

**Rutgers, The State University of New Jersey**

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Introduction to Teaching with Digital Tools

**Fall 2015**

**Online**

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Office Hours: Office hours are available by appointment. Please email me or text me to schedule a meeting time.	Prerequisites or other limitations: <i>No</i>
Mode of Instruction: Online	Permission required: No

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 documentations: <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:**

In this course we will explore how new technologies are changing the educational landscape, and we will also discuss the potential challenges and benefits that arise from these changes. By the end of the semester, all students who successfully complete the course should be able to do the following:

1. Design an educational website that illustrates a working knowledge of online collaborative tools (e.g., wikis, blogs, discussion forums, etc.) and how these tools can be used to enhance teaching and/or learning.
2. Create and respond to blog postings that require individuals to examine and reconsider their knowledge and beliefs about the role of technology in educational settings.

3. Develop and respond to online discussions while drawing connections between course readings, individual assignments, group projects, and other uses of technology used in educational environments today.
4. Create an online multimedia library that identifies and locates technology resources and evaluates them for accuracy and suitability for teaching and/or learning.
5. Analyze and evaluate software, educational websites, and information and communication technologies (ICTs) for their suitability for instruction.
6. Critique and design an instructional plan that illustrates how technology can be used to enhance learning through online communication and/or collaboration.
7. Design an instructional plan and relevant resources that demonstrate knowledge of social, ethical, and human issues concerning use of computers and new technologies such as Web 2.0 tools.
8. Identify computer and technological resources that facilitate lifelong learning and create emerging roles for the learner and educator.

**New Jersey Professional Standards for Teachers (2014)<sup>1</sup>:**

**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 Common Core Standards and the New Jersey Core Curriculum Content Standards and creates learning experiences that make 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

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

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:**

- 2) 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

**Technology Standards:** This course will be based heavily upon ISTE Standards for Teachers located here: <http://www.iste.org/standards/standards-for-teachers.aspx>

**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:**

This is an online course available to all graduate students at GSE. The course was developed based on the philosophy that knowledge is socially constructed and that students and teachers learn best when *learning by doing*. While participating in this course, students will have various opportunities to engage in both individual and collaborative, project-based activities that emphasize learning through inquiry. They will explore theories of learning and how they inform the effective uses of technology in K-12 environments. Additionally, students will investigate what the latest research has to say about the integration of technology in K-12 classrooms, with emphasis being placed on the types of 21st-century skills that are required to be successful in today's digital age society. By engaging students in a variety of project-based activities throughout the semester, this course will introduce them to the various ways that new technologies are challenging traditional ways of communicating and learning. Students will be introduced to various online communication and collaboration tools while exploring how these new technologies are changing the teaching landscape. The course will also introduce students to the potential challenges and benefits that arise from these changes.

### **Required texts:**

- Richardson, W. (2010). *Blogs, Wikis, Podcasts, and Other Powerful Web Tools for Classrooms*. Thousand Oaks, CA: Corwin Press. ISBN # 978-1-4129-7747-0 (This is the 3rd edition of the text.)
- Schrum, L. M., & Levin, B. B. (2015). 2<sup>nd</sup> Edition. *Leading 21st-Century Schools: Harnessing Technology for Engagement and Achievement*. Thousand Oaks, CA: Corwin Press. ISBN # 978-1483374413.
- ISTE Standards (formerly NETS) national technology standards for students, teachers, administrators, and coaches.  
<http://www.iste.org/STANDARDS>
- New Jersey Core Curriculum Content Standards: <http://njcore.org/standards/statestand>

### **Course Overview:**

Our world is rapidly moving to a digital society where digital forms of expression are increasingly replacing printed forms. The ways in which we communicate and disseminate information are constantly changing. As new technologies continue to emerge, it is imperative

that educators take a closer look at what it means to help individuals become proficient and literate in a 21st Century society (Reinking, 1998).

Despite an increased focus on technology and the recognition that educators must be prepared to provide and participate in technology-supported learning environments, research has shown that few educators are using technology in meaningful and transformative ways (Bruce & Hogan, 1998; Cuban, 2003). There are various reasons why individuals might not take advantage of the educational power of technology, some of which include limited access to computers, insufficient technological support, and lack of personal knowledge of the literacies that surround new technologies (Reinking, Labbo, & McKenna, 2000; Zhao, Pugh, Sheldon, & Byers, 2002).

This course is the first in a series of three courses designed to help educators develop proficiency in educational technology and address the challenges of preparing learners for the demands of an information rich, Digital Age society. In this course, you will explore collaborative web 2.0 tools, learn the basics of web design, address internet safety, and create an educational project that incorporates technology integration.

Introduction to Teaching with Digital Tools follows the philosophy that knowledge is socially constructed and that all people learn best when learning by doing. This course will provide you with various opportunities to engage in both individual and collaborative, project-based activities that emphasize inquiry-based learning. You will explore theories of learning based upon how they inform the effective uses of technology in educational environments. Additionally, you will investigate what the latest research has to say about the integration of technology in educational settings, with emphasis being placed on the types of 21st Century skills that are required to be successful in today's Digital Age society. By engaging in a variety of inquiry-based, collaborative activities throughout the semester, this course will introduce you to the various ways that new technologies are challenging traditional ways of communicating and learning.

### **Grading policy:**

#### **Assignments**

All written assignments must be submitted via the eCollege Dropbox. Grades and feedback will be posted in the eCollege Gradebook.

Assignment	Percentage of Grade
Class Discussions 1. Introduce yourself 2. Locate & critique a technology integrated lesson plan 3. Social bookmarking & website evaluation	26

4. Social networking	
5. Barriers to integrating educational technology	
6. Leadership & professional development	
Peer feedback (2)	6
Blogging	10
Website design project	30
Technology implementation project	30

### **Class Discussions**

Each module has at least one Class Discussion. All the Class Discussions are discussion boards within eCollege.

### **Confidentiality**

If you are a teacher or student teacher and discuss classroom situations in class, do so carefully. Please mask the name of a student (or students) on any written or visual work shared in class or used in an assignment.

### **Grading Response Time**

Assignments should be graded within one week of the due date. Lengthy assignments may take a little longer to grade.

### **Grading Scale**

Final grades will be assigned according to the following scale:

- A = 90-100
- B+ = 87-89
- B = 80-86
- C+ = 77-79
- C = 70-76
- D = 60-69
- F = below 60

### **Late Submission Policy**

Due dates for each assignment are published on the course calendar. If you experience an unavoidable personal situation that prevents you from completing work on time, please contact me *prior* to the assignment due date to request an extension. Late work may result in points taken off, a lowering of the assignment grade, or a zero, depending on the assignment.

### **Communication Policy**

If you have questions or concerns, please email me. My goal is to respond to emails and text messages within 24 hours.

### **Video Conference or Telephone Meetings**

For more complex questions or issues, please email me to schedule a telephone call. Times are available evenings and weekends.

### **Participation Policy**

Your active participation in this course is vital to the course and to your learning. This means that you need to:

- Log into eCollege class website three times a week to check for any new announcements and changes.
- Participate in online discussions to illustrate your understanding of weekly readings and how they connect to your own life,
- Meet deadlines for assignments so that you can keep on track, make steady progress throughout the course, and provide feedback to your peers in a timely manner.

### **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.

### **Rutgers University Libraries**

Many library resources are available online. You will be required to download scholarly articles through the Libraries databases. Assistance is available through phone, email and chat.

Information about the library can be found here: <http://libguides.rutgers.edu/intro>

Please review this 2-minute video about the library online resources:

<http://www.youtube.com/watch?v=iJvFVqjz8Dg>

### **Dropping the Course**

In order to withdraw from a course, it is not sufficient to stop posting assignments or contributing to discussion. In accord with university policy, students wishing to withdraw from a course must do so formally through the Registrar's office. It is the student's responsibility to complete all forms. If this is not done, the instructor must assign a grade of F at the end of the semester.

### **Technology Policy**

Throughout the semester, you will be learning about and using various online programs and tools. Many of these are Web 2.0 tools that are found on free, public websites. It is your responsibility to ensure that you have the appropriate technology capabilities to successfully complete assignments and activities. Rutgers University does provide technology assistance for programs like eCollege, and I am also available to assist you whenever I can. Murphy's Law states, "Anything that can go wrong, will go wrong". Computers crash. Internet access can be limited during a thunderstorm. All of these issues cannot prevent you from submitting assignments on time. My advice to you is...

- Aim to complete all assignments **one day early**. This way you have one more day to get to the library or a friend's house if the worst happens. You'll also have time to contact me and notify me of any problem. I will always respond to you within 24 hours, however, if you only have 2 hours to submit the assignment there is no guarantee I will get your message in time.
- Be sure your computer is in **good working order**. If it has any problems or issues you want to make sure those are ironed out BEFORE the course begins.
- Be sure to arrange access to a **2<sup>nd</sup> computer**. This could be your own; this could be the computer lab or a friend's. Technical glitches are not excuses for late work.
- Test the websites you are assigned to use as soon as you receive the assignment. Our eCollege course website may work at your place of business; however, you may find that later in the course a social networking site is filtered (not accessible from your place of business). Some sites don't work on older computers while others don't work on newer computers. Videos may not play. Security settings may need to be checked. It only takes a moment to click around and try this out.
- Keep **usernames and passwords** in a safe place. Since we'll be accessing various sites, you'll have several different places where you'll need login credentials. Keep these in a safe place so that they cannot be lost or stolen.
- **Create back-ups**. There are a lot of digital equivalents to the dog eating your homework. Technology is not always reliable and can fail. All Rutgers students have access to a Google drive which provides unlimited cloud storage. You'll need to login through your Scarlet Mail email address. The Google drive could serve as your back-up location for your class projects or as your primary workspace. [This 3-minute video describes how to use your Rutgers Google Drive.](#)
- **Double-check work**. Make sure assignments are uploaded and posts are submitted.

### Technical Assistance

eCollege technical assistance is available 24 hours a day, 7 days a week at:

[help@ecollege.rutgers.edu](mailto:help@ecollege.rutgers.edu)

877-778-8437

### Other technical support

New Brunswick Computing Help Desk

Hill Center, Room 013

848-445-HELP

helpdesk@nbc.rutgers.edu

### Required technological skills:

- Ability to utilize eCollege
- Ability to learn how to create a personal website

## Required equipment / materials:

- Computer that has all requirements needed to use eCollege:  
<https://onlinelearning.rutgers.edu/technical-requirements>
- Computer with Internet access and speakers or headsets
- Software that can save a file in the format of Microsoft Word or PDF

## Time Commitment

To be successful in this course, we estimate that you will need to commit to at least 9 hours of coursework per week for the fifteen-week semester. Some weeks will require more time, some less. This is the standard expectation for a 3-credit course.

## Course Requirements

### Attendance Policy

There are no on-campus meetings for this class. You are expected to login to the course at least three times per week to ensure you do not miss pertinent postings, messages, or announcements.

Participation in the course discussion boards is required. Unless otherwise stated, you will be required to post one original response and reply to at least two of your classmates for each discussion board assignment. To ensure that we have a productive discussion, you are required to post by the specified due dates.

### Netiquette

“Netiquette” is network etiquette, the dos and don’ts of online communication. When posting to our discussion board or communicating with others in our class, please remain courteous. Below are the guidelines we will follow in this course.

- Be professional and courteous
- Be respectful of other points of view
- Avoid using slang and abbreviations because they can lead to misinterpretation
- Do not capitalize all letters because this suggests shouting
- Think and proofread before you submit

**Note that additional materials are listed in eCollege**

Week	Topic & Guiding Questions	Textbook Readings	Assignments	Due Dates
1 Sept 2-6	<b>MODULE 1: Start Here</b>  What are current state and national standards for educational technology?	Schrum & Levin: Chapters 1& 2  Richardson: Chapter 1	Class Discussion #1 Introduction	<b>Initial post: Sept 6</b>
			Course Intro Quiz	<b>2 response posts: Sept 8</b>

	<p>What are 21<sup>st</sup> Century skills and why are they important?</p> <p>What are the needs of 21<sup>st</sup> Century learners?</p> <p>In what ways can technology meet the needs of 21<sup>st</sup> century learners?</p>		TIP Step 1	<b>Don't need to submit anything</b>
2-3 Sept 8 – 21	<p><b>MODULE 2: Setting the Stage and Establishing a Framework</b></p> <p>What knowledge, skills, and dispositions do teachers and students need in order to be successful in today's 21<sup>st</sup> Century, Digital Age society?</p> <p>What are the qualities and characteristics of a successful 21<sup>st</sup>Century learners and teachers?</p> <p>What is the LoTi Framework? How can it be used to inform teaching and learning? What supports and hinders the successful integration of technology in K-12 classrooms?</p> <p>What does it mean to be "teacher as designer"? What is the ADDIE model of design and why might it be beneficial for teachers to think from a design perspective?</p> <p>ISTE for Teachers 1(a)(d), 3(a-d), 4c, 5(a-d)</p>	Schrum & Levin: Chapters 3 & 4	<p>Class Discussion #2 Social bookmarking &amp; website</p> <p>TIP Step 2 &amp; Parent Letter posted to discussion board</p>	<p><b>Initial post:</b> Sept 10</p> <p><b>2 response posts:</b> <b>Sept 14</b></p> <p><b>Sept 21</b></p>

<p>4-6 Sept 21- October 12</p>	<p><b>MODULE 3: Why Online Communication and Collaboration?</b></p> <p>What new technologies and tools support online communication and collaboration? How do these tools work? What are the advantages and disadvantages to using these tools?</p> <p>How might online communication and collaboration support and/or hinder teaching and learning?</p> <p>How can Web 2.0 tools be used to support higher-order thinking, engaged learning, and authentic learning?</p> <p>What are the elements of the ADDIE ISD model and how does this system approach provide an effective process for developing educational programs? Are there any disadvantages to using the ADDIE model?</p>	<p>Richardson: Chapters 2, 3, 4 &amp; 6</p>	<p>Class Discussion #3 Locate and critique technology integrated lesson plan</p>	<p><b>Initial post: Sept 24 2 response posts: Sept 28</b></p>
			<p>Blog Post #1</p>	<p><b>Initial post: September 28</b></p> <p><b>2 replies: October 5</b></p>
			<p>Peer feedback for TIP Step 2 &amp; Parent Letter</p>	<p><b>October 5</b></p>
			<p>Website project proposal Website project rubric</p>	<p><b>October 12</b></p>

	<p>What are the four principle web design elements and how would you address them in your web site?</p> <p>ISTE for Teachers 1(a)(d), 3(a-d), 5(a-d)</p>			
7-9 October 12-Nov 2	<p><b>MODULE 4: New Technologies for Teaching and Learning</b></p> <p>How can technology be used to support subject/content matter learning?</p> <p>What kinds of technological resources exist to support technology integration in your field of study?</p> <p>What needs to be taken into consideration when using technology with a broader audience?</p> <p>What resources exist to support safe uses of technology?</p> <p>How do you distinguish between instructional goals and objectives?</p> <p>ISTE for Teachers 1(a)(d), 2(a)(c), 3(a-d), 5(a-d)</p>	<p>Schrum &amp; Levin: Chapters 6 &amp; 7</p> <p>Richardson: Chapters 5, 7 &amp; 8</p>	<p>Class Discussion #4 Social networking</p> <p>Create draft website and post on webliography</p>	<p><b>Initial post: October 22</b></p> <p><b>2 response posts: October 26</b></p> <p><b>November 2</b></p>

<p>10-12 November 2-23</p>	<p><b>MODULE 5: Evaluating the Use of New Technologies</b></p> <p>What are the stages to technology adoption?</p> <p>What internal site-based resources can promote and support technology integration?</p> <p>How can governmental and organizational guidelines drive technology quality standards and adoption timelines?</p> <p>What technology tools can be used to make formative and summative assessments of learning, teaching and leading?</p> <p>What is the evidence of successful technology adoption?</p> <p>ISTE for Teachers 1(a)(b)(d), 2(a), 3(a-d), 5(a-d)</p>	<p>Schrum &amp; Levin: Chapter 5</p>	<p>Class Discussion #5 Barriers to integrating educational technology</p> <p>Peer feedback for draft website</p> <p>TIP Step 3: Submit complete TIP Unit Plan</p>	<p><b>Initial post: Nov 12 2 response posts: Nov 16</b></p> <p><b>Nov 16</b></p> <p><b>Nov 23</b></p>
<p>12-14 November 23-Dec 10</p>	<p><b>MODULE 6: Leadership and Professional Development</b></p> <p>ISTE for Teachers 3(a-d), 4 (a), (c) ,(d),5(a-d)</p>	<p>Schrum &amp; Levin: Chapter 8</p> <p>Richardson: Chapter 9</p>	<p>Class Discussion #6 Leadership &amp; professional development</p> <p>Blog post #2</p> <p>Complete website to match with proposal and rubric</p>	<p><b>Initial post: Nov 25</b></p> <p><b>2 response posts: Nov 30</b></p> <p><b>Initial post: Dec 3</b></p> <p><b>2 comments: Dec 8</b></p> <p><b>Dec 10</b></p>

