Fall 2015 EDPS 5442/6442

Online Course (1 Credit)

Instructor:	N. Rachael Sweeten
Instructor Email*:	Please use the Canvas Inbox (Upper right corner of Canvas Course)
Instructor's "Office" Hours	Educational Psychology Dept. Virtual Office Hours Online via Canvas Chat
	Monday evening 6:00pm-7:00pmOr by Appointment
Canvas direct login:	http://utah.instructure.com

Syllabus

Prerequisite Course

EDPS 3140/6141: Using Technology in Diverse Classrooms This course directly builds upon the technology skills and methods that you learned in EDPS 3140/6141. This course (EDPS 5442/6442) focuses on the development of technological pedagogical content knowledge. As such, you will implement inquiry- based science methods consistent with what you are learning in EDU 5375/6375 (Science Methods) using the technology skills that you developed in EDPS 3140/6141.

Textbook

There is no required textbook. All readings will be made available via Canvas or online.

Assignment Timing

Assignments will be due Fridays evenings by Midnight, in order to ease schedule demands with your concurrent class. Readings and tutorials are extensive, so it it vital to allow sufficient time for experimentation with technologies and to commit to making progress each day. Please do not procrastinate!

Your last activity is due on the date for our "Final Exam." Please be aware of all deadlines, and seek assistance early if needed.

Online Course (1 Credit)Prerequisite Course:

Online Course: Attendance, Expectations, Tips

As an online course, you have the freedom to decide where and when you will "attend" this course. This flexibility is a significant benefit, but it also can pose challenges for students. Students often underestimate the amount of time, effort, and attention that it takes to be successful in an online course. Plan ahead and stay on top of deadlines!

Please consider the following tips for success in this (and your other) online courses:

• Set aside a block of uninterrupted time early in the week that is dedicated to this class. Make this a consistent, dedicated block of time that is well in advance of deadlines for assignments. Do not "play it by ear" or block your work time on the day that assignments are due. This will not give you enough time to seek help and resolve problems before assignment deadlines.

o The University of Utah expects that students spend one hour per credit in class, in addition to two hours outside of class per credit. Since this is a one-credit online class, you should expect (on average) to spend three hours per week on this class (one "in-class" hour plus two additional hours). You may find that you occasionally need more time to complete assignments. However, contact your instructor if you consistently need significantly more than three hours to complete your assignments. S/he will help you look for ways to streamline your processes.

• Find a place to study that has the equipment you need. You will need a modern laptop or desktop computer for this course. Many of the assignments are not possible to complete solely on a smartphone. Be sure you have access to equipment before starting the course. (Note: All students can access desktop computers using free computer labs in the College of Education's MBH building and in the Marriott Library.)

• Eliminate distractions in your environment during study time. Try to find a quiet location with computer access that includes few (if any) other distractions (e.g., TV; friends who want to chat). Put

away your phone and work only on class assignments during your allotted time. Research shows that switching attention between multiple sources has a significant cost in terms of efficiency and depth of learning. Multitasking is very tempting when you are taking online courses, but it will compromise your learning and it will slow you down!

• Contact your instructor at least a few days before the deadline if you are having trouble with an assignment. Given the nature of online communication, you and your instructor often will need a day or two to successfully troubleshoot the issues you may be experiencing. Your instructor is here to help you, but cannot be available 24/7 and will need ample time to communicate with you, diagnose your issue, and to prepare supporting materials (as needed) to get you past any problems. Do not be afraid to ask for help (you are encouraged to do so whenever needed!), please but do not wait until the last minute to do so.

Email Correspondence

UOnline and the instructor for this course will send important messages to your UMail address. Please check your account regularly at http://www.umail.utah.edu/ by logging in with your uNID and password. Or, you can have UMail messages forwarded to your Preferred Email Address (see http://www.campusalert.utah.edu/faqs/emailfor details). Special messages, especially urgent information, may also be sent to the Preferred-Email Address that you have on file with CIS (Campus Information System). Thus, it is best to verify that one's contact information is correct in CIS. See the link under both the "Students" and "Faculty & Staff" sections ofhttp://www.utah.edu/

UOnline Support

For support accessing your class or technical help, contact the UOnline Help Desk by calling 801-581-6112. Or, visit the Campus Help Desk at http://it.utah.edu/help/ or call 801-581-4000 ext 1.

Course Description and Course Approach

This course focuses on the effective integration of technology for science instruction and scientific inquiry. Students must be concurrently enrolled in EDU 5375.

In this course, you will investigate ways to integrate technology into the instruction of science. This course is to be taken concurrently with EDU 5375/6375: Elementary Science Methods. This is a required one-credit course for teacher certification programs that is graded as Credit or No-credit, with the requirement that all assignments must be completed with a 70% or higher in order to pass with Credit. The course has been designed to meet the National Educational Technology Standards

for Teachers developed by the International Society for Technology in Education. These standards are available at: http://www.iste.org/docs/pdfs/nets-t-standards.pdf

Effective technology instruction for pre-service teachers occurs in two phases. First, pre- service teachers complete an introductory technology-in-education course in which students learn basic technology skills through meaningful project-based learning scenarios. Next, pre-service teachers practice these skills and integrate them into content areas by taking courses that cover the use of technology in methods courses or field experiences. This approach allows students to examine ways in which technology can be seamlessly integrated with practice. This two-phased approach has been adopted in the Department of Educational Psychology. You should have already taken the basic technology-in-education course (EDPS 3140 or EDPS 6141) and are now ready for this course, a 1-credit technology course to accompany your science methods course.

You will be integrating the technology skills you learned in EDPS 3140/6141 (e.g., creating websites, digital learning objects, and instructional multimedia) with the pedagogical content knowledge you will be building in your science methods course. You will be expected to design learning objects and technology-based materials to support the science lessons and ideas that you will be using in your science methods course. This is an applied, practice-based course. You will be producing a variety of instructional materials that can be integrated into future teaching and/or will serve as the basis for your future development of multimedia materials in science

Please Note: Concurrent Classes are NOT Equivalent Classes

Although this course is designed to work in conjunction with the science methods course and you are required to take these courses concurrently, this course is not designed to fulfill the same instructional objectives as the science methods course. Your science methods course focuses on developing your understanding of the nature of science, scientific ideas, and scientific thinking skills. This course (EDPS 5442/6442) emphasizes your use of educational technology to support your science teaching. Thus, your science methods course will often define "technology" as a piece of scientific equipment (e.g., a microscope) that is used in the course of science. However, this courseemphasizes educational technology in the form of digital learning objects and materials that you develop or implement in order to create meaningful digital learning experiences for your students that supplement and enhance hands-on, in-class science experiences.

Course Objectives

By the end of this course, you will be able to use your technology skills to develop and implement a variety of digital learning objects and materials that will support and enhance your science instruction and your students' science learning experiences. Specifically, you will be able to:

1. Create online, digital learning objects that will support and facilitate inquiry-based science instruction

2. Use digital materials to understand how diverse learners will experience science inquiry in online environments

3. Implement online communication to communicate your science teaching practices with key stakeholders (e.g., parents, administrators)

In a nutshell, the purpose of this class is to create technological pedagogical content knowledge in science. That's a mouthful. But it means that you will learn to use technology to help you teach important scientific knowledge using effective instructional techniques. To meet the above objectives, you will be practicing three essential skills.

• Communicating with other adults about what it means to teach science practices in meaningful and effective ways.

o An important part of excellent science instruction is ensuring buy-in from parents, fellow teachers, and administrators. Being an effective science teacher means not only that you teach effectively, but that you help others understand what it means to teach "real" science in effective ways.

o Activity 1 targets this skill

• Experiencing inquiry-based lessons on the web and documenting what you learn.

o It is difficult to really understand how to use online tools, systems, and data for science unless you engage in the activities yourself. By engaging in science inquiry with digital materials and tools, you will understand the processes and practices in which you want your future students to engage.

o Activities 3 and 4 target this skill.

• Creating multimedia instructional materials for student use/viewing.

o Much of want you will want to do in the future is use digital tools and sites to create effective instruction that will be provided directly to students. Learning

to create these materials will pave the way for you to be a tech-savvy, 21st century teacher. o Activities 2, 5, and the Final Activity target this skill

Evaluation Methods/Grades

This course is graded as pass/fail (CR = Credit, NC = No Credit).

• To pass this course, you must receive a grade of 70% or higher on each activity (five

activities and the final activity). You must complete all activities. You may NOT skip an activity and receive a passing grade.

o The final activity serves as the "final exam" in this class. You will not take a proctored exam for this class. Please do not schedule one through the Campus Information System.

• All assignments must be submitted via Canvas (not email) by the assigned due date. Late assignments will be assessed a penalty of 20% for the first day, and an additional 10% for each additional day that it is late.

• For all assignments except the final assignment, you may resubmit your assignment if you score lower than 70% and the assignment was submitted on time. You have one week after assignments are returned in Canvas to revise your work and resubmit via Canvas.

o A grading rubric is provided for all activities at the time that they are assigned. Please use each rubric to assess your activities before submission in order to ensure that you have met all requirements.

EDPS 6442 Students:

If you are enrolled in the graduate level section of this course (EDPS 6442), you will complete additional requirements for selected activities (see course schedule and detailed instructions on Canvas for each activity). This is required to demonstrate "graduate-level work" in the graduate section of this course.

Canvas

Canvas (http://utah.instructure.com) will be used to submit assignments. In Canvas, you also can find detailed instructions for each activity. Please be sure to read the instructions carefully and contact your instructor if you have questions about the requirements. In the Canvas Course Modules, you'll also find slides/instructions to help you work with the technologies that you'll be using. Instructions are included within modules for seeking technical assistance through U of U Helpdesk or through your Instructor. Additional short tutorials for using Canvas can be found in <u>Canvas Guides for Students</u>.

The Americans with Disabilities Act

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs

to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

Diversity Statement

As the instructor of this course, it is my goal to create a safe and diversity-sensitive learning environment that respects the rights, dignity, and welfare of students, faculty, and staff. Diversity means the fair representation of all groups of individuals, the inclusion of minority perspectives and voices, and appreciation of different cultural and socioeconomic group practices. I aspire to foster and maintain an atmosphere that is free from discrimination, harassment, exploitation, or intimidation.

Fitness to Teach Policy

Students in this course are expected to comply with the University of Utah's Urban Institute of Education (UITE) Fitness to Teach (FIT) policy located at:http://bit.ly/1N6TyxN

Addressing Sexual Misconduct

Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801- 581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

Student and Faculty Responsibilities

All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI)

that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

Notice

This syllabus is meant to serve as an outline and guide for this course. Please note that the instructor may modify it or the Course Schedule to accommodate the needs of the class. Any changes will be posted on Canvas under Announcements.

Date	Details	
Fri Sep 4, 2015	Customize Your Canvas Profile and Notification Settings	11:59pm
Fri Sep 11, 2015	Activity 1: Digital Communication about Science Teaching	11:59pm
Fri Sep 25, 2015	Submit Script Outline	11:59pm
Fri Oct 2, 2015	Activity 2: Teaching about the Nature of Science via Multimedia Video	11:59pm
Fri Oct 23, 2015	Activity 3: Using the Web to Collect and Represent Authentic Data	11:59pm
Fri Oct 30, 2015	Point and click or grab and heft (Triona & Klahr, 2003)	11:59pm
Fri Nov 6, 2015	Activity 4: Scientific Inquiry via Online Simulations	11:59pm
Fri Nov 20, 2015	Activity 5: Online Assessment	11:59pm
Fri Dec 11, 2015	Final Activity	11:59pm