# Technology



# IN THE ELEMENTARY CLASSROOM EDUC 305



#### SALISH KOOTENAI COLLEGE

**EDUCATION DEPARTMENT** 

FALL 2016 ~ 2017 Doug Ruhman

## **EDUC 305** Course Syllabus

## Course Information:

a. Number: EDUC 305 Title: Technology in the Elementary Classroom

b. Credits: 4

c. Prerequisite: EDUC 115 or equivalent

d. Corequisite: none

e. Availability: This course is offered Fall quarter

f. Location: Adeline Mathias Room 121

g. Meeting Time: Tuesdays & Thursdays 11:00 a.m. - 12:50 p.m.

#### **Instructor Information:**

a. Instructor: Doug Ruhman, M.Ed.b. Office: Education Building Room 124

c. Office Hours: Tues. and Thurs. 8:00 – 11:00 a.m.

d. Phone: office: (406) 275-4763 e. eMail: doug ruhman@skc.edu

#### Required Materials:

**Text:** (No textbook is required for this course.)

#### Other required resources:

USB Jump/Flash drive (2 gb or higher, 4 gb preferred)

3-ring binder w/ dividers and tabs

#### Course Description:

**Technology in the Elementary Classroom** is a methods course which guides students towards a larger awareness of the role of technology in schooling. The course covers such issues as technology integration across the curricula, multimedia and learning, technology to enhance teaching, adaptive/assistive technologies, and much more. The course focuses on gaining a deeper understanding of how technology affects the teaching and learning experiences, instead of simply "teaching computers". In the process of learning, students in this course design materials they can use, while demonstrating key tech skills that are essential for today's teachers.

#### Course Overview:

**Technology in the Elementary Classroom** is designed to orient teacher candidates in the current uses of technology in elementary education. Included are strategies for

the use and evaluation of internet, productivity, and multimedia design tools, as well as topics like hardware issues, integration with curriculum, technology leadership, and school networking. We will be exploring issues regarding the uses of technology in traditional and non-traditional classroom settings, including the ethical domain of technology instruction and issues surrounding cultural relevance.

## Other Course Information:

#### 1) Attendance:

As an adult learner in this class, you are a co-creator in the content of the course. To bring meaning to the course content you will be asked to participate in discussion, group work, presentations, critique classmate presentations, and other class activities. A variety of class activities, discussions and presentations will be conducted throughout the course. These cannot be made up, therefore your absence forfeits the opportunity to learn from the activities.

Students are expected to be on time for class and to stay until the designated time set for dismissal. If a student must leave early he/she must inform the instructor(s) at the beginning of class. Communication with the instructors is very important; if students know that they will have to miss a class, they must contact the instructor ahead of time. As stated above, there is no way to make up what is covered in class whether absence is considered "excused" or unexcused. The course is designed for students to be in attendance at all times. If an absence is needed, students should arrange for someone in the class to pick up handouts and other materials and information that was presented.

In the event of emergency medical / health problems or extended absences for other reasons, students will be expected to meet the requirements of the course using outside-of-class methods such as phone/email/internet resources. It is the <u>student's</u> responsibility to communicate with the instructor to make sure that class assignments/requirements are completed if absences occur.

#### 2) <u>Preparation for Class:</u>

Late Assignments: On the day that assignments are due, students are expected to have them complete and ready to be turned in (typed and printed out, or turned in electronically) at class time. Assignments will only be accepted during class time. Late work will receive a reduced amount of assignment points

and must be submitted the **following class period**. If later than one week, no credit will be given.

<u>Presentations</u>: The above does not pertain to class presentations. Individuals who are not prepared on the scheduled day for a presentation will receive 50% reduction in assignment points. Preparedness for presentations includes having all copies for other students made before class begins.

Rewriting Assignments: In cases where assignments are judged to be of poor quality, students may request consideration for a rewrite of the assignment. This request must be made by the end of the first week of seeing the grade. Revisions must be submitted no later than the second class meeting from the time the assignment was handed back. Revisions will not be accepted after that date.

#### 3) Cell Phones:

- a. Students must keep cell phones in the **silent** mode during class. Any student who chooses to either make a call or take a call, or text during class will be asked to leave for the remainder of the class period. (This does not include calls made during class breaks.)
- b. Taken from the SKC Student Handbook Section VI:

"Cell phones will not be permitted in classrooms. Please turn off phone upon entering classroom. This is showing respect for your instructor and other students. Failure to do so may result in class suspension."

**4)** <u>Incompletes</u> will not be given except in the case of emergencies.

## Course Objectives:

Upon completion of this course, students will be able to...

## A. General Course Objectives

1. Identify and describe the relevance and attributes of each of the major subject areas of elementary educational technology, including:

(InTASC- all MT- 1,2,3,4)

- · technology, computers, and cultural relevancy
- the history of computers
- technology and curriculum integration
- computer hardware and systems
- educational software
- internet-based learning, online collaboration, and web publishing
- multimedia applications, video, robotics, and other technologies
- · technology ethics and school technology environments
- technology's impacts on classroom management
- adaptive and assistive technologies for exceptional learners
- personal growth and staff development models for technology leadership and education
- 2. Comprehend and summarize important selected research related to instructional technology for elementary school teachers. (InTASC-1,4,9 MT-2)
- 3. Demonstrate knowledge of the structure and content of the Montana State Standards for Technology, and awareness of regional and national resources for technology in education.

(InTASC- 9, 10 MT- 2,4)

**4.** Demonstrate proficiency in the following technological instructional tools: (InTASC- 4, 5, 8 MT 1, 3, 4)

word processing
simple spreadsheets
digital slideshows
digital imaging
desktop publishing
digital media tools and design
presentation tools, including projectors and interactive whiteboards

5. Design and implement meaningful, standards-based curricular lessons incorporating the use of technological tools.

(InTASC- 3, 4, 5, 7, 8 MT 1, 2, 3, 4)

## B. Critical Thinking Objectives

- 5. Differentiate between various models for the integration of technology, and evaluate them for instructional effectiveness. (InTASC-1, 2, 3, 5, 7 MT-1)
- 6. Identify and discuss the effect of technological changes on elementary education in the past, present, and future. (InTASC-7, 9 MT-1, 2)
- 7. Identify, evaluate, and appraise the various benefits of current technologies on student achievement and teacher productivity. (InTASC-1, 2, 3, 5, 9 MT-1)

#### C. Cultural Knowledge Objectives

- 8. Identify and describe various instructional technology tools which incorporate culturally appropriate references and themes.

  (InTASC- 2, 3, 9 MT- 2, 3)
- 9. Examine, assess, and discuss ways that the inclusion of technology may empower Native American learners to express their cultural knowledge. (InTASC- 2, 5, 7, 9 MT- 3)
- 10. Explore and explain the relationships that have been studied involving American Indian students and technology-based learning. (InTASC-2, 7, 9 MT-2, 3)

## D. Communication Skills Objectives

- 11. Demonstrate proficiency in the use of projection tools, smartboard technology, and other presentation tools to enhance the delivery of tech-based instruction. (InTASC- 3, 5, 7 MT- 1, 2, 3, 4)
- 12. Demonstrate knowledge learned in the area of instructional technology using a variety of communication skills and techniques, including written narratives, digital media projects, and oral presentations. (InTASC- 3, 5, 7 MT- 1, 2, 3, 4)

## **E.** Citizenship Objectives

13. Observe, record, and reflect on the use of instructional technology tools in various public and private education settings. Explore ways these tools help build enhanced perspectives and connections with regard to other people locally, nationally, and globally.

(InTASC-2, 7, 9 MT-2, 3)

14. Discuss, reflect on, and describe in writing multiple issues connected to community values, technology ethics, internet filtering, social networking, technology security, and other issues related to technology and the world outside of schools.

(InTASC- 9, 10 MT- 2)

#### InTASC STANDARDS and PEPPS ADDRESSED IN EDUC305:

Assessments in bold are to be included in student TEP portfolios

Indicators	Туре	Assessments
InTASC Principle 3: Learning Environments 3m. The teacher knows how to use technologies and how to guide learners to apply them in appropriate, safe, and effective ways. (Guiding Princ. E PEPPS 10.58.508.b.vii)	Knowledge Skills Dispositions	Reflective Journal Integrated Unit Plan with multiple assessments (Technology Project 3) (TEP portfolio requirement)
InTASC Principle 8: Instructional Strategies. 8o. The teacher understands how content and skill development can be supported by media and technology and knows how to evaluate these resources for quality, accuracy, and effectiveness.  (Guiding Princ. E PEPPS 10.58.508.d)	Knowledge Skills	Educational Website Evaluation Rubric Unit Plan Assessments ActivInspire Whiteboard Learning Module Technology Project 1 or 2 (TEP portfolio requirement)
InTASC Principle 10: Leadership and Collaboration 10g. The teacher uses technological tools and a variety of communication strategies to build local and global learning communities that engage learners, families, and colleagues.  (Guiding Princ. B PEPPS 10.58.508.b.i)	Knowledge Skills	Digital media project(s)  Webliography (TEP portfolio requirement)

#### Course Requirements:

# Reflective Journal (50 points)

The Reflective Journal is like a small-scale diary that chronicles your learning in the class. It is for you to keep your own personal thoughts and reactions in. The content of the RJ should focus on your involvement in this class, not "life in general". Write about how the class is going, what you're learning, your responses to course topics... but keep it centered on your technology methods course. The entries should be done once per week - I recommend over the weekend, reflecting on the previous week – and should be short (1-2 paragraphs). You keep this journal over the course of the quarter and

hand it in at the end. It is for you and me only. No one else will be allowed to read your RJ unless you wish to share your written observations with the class. If it takes more than 5-10 minutes to do this each week, then you are doing too much! Keep it simple, honest, and brief. It should be done electronically, and I would prefer that you attach it (as a Word document) to me in an email at the end of the quarter.

#### Classroom Observations (100 points)

As part of this class you will do some observing (and perhaps assisting) in an actual classroom. You will need to set up at least two observations of teachers using technology, follow up with a short interview of the teacher, and prepare a short written analysis summarizing and evaluating your observations. These can be done at any time throughout the span of the course, up until week 9. In other words, you should get these done and submitted to me by the end of Week 9. Clear instructions will be provided on how to complete and document these assignments near the beginning of the course.

## Reading Responses (50 points)

Connected to most class sessions, there will be assigned reading from online sources, or from instructor handouts. At the beginning of the following class, the material will be discussed and a short write-up will be due. This "Reading Response" or "RR" should include a brief summary of the material presented in the assigned readings and 2-3 questions for discussion. More details on this requirement will be covered on the first day of class.

## \* Class Assignments (50 points)

There will be several tasks, mini-projects, tech exercises, and other activities which will be a part of the 305 course. Most of these will be in-class; some will be for homework. All together these assignments will count towards a total of 50 points towards the total for the course. Examples include classroom forms and schedules, classroom budgets, and written evaluations of educational web resources.

## Tech Ed Projects (150 points)

In this course you will be asked to do three separate out-of-class projects connected to the course content. Each of these will be due on specific dates throughout the quarter. The instructor will give clear details of these assignments in the beginning of the course, and will provide a handout with project suggestions and options. A minimum of one of these projects must be connected to American Indian/Alaskan Native culture, preferably focused on the tribes of the Flathead Reservation. One of these three projects must be in the form of a interdisciplinary **unit plan that integrates technology into curriculum.** 

## Attendance and Participation (100 points)

Students will be expected to be on time and are required to attend every scheduled class session. Five attendance points will be earned for each class attended. Students arriving late to class receive fewer points, and missed classes result in no points. More than 30 minutes absence from class will also result in zero attendance points. During class time, students should be on-task and involved in the topic or activity being presented. This level of participation will be noted by the instructor.

#### **Credit Hours:**

Following the SKC Credit Hour policy, to meet the identified objectives of this course, this 4 credit course- delivered over a 10 week term- will approximate:

4 hours/week classroom or direct faculty instruction

2+ hours field work / observations for the course

In addition out-of-class student work will approximate a minimum of 8 hours each week.

500

## **Grading:**

Points will be awarded as follows:

Total points possible

Reflective Journal	50 points
Classroom Observation docs	100 points
Reading Responses	50 points
In-Class assignments	50 points
Tech Ed projects	150 points
Attendance/Participation	100 points



Grades will be assigned according to the following points breakdown:

450 - 500 = A 400 - 449 = B 350 - 399 = C 300 - 349 = D Below 300 = F

## Accommodations and Course Information

Reasonable accommodations are provided for eligible students with identified disabilities. The College complies with the Rehabilitation Act of 1973 and the Americans with Disabilities Act. Students may contact the College's Disability Officer, Linda Pete (linda\_pete@skc.edu, 406.275.4968) or consult the SKC web page for Students with Disabilities for more information.

The faculty reserves the right to change the course syllabus or course content. Students will be provided advanced notice of changes in writing.

#### SKC Student Success Team

The SKC The SKC Student Success Team is available to help you if you are having difficulties at SKC. The Team is available to help you with tutoring, adjusting to college life, time management, reading, study skills, personal issues, and more. We are located in the Late Louis Caye Building and you are welcome to drop-in at any time. Please contact the Success coaches to help you; James Steele, Jr 275-4712 and Laura Ginsburg at 275-4711.

## Academic Honesty/Integrity

Inherent in the use of technological media is the potential for duplication of others' work and intellectual property. This class relies heavily on electronic media for learning and for demonstration of learning. All submitted student work should be the original work of the student, or properly cited if otherwise. Plagiarism in any form will not be tolerated, and will result in a failing grade in the class- **no exceptions**. Plagiarized work will be brought to the attention of the administration at SKC and further disciplinary action may be pursued.

#### Title IX

The U.S. Department of Education's Office for Civil Rights (OCR), enforces Title IX of the Education Amendments of 1972. Title IX protects people from discrimination based on sex in education programs or activities that receive Federal financial assistance. Title IX states that:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.

All employees at SKC are considered "Responsible Employees" which requires them to report incidents of gender-based discrimination (sexual violence, sexual harassment, rape, sexual assault, domestic violence, and/or stalking). In accordance with Title IX laws, students must be made aware of the following: If any employee of SKC, including instructors, learns of any potential gender-based discrimination, they are required to notify the Title IX Coordinator, Rachel Andrews-Gould (275-4985, located in BigKnife Building), immediately. Once an incident is reported to Title IX, the student will be contacted by the Title IX Coordinator for follow up. Students can also report directly to the Title IX coordinator in regards to any gender-based discrimination.

If any student wants to speak with someone confidentially, the following resources are available:

Center for Prevention and Wellness Agnes Kenmille Building Building #51 406.275.4913 or 406.275.4744

SAFE Harbor Advocacy Services 24-Hour Advocacy 406.676.0800

Speaking with a confidential resource does not preclude students from making a formal report to the Title IX Coordinator if and when they are ready. In the confidential setting, students will be made aware of available resources and reporting options. An advocate is available for all students upon request through the Center for Prevention and Wellness.

#### Course Outline:

(This course plan is subject to modification depending on the needs of the class)

#### **Week 1**: Introduction / What is the impact of technology in the classroom?

Intro. to course, history of computers in education, role of technology as a tool for creativity and learning, multiple intelligences, tech as teacher tool vs. student tool, tech and cultural literacy Lab: web research on current education tech issues Weekly Plan

# Week 2-3: What do I need to know about the internet as a teacher, and how can I use it effectively with my students?

History of the internet, Web-based learning (WebQuests, etc.), searching and researching on the web, teachers and copyrights, kids' sites (yahoo kids), evaluating websites for academic worth, learning modalities and assumptions about reading and literacy relevant to web use *Lab: Webliography, web eval. rubric. Evaluating and creating school / classroom websites* 

# <u>Week 4</u>: What kind of web resources can make teaching more efficient and engaging?

productivity tools, applications, school mgmt software, multimedia overview *Lab: Innovative resources for teachers* Tech-rich cultural teaching resources

#### Week 5: What does a teacher need to know about hardware?

Demystifying computers: inside the machine, 3 levels of interface, tech repair / maintenance systems, operating systems (mac and win), school networking basics, the processing cycle: input-processing-output-storage. Exploration of Interactive Whiteboards and their software. *Lab: hardware exploration in teams* 

#### Week 6: How do elementary teachers integrate technology into subject areas?

4 elem curriculum areas: Math, LA, SS, Sci., integration matrix, subject area standards, tech standards (ISTE and MT), cultural curricula, educ. technology-based organizations, resources *Lab: Research and reflections on observations* 

# Week 7-8: How can I use digital media to get my students excited about learning, and empower my teaching?

Multimedia hardware and software tools, digital cameras, video in the classroom, the use of imaging in elementary school settings, Howard Gardner MI theory, student learning modalities

Lab: ActivInspire learning module including IEFA Digital video editing

#### Week 9: How do teachers effectively plan and assess tech-based learning?

Using rubrics to assess technology-based learning, authentic assessment, portfolios, criteria for evaluating web resources. *Lab: Lesson planning with technology* 

# <u>Week 10</u>: What do teachers need to know about safety and ethics, with regard to technology?

Computer security, digital property rights, acceptable use policies, software piracy and schools, digital drilling vs. constructivist learning, internet filtering Lab: Unit Plan presentations

#### Other topics explored:

#### Technology and the Exceptional Learner

Special education and computers, assistive and adaptive technologies, technology's role in gifted-talented instruction

#### Beyond the Computer

Video as a learning and teaching tool (viewing and making), robotics, cable in the classroom, older technologies and their application in modern classrooms

#### Planning for Your Future / Technology Leadership

School Tech plans, tech committees, student tech clubs/teams/technicians, staff development models, ITPP, emerging technologies, tech attitudes of acceptance

#### **EDUC 305** Integrated Unit Plan

## **TEP Stage 2** Principle 3

Student		
Instructor		
		-
Date:	 	

Level of Performance:	0 Unacceptable	1 Developing	2 Proficient	3 Exemplary
3(m) The teacher knows how to use technologies and how to guide learners to apply them in appropriate, safe, and effective ways.  Guiding Principle: E	Unit Plan is weak and/or inconsistent; may be inappropriate in terms of developmental levels or topic focus. Consistently makes content errors, does not correct errors, or does not research the content as needed.	Unit Plan is adequately written, but it may require revision in terms of content and/or form. Demonstrates content knowledge but does not connect content with other subjects or disciplines.	Unit Plan is well designed and written. Appropriate use of technology is evident in the plan. Demonstrates sound content knowledge and connects content across subjects and disciplines.	Candidate demonstrates proficient skills at an advanced degree or at a master teaching level. This score is reserved for those who demonstrate skills of an experienced teacher who is able to mentor others.

Score:	
<b>Comments:</b>	
This Unit Plan received a score of	out of a possible 80
points for EDUC 305.	•

#### **EDUC 305** Technology Project

## **TEP Stage 2** Principle 8

Student		
Instructor		
Date:		

Level of Performance:	0 Unacceptable	1 Doveloning	2 Proficient	3 Evomplany
	T. 1 1	Developing		Exemplary
8(o) The teacher	Technology	Project is	Project is	Candidate
understands how	project is absent,	complete but	complete and in-	demonstrates
content and skill	or very lacking in	may be lacking	depth, with clear	proficient skills
development can	detail or	in depth or	and well-stated	at an advanced
be supported by	curricular	connection to	connection to	degree or at a
media and	relevance.	curricula.	curricula. Clear	master teaching level. This score
technology and	Connection to	Some	evidence of	is reserved for
knows how to	technology/media	connection to	understanding of	those who
evaluate these	and student	technology and	ways that	demonstrate
resources for	learning is not	learning is	technology and	skills of an
quality,	evident. Writing	evident, but	media can	experienced
accuracy, and	is poor and	this may	enhance	teacher who is
effectiveness.	contains multiple	require	instruction.	able to mentor
Guiding	grammatical or	revision.	Writing is clear	others.
Principle: E	spelling errors.	Writing is	and well	
_	_	somewhat	structured with	
		organized, but	few or no errors.	
		may be unclear		
		at times.		

Score:	
<b>Comments:</b>	
This Technology Project received a score of	out of a
possible 35 points for EDUC 305.	

## EDUC 305 Weekly Plan

## **TEP Stage 2** Principle 10

Student		
Instructor		
Date:		

Level of Performance:	0 Unacceptable	1 Developing	2 Proficient	3 Exemplary
10(g) The	Weekly Plan is	Weekly Plan	Weekly Plan is	Candidate
teacher uses	weak and/or does	contains some	well composed.	demonstrates
technological	not contain	required	Information	proficient skills at
tools and a	pertinent	elements, but	provided is well	an advanced
variety of	information for	may require	written and	degree or at a
communication	students and/or	further revision.	contains all	master teaching
strategies to	families. Evidence	All elements are	required elements	level. This score
build local and	of minimal	present, but some	and formats as	is reserved for
global learning	planning and effort	may require	assigned.	those who
communities		revision. Some	Elements of the	demonstrate skills
that engage		grammatical	assignment	of an experienced
learners,		errors present.	provide evidence	teacher who is
families, and			that the teacher	able to mentor
colleagues.			understands how	others.
Guiding			to effectively	
Principle: B			utilize technology	
			and media based	
			tools in	
			communicating	
			with students and	
			families.	

Score:	
<b>Comments:</b>	
This Weekly Plan received a score of	out of a possible 10
points for EDUC 305.	