

**Rutgers, The State University of New Jersey**  
**05:300:350:90\_91\_92 Education & Computers**  
**SPRING 2021**  
**ONLINE**

Instructor: James Lynch-Urbaniak	<a href="mailto:Jamesru7@rutgers.edu">Email: jamesru7@rutgers.edu</a>
Phone Number : 848-932-0789	Location: Online
Office Hours: Online by Appointment	Prerequisites or other limitations: <i>None.</i>
Mode of Instruction: ___ Lecture ___ Seminar ___ Hybrid <input checked="" type="checkbox"/> Online ___ Other	Permission required: <input checked="" type="checkbox"/> No ___ Yes Directions about where to get permission numbers: Email Instructor

**Course Description:** (as it appears in the GSE Catalog)

Education & 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 a 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.

**Disability Policy:** Rutgers University welcomes students with disabilities into all 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>



**SAS Core Curriculum Learning Goals Met by this Course: CCO-2** *Analyze the relationship that science and technology have to a contemporary social issue.*

For a complete list of Core Curriculum learning goals, see:  
<https://sasoue.rutgers.edu/docman-docs/curriculum/858-revised-core-curriculum-5-2018-1/file>

For more information about the SAS Core see:  
<https://sasundergrad.rutgers.edu/degree-requirements/core>

**Organization:** 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 eCollege website.

**Required Texts:** No textbooks are required for this course; online readings will be provided via Canvas

**By the end of the course, learners 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 the advantages and limitations of computers and computer-based technologies in the classroom.
- Understand how teachers plan effective learning activities with computers and computer-enhanced lessons.
- Demonstrate an understanding of the roles of teaching standards such as the NJCCCS for Technology and ISTE NETS in learning and teaching.
- Apply technology to develop learners' 21st Century literacy skills, higher order skills, and creativity.
- Employ basic principles of multimedia design for educational activities.
- Establish familiarity with trending topics in technology and provide an assessment (both highlights and pitfalls) of those trends as they relate to learning and teaching.
- Provide discourse on social, equity, ethical, accessibility and legal issues surrounding the use of technology in learning and teaching.
- Analyze the relationship that technology has to equitable access to high-quality education.
- Examine and reconsider knowledge and beliefs about the role of technology in the classroom.
- Utilize computers and technology to support professional growth.

**Academic Integrity:** All issues of academic integrity are referred to the Rutgers University policy on academic integrity. I expect that you will comply with standards of academic integrity in this course. Assignments should be your own work, except in the case of a required group product. The consequence for violating policies of academic integrity and other elements of the student code of conduct are serious and can have a tremendous negative impact on your academic progress and future career. Refer to <http://academicintegrity.rutgers.edu/academic-integrity-policy> for a full explanation of policies.

**Grading Policies:** Each assignment in this course will be graded on a 4-point scale with the exception of the SAS Final Research Paper which will be graded out of 20 points:

4/4 = Outstanding

3/4 = Good

2/4 = Satisfactory

1/4 = Unsatisfactory

0/4 = Not Completed By Due Date

**Graded assignments** must be submitted by the due date and time listed in Canvas. **Late work will not be accepted and will automatically receive 0 points.** In case of illness, please provide a doctor's note.

**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 grammar. Please use language that is appropriate for the classroom setting and maintain a professional tone in both Canvas postings and classroom discussions. Outside sources, in any assignment, must be referenced appropriately (either APA or Chicago style is acceptable)

**Final Grading Scale:** The total number of points earned will be divided by the amount of assignments in the course to determine your final grade:

A	90 – 100 %
B+	87 – 89%
B	80 – 86 %
C+	77 – 79 %
C	70 – 76%
D	60 – 69 %
F	0 – 59%

### Summary of Requirements

Below is a list of topics and assignments that will be covered in Education & Computers. For specific assignment requirements, please visit the course page at [canvas.rutgers.edu](http://canvas.rutgers.edu)

All assignments must be completed by 11:59 PM EST on the evening of the due date. As an example, if an assignment is due on 2/3/21, you have until the night of 2/3/20, 11:59 PM EST (1 minute before it turns 2/4/21) to complete the assignment.

### Course Schedule by Week

Week	Topics to be Covered	Assignments & Readings
Unit 1:	<ul style="list-style-type: none"> <li>Team Building &amp; Changes in Technology</li> </ul>	<ul style="list-style-type: none"> <li>Introduce Yourself to the Class Initial Response by 1/25 &amp; Replies by 1/27</li> <li>Did You Know Initial Response by 1/25 &amp; Replies by 1/27</li> <li>Sign-Up Remind Text Messaging by 1/25</li> </ul>
Unit 2	<ul style="list-style-type: none"> <li>Common Core &amp; Standards Based Education</li> </ul>	<ul style="list-style-type: none"> <li>What Do You Remember Initial Response by 2/1 &amp; Replies by 2/3</li> <li>Thoughts on Common Core Initial Response by 2/1 &amp; Replies by 2/3</li> <li>Common Core Reflection by 2/3</li> </ul>
Unit 3	<ul style="list-style-type: none"> <li>Lesson Planning</li> </ul>	<ul style="list-style-type: none"> <li>What Is a Lesson Plan Initial Response by 3/8 &amp; Replies by 3/10</li> <li>Lesson Plan Reflection by 3/10</li> </ul>
Unit 4	<ul style="list-style-type: none"> <li>The Flipped Classroom/Blended Learning</li> </ul>	<ul style="list-style-type: none"> <li>Khan Academy Initial Response by 2/15 &amp; Replies by 2/17</li> <li>Jing Response of Khan Academy by 2/17</li> </ul>
Unit 5	<ul style="list-style-type: none"> <li>Google Apps for Education (G-Suite)</li> </ul>	<ul style="list-style-type: none"> <li>Google Apps for Education Discussion Response by 2/22 &amp; Replies by 2/24</li> <li>Google Slide Presentation on GAFE by 2/24</li> </ul>
Unit 6	<ul style="list-style-type: none"> <li>Integrating Smartphones &amp; Apps into the Classroom</li> </ul>	<ul style="list-style-type: none"> <li>Smart Phones &amp; Apps Initial Response by 3/1 &amp; Replies by 3/3</li> <li>Apps &amp; Education Reflection by 3/3</li> </ul>
Unit 7	<ul style="list-style-type: none"> <li>Pinterest &amp; Social Media Do's &amp; Don't</li> </ul>	<ul style="list-style-type: none"> <li>Pinterest in the Classroom Response by 3/8 &amp; Replies by 3/10</li> <li>Jing Response of Pinterest &amp; Educational Board by 3/10</li> </ul>
Unit 8	<ul style="list-style-type: none"> <li>Facebook in the K-12 Classroom</li> </ul>	<ul style="list-style-type: none"> <li>Facebook and the Classroom Initial Response by 3/22 &amp; Replies by 3/24</li> <li>Edmodo Reflection Response by 3/24</li> </ul>
Unit 9	<ul style="list-style-type: none"> <li>Twitter &amp; The Classroom</li> </ul>	<ul style="list-style-type: none"> <li>The Twittersphere Initial Response by 3/29 &amp; Replies by 3/31</li> </ul>
Unit 10	<ul style="list-style-type: none"> <li>Digital Natives &amp; Online Learning</li> </ul>	<ul style="list-style-type: none"> <li>Digital Natives Initial Response by 4/5 and Replies by 4/7</li> </ul>
Unit 11	<ul style="list-style-type: none"> <li>Digital Dirt &amp; Online Safety</li> </ul>	<ul style="list-style-type: none"> <li>Digital Dirt Initial Response by 4/12 &amp; Replies by 4/14</li> <li>Technology &amp; Your Career Reflection by 4/14</li> </ul>
Unit 12	<ul style="list-style-type: none"> <li>Education &amp; Computers Common Assessment: Culminating Final Paper</li> </ul>	<ul style="list-style-type: none"> <li>Final Essay due by 5/2</li> </ul>

**Learning Goals:** This course grounded heavily in ISTE NETS standards located here: <http://www.iste.org/standards.aspx> and New Jersey Professional Teaching Standards (2014) addressed below which can be found here: <http://www.state.nj.us/education/code/current/title6a/chap9.pdf>

**Standard One: Learner Development.** The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

**i. Performances:**

2) The teacher creates developmentally appropriate instruction that takes into account individual learners' strengths, interests, and needs and that enables each learner to advance and accelerate his or her learning **iii.**

**Critical Dispositions:**

2) The teacher is committed to using learners' strengths as a basis for growth, and their misconceptions as opportunities for learning

**Standard Two: Learning Differences.** The teacher uses an 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 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 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

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**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 a 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

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**The course addresses the following Council for the Accreditation of Education Professionals (2013). You can find the complete listing of CAEP standards here:**

<http://caepnet.org/standards/>

**Standard #2: Learning Differences.** The teacher uses an 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 a 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.