Rutgers University welcomes students with disabilities into all of the University’s Education 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

Learning goals: Students will be able to:

- Think critically about the advantages and limitations of computers and computer-based technologies in the classroom.
- Understand how teachers can integrate computer-based technologies into learning contexts.
- Use computers and computer-enhanced technologies to support professional growth.
- Develop a rich understanding of the roles of the NJ SLS for Technology, ISTE Standards-T, and ISTE Standards-S in teaching and learning.
- Develop students’ 21st Century Learning Skills using computer-enhanced technology.
- Consider how computer-based learning activities can promote the use of complex cognition.
- Critique Internet and multimedia learning tools.
• Develop skills in the use of several computer-based tools that can enhance students’ learning (e.g., Prezi, Google Docs, Smart Notebook).
• Use computer-based tools to create project-based learning (PBL) activities.
• Apply principles of explicit instruction to create a computer-based tutorial.

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.

i. Performances:
   3) The teacher designs instruction to build on learners’ prior knowledge and experiences, allowing learners to accelerate as they demonstrate their understandings

ii. Essential Knowledge:
   6) The teacher knows how to access information about the values of diverse cultures and communities and how to incorporate learners’ experiences, cultures, and community resources into instruction.

iii. Critical Dispositions:
   1) The teacher believes that all learners can achieve at high levels and persists in helping each learner reach his or her full potential

Standard Three: Learning Environments. The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.

i. Performances:
   2) The teacher develops learning experiences that engage learners in collaborative and self-directed learning and that extend learner interaction with ideas and people locally and globally

ii. Essential Knowledge:
   1) The teacher understands the relationship between motivation and engagement and knows how to design learning experiences using strategies that build learner self-direction and ownership of learning;
   2) The teacher knows how to help learners work productively and cooperatively with each other to achieve learning goals

iii. Critical Dispositions:
   3) The teacher is committed to supporting learners as they participate in decision-making, engage in exploration and invention, work collaboratively and independently, and engage in purposeful learning; and
   4) The teacher seeks to foster respectful communication among all members of the learning community.

Standard Four: Content Knowledge. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches, particularly as they relate to the New Jersey Student Learning Standards (NJSLS), and creates learning experiences that make

¹ http://www.state.nj.us/education/code/current/title6a/chap9.pdf
these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

i. Performances:
   1) The teacher effectively uses multiple representations and explanations that capture key ideas in the discipline, guide learners through learning progressions, and promote each learner’s achievement of content standards
   7) The teacher uses supplementary resources and technologies effectively to ensure accessibility and relevance for all learners

iii. Critical Dispositions:
   1) The teacher realizes that content knowledge is not a fixed body of facts but is complex, culturally situated, and ever evolving. He or she keeps abreast of new ideas and understandings in the field

Standard Five: Application of Content. The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

i. Performances:
   1) The teacher develops and implements projects that guide learners in analyzing the complexities of an issue or question using perspectives from varied disciplines and cross-disciplinary skills

ii. Essential Knowledge:
   4) The teacher understands how to use digital and interactive technologies for efficiently and effectively achieving specific learning goals

iii. Critical Dispositions:
   3) The teacher values flexible learning environments that encourage learner exploration, discovery, and expression across content areas

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.

i. Performances:
   4) The teacher engages learners in understanding and identifying quality work and provides them with effective descriptive feedback to guide their progress toward that work;
   5) The teacher engages learners in multiple ways of demonstrating knowledge and skill as part of the assessment process

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

i. Performances:
   7) The teacher engages learners in using a range of learning skills and technology tools to access, interpret, evaluate, and apply information

ii. Essential Knowledge:
   3) The teacher knows when and how to use appropriate strategies to differentiate instruction and engage all learners in complex thinking and meaningful tasks;
   4) The teacher understands how multiple forms of communication (oral, written, nonverbal, digital, and visual) convey ideas, foster self-expression, and build relationships;
5) The teacher knows how to use a wide variety of resources, including human and technological, to engage students in learning

iii. Critical Dispositions:
3) The teacher is committed to exploring how the use of new and emerging technologies can support and promote student learning

Council for the Accreditation of Education Professionals (2013)²:

Standard #2: 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.
Standard #3: Learning Environments. The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
Standard #5: Application of Content. The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
Standard #8: 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.
Standard #9: Professional Learning and Ethical Practice. The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

Course catalog description
“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.”

Student/Instructor Communication
The best way to contact me is by email (james.okelly@gse.rutgers.edu). Most days I check my email account several times – unless, of course, I am away for the day or otherwise engaged. When you contact me, it is necessary for you to inform me of the section in which you are enrolled. (That little bit of information saves me a lot of time.) If you do not let me know which section you are enrolled in, I will return the email to you, requesting that you add the information about your section.

In case you want to speak with me face-to-face. I am usually free each Wednesday after 2:30 PM. Please make sure that you contact me prior to such a meeting, so that I don’t schedule some other professional or personal obligation.

² http://caepnet.files.wordpress.com/2013/09/final_board_approved1.pdf
Course Apps, Multimedia Resources, Book, Methods

Apps: There is no need to purchase any computer programs or apps for this course. The programs that will be used for projects (i.e., WQ, DS, PT) in the course can be found on the Internet.

Students will need to have Google, Prezi, and PowToon accounts in order to work on projects.

Multimedia Resources: Students will find an assortment of videos they need to view and comprehend for the course. These videos are available through the Webliography tab in ecollege. Some, but not all, of these videos will be presented in class. Students, however, must familiarize themselves with each of these videos by various dates in the semester. Questions about information encountered through the videos could appear on exams.

Book: Each student will need to purchase an information book written for an elementary school audience. This book will be used for the Tutorial project that will be done during the final third of the semester. The book should cost you less than $20. Several weeks before you need the book, I will show you examples of the type that you will need to purchase. This book MUST be purchased PRIOR to the start of the project. The book can be purchased from Amazon or Barnes & Noble. If a student does not have an approved book prior to the start of the project, his or her project will incur a penalty.

Methods: The course will use a variety of instructional approaches, including lecture, videos and discussion, computer lab activities, frequent small in-class group activities, and occasional independent in-class activities.

A double-period class, such as this one, presents a number of potential challenges to the students and instructor. Sitting in a room for 160 minutes without a break is one of those challenges. Therefore, class meetings will usually be split into two distinct sub-periods. The first one will focus on the readings. There will usually be a presentation about the readings as well as a follow-up small group activity. (The presentations and the small group activities will have roles on the mid-term, final exams, and/or the course SAS Essay.) The second sub-period will focus on the various technology projects that comprise 60% of the grade for the course. There will a brief break between the sub-periods for students to stretch their legs, get a drink of water, and the like.

Email Reminders
From time to time I send email reminders to class members about issues regarding the course. I use the email addresses provided by the University. (I will use those addresses and no others.) Please check those accounts from time-to-time, so that you do not miss any reminders.

Required Readings
Textbook: There is no textbook for this course. There are articles listed in the Readings folder that you can access via the Doc Sharing tab in ecollege. In that folder you will see a set of Word documents whose filenames correspond with the various topics that you will encounter this semester. When you open each document, you will see a set of article titles and links. These links allow you to access your assigned readings. The readings need to be completed prior to a designated class meeting in order for students to perform well with class activities associated with those readings.
Assignments: Overview

SAS Essay
This course fulfills a requirement for the University’s core curriculum. As such, there is a common assignment for all sections of the course. All instructors for this course must use a common grading rubric that they strictly must follow.

- Title: Utilizing Web-based Tools to Find and Research Classroom Resources
- 20 points of the final grade
- This assignment will be returned to students immediately after the final exam.

Projects
Students will create three instructional projects over the course of the semester. Each project is worth up to 20 points. Each one will utilize a different program for its creation. It is important for students to understand that these projects are exercises. As exercises, they are designed to cause students to practice and apply a variety of skills and domains of knowledge pertinent to the use of technology in education. Each project will be worth twenty points. Each project will acquaint students with an instructional format that is in widespread use in contemporary classrooms. Specific directions and support documents for each project will be found in folders on ecollege as the projects are formally introduced.

- Project 1/Digital Storytelling (DS): This project will be created with PowToon.
- Project 2/WebQuests (WQ): This project will be created with Google Sites.
- Project 3/ Prezi Tutorial (PT): This project will be created with Prezi.

Quality of Written Work
These criteria will be considered in the evaluation of written work:

- Responsiveness to the task: Am I clearly addressing the prompts or questions posed in the task?
- Organization: Am I writing in a logical and/or reasonable manner? Are my connections to ideas and thoughts clear to my reader?
- Conciseness: Am I writing in a manner that is straight to the point? Am I being wordy?
- Depth: Am I omitting information that needs to be included in the response? Do I provide the necessary amount of information to support my thoughts, conclusions, or assertions? (This criterion complements conciseness. It is important to avoid being wordy, but it is also important to provide a full response.)
- Relevance: Am I making clear connections to the content of Education and Computers. (Please note that all responses should be connected to documents and other resources provided through this course.)
- Conventions: It is expected that all formal writing assignments follow standard writing conventions for punctuation, grammar, and spelling.

Exams
Mid-term Exam (10 points)

- The mid-term exam will be based on readings, lectures, lab activities, and explorations.
• An exam blueprint will be provided to students at least a week prior to the exam.
• The exam will prompt the students to address a few problems of educational technology.

Final Exam (10 points)
• The final exam will include items from the entire semester.
• It will be in multiple-choice format.
• An exam blueprint will be provided to students near the end of the semester.
• The final exam will be administered according to the University schedule and policies.
• Please note that there will be no exceptions to University policies.

Please Note
• This course employs a point system for grading. Students may earn up to 100 points. Each course assignment has been allotted a certain number of the 100 points. At the end of the semester the instructor will tally the points a student has accumulated for all the assignments, and assign a grade. (Please refer to chart on page 10.)
• An assignment that is submitted late will receive a one-point penalty for each day that it is overdue.
• Be sure to save all returned grade/scoring sheets. These documents will be your records in case there is a discrepancy between what you believe is your grade and what is on my grading spreadsheet. If there is a dispute about the grade for an assignment, and a student fails to produce a grade sheet, the instructor’s record will be the official grade.
• If, for any reason, a student fails to take an exam, the instructor, at his discretion, will assign a research paper or other assignment in lieu of the missed quiz. (If a student simply does not show up for an exam, and that student can not document that he or she had a legitimate reason for that absence, the student will receive a zero for the exam.)
• All course requirements must be fulfilled by the end of the semester, unless there is a reason that falls under University policies (e.g., documented illness, extreme family emergency).
• Be advised that there will be NO extra credit tasks, assignments, or projects for this course. (At the end of the semester, it is not unusual for a few students to request that I allow them to earn points beyond what they earned over the course of the semester. I decline all such requests.)

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/academic-integrity-policy/ for a full explanation of policies.

Web site: https://onlinelearning.rutgers.edu/ecollege
Course Requirements

Attendance Policy
This course observes the University policy for attendance. Students are expected to attend class regularly, with the exception of certain circumstances (e.g., serious illness, death in a family, court appearances, religious observances). If such a circumstance does occur – particularly when an exam or quiz is scheduled – please contact the instructor, and the matter will be handled in a discreet manner. Be advised: the instructor reserves the right to request documentation for a quiz or exam that has been missed.

If you expect to miss a class, please use the University absence reporting website https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence. An email is automatically sent to me. Be aware, however, that reporting an absence does not in any way obviate a student’s course obligations.

Upon entering the computer lab for a class meeting, students should initial an attendance sheet that will be at a table near the front of the lab. This record will be the official attendance record for the course. If a student fails to initial the attendance sheet, he or she will be considered absent. (Students will earn no points for good attendance; students will lose no points for poor attendance. HOWEVER, there is a STRONG correlation between good attendance and good grades.) If a student arrives significantly late or departs early from a class meeting, it will be noted on the attendance sheet.

Given that there are fourteen class meetings scheduled for this course instead of the usual twenty-eight class meetings, students who miss just a few class meetings are putting their grades in jeopardy. It is absolutely essential that students miss as few classes as possible.

It is not uncommon for a student who misses a class to contact me to set up a time when I can teach him or her the things that were taught during such an absence. My policy is to do that only for students who miss class meetings because of absences permissible under the University attendance policy. (See above.) Otherwise, I respond to such a request by directing that student to confer with a member of his or her team. (See below.)

Teams
When the drop/add period is over, students will set up work teams. In most cases each team will be comprised of three members. Students will provide a list of teams and members to the instructor. There are several purposes for the teams:

- Absences: When a student misses a class, he or she should contact a member of the team for notes or other information pertinent to the course.
- Class work: There will be frequent use of small group activities or tasks over the course of the semester. Once the directions for an activity are explained, groups can quickly assemble to complete the work. This work may be part of one of the quizzes that are part of the course assessment procedures.
- Peer Review: Students often find it valuable to have peers review and critique work that they plan to submit for grading.
### Topic Schedule by Week

<table>
<thead>
<tr>
<th>Mtg</th>
<th>Date</th>
<th>Activity</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/18</td>
<td>Introduction to Course/Instructional Models</td>
<td>ecollege</td>
</tr>
<tr>
<td>2</td>
<td>1/25</td>
<td>21st Century Learning and Teaching</td>
<td>ecollege</td>
</tr>
<tr>
<td>3</td>
<td>2/1</td>
<td>NJSLS and Ed Tech</td>
<td>ecollege</td>
</tr>
<tr>
<td>4</td>
<td>2/8</td>
<td>ISTE Standards/NJ Ed Tech Standards</td>
<td>ecollege</td>
</tr>
<tr>
<td>5</td>
<td>2/15</td>
<td>Learning Theories and Ed Tech*</td>
<td>ecollege</td>
</tr>
<tr>
<td>6</td>
<td>2/22</td>
<td>Supporting HOTS w/ Ed Tech I: Bloom’s Taxonomy</td>
<td>ecollege</td>
</tr>
<tr>
<td>7</td>
<td>3/1</td>
<td>Supporting HOTS w/ Ed Tech II: Webb’s DoK</td>
<td>ecollege</td>
</tr>
<tr>
<td>8</td>
<td>3/8</td>
<td>Assessment and Educational Technology</td>
<td>ecollege</td>
</tr>
<tr>
<td>9</td>
<td>3/15</td>
<td><strong>Spring Break</strong></td>
<td>ecollege</td>
</tr>
<tr>
<td>10</td>
<td>3/22</td>
<td>Evaluating the Quality of Internet Resources*</td>
<td>ecollege</td>
</tr>
<tr>
<td>11</td>
<td>3/29</td>
<td>Research, Professional Development, and Ed Tech*</td>
<td>ecollege</td>
</tr>
<tr>
<td>12</td>
<td>4/5</td>
<td>Explicit Instruction w/ Ed Tech</td>
<td>ecollege</td>
</tr>
<tr>
<td>13</td>
<td>4/12</td>
<td>Visual Literacy/Graphic Organizers*</td>
<td>ecollege</td>
</tr>
<tr>
<td>14</td>
<td>4/19</td>
<td>Reducing Barriers with Digital Technology</td>
<td>ecollege</td>
</tr>
<tr>
<td>15</td>
<td>4/26</td>
<td>Web 2.0</td>
<td>ecollege</td>
</tr>
</tbody>
</table>

* These topics play an important role in your SAS Essay.

### Lab Projects

<table>
<thead>
<tr>
<th>Mtg</th>
<th>Date</th>
<th>Activity</th>
<th>Resources/Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/18</td>
<td>Digital Storytelling</td>
<td>DS Folder</td>
</tr>
<tr>
<td>2</td>
<td>1/25</td>
<td>Digital Storytelling</td>
<td>DS Folder</td>
</tr>
<tr>
<td>3</td>
<td>2/1</td>
<td>Digital Storytelling/SAS Essay</td>
<td>DS Folder</td>
</tr>
<tr>
<td>4</td>
<td>2/8</td>
<td>Digital Storytelling</td>
<td>DS Folder</td>
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<td>5</td>
<td>2/15</td>
<td>Digital Storytelling</td>
<td>DS Folder</td>
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<td>6</td>
<td>2/22</td>
<td>WebQuests</td>
<td>WQ Folder</td>
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<td>7</td>
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<td>9</td>
<td>3/15</td>
<td><strong>Spring Break</strong></td>
<td>NA</td>
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<tr>
<td>10</td>
<td>3/22</td>
<td>WebQuests</td>
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<td>3/29</td>
<td>WebQuests</td>
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<tr>
<td>12</td>
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<td>4/26</td>
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## Schedule: Course Assessments

### Projects

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<tr>
<th>Activity</th>
<th>Date Assigned</th>
<th>Due Date/Time</th>
<th>Points</th>
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<tbody>
<tr>
<td>Project 1/ DS</td>
<td>1/18</td>
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<td>20</td>
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<tr>
<td>Project 2/WQ</td>
<td>2/15</td>
<td>4/5 (8:10 AM)</td>
<td>20</td>
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### Assessments

<table>
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<tr>
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<th>Administered</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-term Exam</td>
<td>Mtgs. 1 – 6</td>
<td>3/1</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Mtgs. 1 – 14</td>
<td>5/8 (8:30 – 11:00 AM)</td>
</tr>
</tbody>
</table>

### Core Curriculum Assignment

| SAS Essay | Start: 2/1 | Due: 4/19 (8:10 AM)* | 20     |

* The digital copy must be in the dropbox basket by 8:10 AM; the hard copy may be submitted upon entering the lab for the class meeting. If you are absent that day, please ask someone to bring it to the lab.

### Grades/Points

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<thead>
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<th>Points</th>
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<tbody>
<tr>
<td>A</td>
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</tr>
<tr>
<td>B+</td>
<td>85 - 89</td>
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<tr>
<td>B</td>
<td>80 - 84</td>
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<tr>
<td>C+</td>
<td>75 - 79</td>
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<tr>
<td>C</td>
<td>70 - 74</td>
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<tr>
<td>D</td>
<td>60 - 69</td>
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<td>F</td>
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