

Rutgers, The State University of New Jersey

05:300:350:99 Education & Computers

Spring 2018, Online

Instructor: Jen Chingwe	Email: jchingwe@rutgers.edu
Phone Number: 919-400-2745 (cell)	Location: Online
Office Hours: By Skype appointment	Prerequisites or other limitations: None
Mode of Instruction: Online	Permission required: No
Website: Rutgers.instructure.com (Canvas)	Required Equipment: Computer, Internet access

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a *Letter of Accommodations*. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Course Description

Education and Computers establishes a foundation for using the computer and technology in a variety of educational settings across all subject areas. The course is hands-on in nature, with focus on current trends. Additionally, learners can expect to discuss theory, practice, and social/philosophical issues related to the use of computers in education. Some familiarity with computers is recommended; no prior computer skills are required.

Course Learning Objectives

By the end of the course, you should be able to:

- Provide a foundation for using computers and technology effectively in the classroom.
- Improve understanding of computers and technology (both hardware and software) as necessary to support the first goal.
- Discuss advantages and limitations of computers and computer-based technologies in the classroom.
- Understand how teachers plan effective learning activities with computers and computer-enhanced technologies.
- Demonstrate an understanding of the roles of the NJCCCS for Technology, NETS-T, and NETS-S in teaching and learning.
- Develop students' 21st Century Learning Skills using computer-enhanced technology.
- Employ basic principles of multimedia design for educational activities.
- Establish familiarity with trending topics in technology and provide assessment (both highlights and pitfalls) of those trends as they relate to learning and teaching.
- Provide discourse on the social, ethical, and legal issues surrounding the use of technology in learning and teaching.
- Examine and reconsider knowledge and beliefs about the role of technology in the classroom.
- Apply technology to develop students' 21st Century literacy skills, higher order skills, and creativity.

Course catalog description: 05:300:350 Education and Computers (3) Establishes a foundation for using the computer and technology in a variety of educational settings across all subject areas. The course is hands-on in nature, with focus on current trends. Additionally, learners can expect to discuss theory, practice, and social/philosophical issues related to the use of computers in education. Some familiarity with computers is recommended; no prior computer skills are required.

Other description of course purposes, context, methods, etc.: As an online course, students are expected to access the course daily to complete required assignments. The material covered in this course is practical and hands on. Students will explore a variety of online/web-based learning tools and work collaboratively with peers to explore how these tools can positively impact student learning and professional practice. Weekly class discussions, video reflections, and written essays will be assigned and due on specific due dates as assigned on the Canvas website.

Required texts: None.



SAS Core Curriculum Learning Goals Met by this Course: ITR y

For list of Core Curriculum learning goals, see:

http://sas.rutgers.edu/component/docman/doc_download/413-summary-of-new-core-curriculum-learning-goals

For a list of Core Certified courses by learning goal, see:

<http://sasundergrad.rutgers.edu/core>

Teaching Standards

This course is based heavily upon ISTE NETS standards located here: <http://www.iste.org/standards.aspx>

The course addresses the following **New Jersey Professional Teaching Standards (2015)**. You can find the complete listing of NJPTS here: <http://www.state.nj.us/education/code/current/title6a/chap9.pdf>

New Jersey Professional Standards for Teachers (2014)¹

Standard Two: Learning Differences. The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards:

- (6) The teacher accesses resources, supports, and specialized assistance and services to meet particular learning differences or needs and participates in the design and implementation of the IEP, where appropriate, through curriculum planning and curricular and instructional modifications, adaptations, and specialized strategies and techniques, including the use of assistive technology.

Standard Six: Assessment. The teacher understands and uses multiple methods of assessment to engage learners in examining their own growth, to monitor learner progress, and to guide the teacher's and learner's decision-making.

- (9) The teacher continually seeks appropriate ways to employ technology to support assessment practice both to engage learners more fully and to assess and address learner needs.

Standard Eight: Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

- (6) 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.

¹ <http://www.state.nj.us/education/code/current/title6a/chap9.pdf>

Standard Eleven: Ethical Practice. The teachers acts in accordance with legal and ethical responsibilities and uses integrity and fairness to promote the success of all students.

- (2) The teacher advocates, models, and teaches safe, legal, and ethical use of information and technology including appropriate documentation of sources and respect for others in the use of social media.

Council for the Accreditation of Education Professionals (2013)²

Technology & Digital Learning

The Commission's standards include several references to applications of new technologies to educational situations:

- Standard 1 endorses the InTASC teacher standards in their entirety, and the performances, knowledge, and dispositions that are extensions of those standards include a score of references to applications of technology. Educators must know how to use technologies and how to guide learners to apply them. They must know how to use digital and interactive technologies for efficiently and effectively achieving specific learning goals.
- Standard 1 also states that providers are to “ensure that completers model and apply technology standards as they design, implement, and assess learning experiences to engage students and improve learning and enrich professional practice.”
- Standard 2 on clinical experiences refers to technology-enhanced learning opportunities as part of clinical experiences, as well as appropriate technology-based applications for selection, development, evaluation, and continuous improvement and retention of clinical educators. Clinical partnerships are to include technology-based collaborations, as well.
- Standard 3 on candidate quality states that providers present multiple forms of evidence of candidates developing knowledge and skills during preparation, including “the integration of technology in all of these domains.”

² http://caepnet.files.wordpress.com/2013/09/final_board_approved1.pdf
Syllabus - 05:300:350:99, Education & Computers, Spring 2018

Grading Policy

Your final grade is based on a 100-point scale.

Letter Grade	Points
A	90 - 100
B+	87 - 89
B	80- 86
C+	77 - 79
C	70 - 76
D	60 - 69
F	59 and below

All assignments and discussions add up to a total of 100 points, as follows:

Points	Assignments
40	<p>SAS Core Paper* - 40 points total</p> <p>Pre-Work: Website selection (4/40 points)</p> <p>Section 1: Introduction and the Mission, Structure, and Organization of the Website (9/40 points)</p> <p>Section 2: Quality of the Website (9/40 points)</p> <p>Section 3: Research (9/40 points)</p> <p>Section 4: Theory and Closing (9/40 points)</p> <p>*You must receive a passing grade on this paper to get credit for completing your SAS Core Curriculum Learning Goal ITR y.</p>
40	<p>Website Project - 40 points total</p> <p>Part 1: Proposal (2/40 points)</p> <p>Part 2: Rubric (6/40 points)</p> <p>Part 3: Live Site (22/40 points)</p> <p>Part 4: Peer Review (4/40 points)</p> <p>Part 5: Reflection (6/40 points)</p>
6	Student Guest Lecture (partner project)
2	Website Evaluation (in discussion)
2	Technology & Standards (in discussion)
10	Class Discussions (1 point each)

Grades for each assignment will be posted in Canvas as soon as they are graded.

Grading Policies: Care, respect, and integrity are expected in written and classroom exchanges. All written work, including postings on Canvas should be proofread for clarity, spelling, and grammatical errors. Please use language that is appropriate for the classroom setting and maintain a professional tone in discussion postings and assignments. Outside sources, in any assignment, must be referenced appropriately (either APA or Chicago style is acceptable)

Graded assignments cannot be missed except in case of a serious issue. If you miss an assignment for another reason, it is at my discretion whether or not to allow a make-up. If there are questions or an assignment cannot be completed, contact me as soon as possible. Illness will require a doctor's note. Missing any assignment without a sufficient reason will result in a grade of 0 for that portion of the course.

Late Policy: Any assignment in this course will be accepted late with a penalty of 1 point per day the assignment is late. My advice is to get things done earlier rather than later. Things happen. Your computer can crash. The power might go out. We have to get a lot of material covered in a short amount of time. It's best not to wait to the last minute. As Murphy's Law states: Anything that can go wrong WILL! If something does go wrong, contact me right away. ALWAYS back-up all data. That means having at least 2 copies of work on different storage media. It is your responsibility to make sure you have working equipment and a plan of action if you have problems.

Email Policy: Course updates and other important communication will occasionally be e-mailed to you. You are responsible for all course-related e-mail, so please check your mail regularly, and be sure you are not losing messages to a spam box. The course website on Canvas is populated with your e-mail address as it stands in the University directory at the time when you enroll in the course.

Academic Integrity Policy:

Any violation of academic honesty is a serious offense and is therefore subject to an appropriate penalty. Refer to <http://academicintegrity.rutgers.edu/integrity.shtml> for a full explanation of policies.

Web site: Rutgers.instructure.com (Canvas)

Course Schedule by Module Spring Semester 2018

Please note: If there is a discrepancy in due dates between the syllabus and Canvas, please go by the dates listed in Canvas.

Module 1 – Education Technology & Theory (Weeks 1 - 2)	
<p>Week 1 (1/16 – 1/21)</p> <ul style="list-style-type: none"> • Discussion: Introduce Yourself (POST by 1/19) • Discussion: Standards (POST by 1/19, REPLY by 1/21) 	<p>Learning Objectives</p> <ul style="list-style-type: none"> • Describe educational technology and its role and impact in today's learning environments. • Articulate the key national and state standards for learners. • Define the behaviorist, cognitive, and constructivist learning theories and why they are relevant when implementing technology in the classroom. • Use learning theory to present your personal views on the relationship between teaching, learning, and technology. <p>Lectures & Readings – See Canvas</p>
<p>Week 2 (1/22 – 1/28)</p> <ul style="list-style-type: none"> • Discussion: Learning Theories (1 pt.) (POST by 1/25, REPLY by 1/28) • SAS Core Paper – Pre-Work (4 pts.) (DUE 1/28, end of Week 2) 	

Module 2 – Technology (Weeks 3 - 4)	
<p>Week 3 (1/29 – 2/4)</p> <ul style="list-style-type: none"> • Discussion: Technology Tools (1 pt.) (POST by 2/1, REPLY by 2/4) 	<p>Learning Objectives</p> <ul style="list-style-type: none"> • Identify several broad types of technology and how they can be applied in the classroom to facilitate learning. • Begin to consider ways to apply technology to develop students' 21st Century literacy skills, critical thinking skills, and creativity. • Identify the difference between academic and administrative software. <p>Lectures & Readings – See Canvas</p>
<p>Week 4 (2/5 – 2/11)</p> <ul style="list-style-type: none"> • Discussion: Technology/Standards (1 pt.) (POST by 2/8, REPLY by 2/11) • SAS Core Paper: Section 1 (9 pts.) (DUE 2/11, end of Week 4) 	

Module 3 – Networking (Weeks 5 – 7)

Week 5 (2/12 – 2/18)

- **Discussion: Internet** (1 pt.)
(POST by 2/15, REPLY by 2/18)

Week 6 (2/19 – 2/25)

- **Discussion: Website Evaluation** (2 pts.)
(POST by 2/22, REPLY by 2/25)
- **SAS Core Paper: Section 2** (9 pts.)
(DUE 2/25, end of Week 6)

Week 7 (2/26 – 3/4)

- **Discussion: Professional Dev't** (1 pt.)
(POST by 3/1, REPLY by 3/4)

Learning Objectives

- Consider how networking and the Internet have changed teaching and learning.
- Identify advantages and risks of Internet use in the classroom.
- Analyze issues related to website validity and safety.
- Locate and evaluate instructional support websites, classroom management and academic tools, and teaching resources that are available on the Internet.

Lectures & Readings – See Canvas

Module 4 – Collaboration (Weeks 8 – 10)

Week 8 (3/5 – 3/9)

- **Discussion: Social Learning** (1 pt.)
(POST by 3/6, REPLY by 3/9)
- **SAS Core Paper: Section 3** (9 pts.)
(DUE 3/19, after Spring Break)

Spring Break (3/10 – 3/18)



Week 9 (3/19 – 3/25)

- **Discussion: Social/Collab. Tools** (1 pt.)
(POST by 3/22, REPLY by 3/25)
- **SAS Core Paper: Section 4** (9 pts.)
(DUE 3/25, end of Week 9)

Week 10 (3/26 – 4/1)

- **Discussion: Safety** (1 pt.)
(POST by 3/29, REPLY by 4/1)
- **Website Project: Part 1** (2 pts.)
(DUE 4/1, end of Week 10)
- **Discussion: Find a Partner**
(FIND a partner by 4/1 for Student Guest Lecture assignment due 4/12)

Learning Objectives

- Analyze the impact of social connections and participatory culture on facilitating learning.
- Identify the elements of the Community of Inquiry theoretical framework for online teaching and learning.
- Identify and critique various social and collaborative tools and explain their role in teaching and learning.
- Identify advantages of using weblogs and wikis to facilitate learning.
- Analyze issues related to weblog and wiki safety.
- Compare the roles of stakeholders (students, parents, teachers, community) in supporting the appropriate use of technology in education.

Lectures & Readings – See Canvas

Module 5 – Multimedia (Weeks 11 – 12)

Week 11 (4/2 – 4/8)

- **Website Project: Part 2** (6 pts.)
(DUE 4/8, end of Week 11)

Week 12 (4/9 – 4/15)

- **Assignment: Student Guest Lecture** (6 pts.)
(DUE 4/12, Thursday)
- **Discussion: Student Guest Lecture** (1 pt.)
(POST lecture by 4/12, REPLY to others by 4/15)

Learning Objectives

- Describe multimedia learning theory.
- Analyze how audio/visual media support teaching and learning (Web 2.0 multimedia).
- Describe multimodal literacies and how they support differentiated learning.
- Understand copyright and fair use related to audio and visual media.

Lectures & Readings – See Canvas

Module 6 – Technology Integration (Weeks 13 – 15)

Week 13 (4/16 – 4/22)

- **Website Project: Part 3** (22 pts.)
(DUE 4/22)
- **Discussion: Find a Partner**
(FIND a peer review partner by 4/22 for Website Project: Part 4, due end of Week 14)

Week 14 (4/23 – 4/29)

- **Discussion: Peer Review** (4 pts.)
(POST website link & rubric by 4/23; PROVIDE peer review feedback by 4/29)
- **Discussion: Emerging Technologies** (1 pt.)
(POST by 4/26, REPLY by 4/29)

Week 15 (4/30 – 5/6)

- **Website Project: Part 5** (6 pts.)
(DUE 5/6, early submissions appreciated)

Learning Objectives

- Identify pros and cons of distance and blended learning.
- Discuss the social, ethical, and legal issues surrounding the use of technology in learning and teaching.
- Identify emerging technologies that may affect teaching and learning.
- Considering - Where do we go from here?

Lectures & Readings – See Canvas