructive criticism to their fellow classmates.

***G.6***. Teach the learner how to incorporate learning technology tools into their courses.

***O.6.1***. Students will have the opportunity to utilize the learning technology to learn how it can be incorporate in their courses.

**Intended Sequence and Description of Instruction/Learning Activities:**

The course will be divided into different activities. Every week student learner will have to work on the following.

*Reading Materials (G.1, O.1.1, O.1.2, O.1.3)*

* Reading materials will be provided to the students. Students will read the materials and reflect on what the provided information. The reading materials will either be articles and/or research work.

*Discussions, Writing, and Reflections (G.4, O.4.1)*

* The student will write a post in the discussion area related to the topic for the week. The student will reflect on the reading and will write a blog entry or create a video blog to document what they did for the week.

*Hands-on Activity (G.2, O.2.1, O.2.2, G.3, O.3.1, G.6, O.6.1)*

* Students will perform different hands-on activities each week. This can vary from creating accounts on websites, creating a blog entry, creating vlog, screen sharing, screen capturing, creating a video, using google tools, and others.

*Critique and Final Presentation (G.5, O.5.1)*

* Students will critique other students created materials and will be presenting a final portfolio.

**Timeline for Delivery of Instruction:**

*Week 1- Module 1: Introduction*

* Introduction of Technology
* Personal Introduction/Getting to know
* Discussions, Writing, and Reflections
* Pros and Cons of Technology in the Classroom
* List some of your favorite technology

*Week 2 & 3 – Module 2 & 3: Blogging and Video Blogging (Vlog) - (2 weeks)*

* Reading Materials, Discussion, Writing and Reflections, Hands-on Activity
* Blogging and Vlogging – text vs video
* Wordpress, Blogger, Wix, Squarespace.com
* Create a blog
* Create a blog entry using Vide Blog – Reflection #1

*Week 4 – Module 4: Writing Tools/Apps*

* Reading Materials, Discussion, and Reflections, Hands on Activity
  + Grammarly and Hemingway

*Week 5- Module 5: Screencasting/Screensharing Tools*

* Reading Materials, Discussion, Reflections, and Hands on Activity
* Screencast-o-matic, Snagit, Jing by Techsmith

*Week 6 & 7 – Module 6 & 7: Media/Video (2 weeks)*

* Reading Materials, Discussion, Reflections, and Hands on Activity
  + Screencast-o-matic, YouTube

*Week 8 – Module 8: Interactive Quizzing*

* Reading Materials, Discussion, Reflections, and Hands on Activity
  + Kahoot

*Week 9 & 10 – Module 9 & 10: Social Media (2 weeks)*

* Reading Materials, Discussion, Reflections, and Hands on Activity
* Facebook, Twitter, Instagram, LinkedIn

*Week 11 & 12 – Module 11 & 12: Google Tools (2 weeks)*

* Reading Materials, Discussion, Reflections, and Hands on Activity
  + Google Drive, Forms, Docs, and Slides

*Week 13 – Module 13: Audio and Video Conference Tool*

* Reading Materials, Discussion, Reflections, and Hands on Activity
  + Zoom

*Week 14 & 15– Module 14 & 15: Podcasting*

* Reading Materials, Discussion, Reflections, and Hands on Activity
  + Audacity

*Week 16 – Module 16: Presentation*

* Presentation – student can choose the app they want to use to present.

**Assessment of Learning**

To assess the effectiveness of the course, students will submit a weekly completion of each week activities. The student must score a total of 75% in order to pass the course.

This will include the following activities:

* Discussions 15%
* Reflections (Blog /Vlog) 35%
* Hands-on Activities 40%
* Presentation 10%

At the end of the course, the student will submit a presentation utilizing the different apps, websites and/or software they have learned throughout the class. The student can choose which applications they want to use for their presentations.

**Evaluation of Design:**

Feedback from students will be solicited through a satisfaction survey at the end of the course to determine if the design of the course was successful. The following student survey questions below will be used.

*Student Survey Questions:*

1. What do you think of the course design? Would you use any of the apps, websites or software to enhance the learning of students in your class?
2. Do you see any benefits and limitations of the course?
3. Are there enough resources to learn the technology covered in the course? If not, do you have any suggestions for the resources?
4. What would you suggest to improve the resources of the course?
5. Do you have any suggestions as to what applications, software, and/or websites that were not covered in the course?
6. Would you recommend this course to another instructor? Why? Why not?

If the learners learn the material and are able to utilize them in the learning environment appropriately the course will be considered successful. If the learners are not able to utilize the tools appropriately the course will be considered unsuccessful and a review of the structure, design, and apps will have to be made in order to improve the course.

**Reference**

University of California – Berkeley (n.d.). Overview of Learning Theories. *Graduate Student Instructor: Teaching & Resource Center*. Retrieved from http://gsi.berkeley.edu/gsi-guide-contents/learning-theory-research/learning-overview/. Retrieved on January 29, 2017.

Groff, J. & Mouza, C. (2008). A Framework for Addressing Challenges to Classroom Technology Use. *AACE Journal*, 16(1), 21-46. Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

University of Houston. (n.d.) Cognitive Constructivist Theories. Retrieved from http://viking.coe.uh.edu/~ichen/ebook/et-it/cognitiv.htm