

**George Mason University  
College of Education and Human Development  
Instructional Design and Technology Program**

**EDUC852  
Technology and Teacher Development  
Sec. B01  
Tuesdays/Thursdays – Innovation Hall 336  
Fridays - Online**

Summer 2019	3 Credit Hours, Sec. 001
Instructor: <a href="#">Dr. Debra Sprague</a> Dr. Tom Opfer	E-Mail: <a href="mailto:dspragu1@gmu.edu">dspragu1@gmu.edu</a> <a href="mailto:topfer2@gmu.edu">topfer2@gmu.edu</a>
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### **Course Description**

Investigates the latest research and issues related to technology and teacher development: includes research on teacher professional development and teacher leadership will focus on both professional development for K-12 in-service teachers as well as preservice university courses.

### **Relationship to Program Goals and Professional Organizations**

This course addresses the following CEHD priorities: collaboration, research-based practice and innovation. It is designed as an integral component of the Teaching and Teacher Education PhD Program, and meets new state and national guidelines and standards including the International Society for Technology in Education, (ISTE).

### **Learning Outcomes**

1. Students will be able to describe factors that shape the role of technology in teacher education.
2. Students will be able to discuss the ways in which the evolution of information technology is shaping the mission, objectives, content, processes, participants and organizational structures in teacher education.
3. Students will be able to identify the opportunities and challenges associated with integrating technology in teacher education and in P-12 education.
4. Students will be able to identify successful models for teacher development.

5. Students will be able to evaluate research related to technology integration in teacher development.

### **Nature of Course Delivery**

This course includes multiple instructional strategies. Individual session formats will vary and may include lecture, small group/ large group discussion, hands-on, interactive work, student presentations, guest presentations, and cooperative learning. Approximately 35% of the course will be online.

### **STANDARDS**

#### **ISTE NETS for Teachers**

1. **Learner** - Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.
2. **Leader** - Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.
3. **Citizen** - Educators inspire students to positively contribute to and responsibly participate in the digital world.
4. **Collaborator** - Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.
5. **Designer** - Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.
6. **Facilitator** - Educators facilitate learning with technology to support student achievement of the ISTE Standards for Students.
7. **Analyst** - Educators understand and use data to drive their instruction and support students in achieving their learning goals.

### **Required Texts**

There are no required books for this class. Required articles are posted in MyMason

### **Assignments:**

**ALL ASSIGNMENTS SHOULD BE SUBMITTED ELECTRONICLY BY THE DUE DATE.** Assignments that contain multiple grammar and spelling errors and/or typos will be returned, without grading, to be edited by the student.

Assignments earning less than a passing grade may be rewritten and resubmitted so that the assignment is satisfactorily completed. In fact, because learning is the goal, I may *require* you to redo an assignment that is far below expectations.

All written papers must be double spaced, with 1” margins, and in 12-point font (Times New Roman, Calibri, or Arial).

1. **Planning and Participation with EDIT 504 (25 points)** – Throughout the course students will develop online activities for Secondary Education students enrolled in EDIT 504. With the instructor of EDIT 504 (Dr. Opfer), students will co-teach part of the course. (**Learning Outcomes 1, 3, 4**)
2. **Reflective Journal on Course Readings and Activities (15 points)** – Students will maintain a journal of their thoughts on course readings and activities, including the co-planning and co-teaching of EDIT 504. The journal should be reflective in nature. Focus should be placed on how ideas generated by the course can be incorporated into teacher education or teacher professional development. Students should also discuss why it is difficult to get teachers to integrate technology. (**Learning Outcomes 1, 2, 5**)
3. **Online Activities (20 points)** – Friday classes will be online. Students will participate in all online modules and activities. Modules will be opened on Thursday evenings and will close at 4:30 on Tuesdays. (**Learning Outcomes 2, 3, 4 5**)
4. **Design a Teacher Development Plan (40 points)** – Using the ideas presented in the course, students will design a teacher professional plan on technology integration. For students planning to go into a university setting, the plan should focus on a course or course module that integrates technology in a preservice education program. For those who are planning to remain in the P-12 setting, the plan should focus on ways to help teachers integrate technology in their classroom. In both cases, resources should be identified and a rationale provided for the instructional model chosen. The rationale should be supported by the literature. **This is the PBA for this course. (Learning Outcomes 1, 3, 4, 5)**

*Note: I reserve the right to add, alter, or omit any assignment as necessary during the course of the semester. You will always receive advanced notice of any modifications.*

### **Grading Scale**

A = 94-100%  
B = 80-86%

A- = 90-93%  
B- = 77-79%

B+ = 87-89%  
C = 70-76%

## **COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:**

### **Core Values Commitment**

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

### **GMU Policies and Resources for Students**

#### *Policies*

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).

- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

### *Campus Resources*

- Support for submission of assignments to Tk20 should be directed to [tk20help@gmu.edu](mailto:tk20help@gmu.edu) or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursesupport.gmu.edu/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

**For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .**

### **PROFESSIONAL DISPOSITIONS**

Students are expected to exhibit professional behaviors and dispositions at all times. [See [http://cehd.gmu.edu/assets/docs/forms/secondary\\_ed/sec\\_ed\\_handbook.pdf](http://cehd.gmu.edu/assets/docs/forms/secondary_ed/sec_ed_handbook.pdf)]

### **Emergency Procedures**

You are encouraged to sign up for emergency alerts by visiting the website <https://alert.gmu.edu>. There are emergency posters in each classroom explaining what to do in the event of crises. Further information about emergency procedures exists on <https://ready.gmu.edu/>

**Course Schedule:**

<b>Day</b>	<b>Topics/Learning Experiences</b>	<b>Reading Assignments to be Completed Prior to Class</b>
6/4	Elementary Education Research Symposium - Class will meet in Merten Hall Rm. 1201	<p>Read: Koehler, M. J., &amp; Mishra, P. (2009). What is technological pedagogical content knowledge? <i>Contemporary Issues in Technology and Teacher Education</i>, 9(1). Retrieved from <a href="http://www.citejournal.org/vol9/iss1/general/article1.cfm">http://www.citejournal.org/vol9/iss1/general/article1.cfm</a></p> <p>Read: Koehler, M.J., Mishra, P., Bouck, E. C., DeSchryver, M., Kereluik, K., Shin, T.S., Wolf, L.G. (2011). Deep-play: Developing TPACK for 21st century teachers. <i>International Journal of Learning Technology</i>, Vol. 6, No. 2. 146-163.</p> <p><b>Write in Reflective Journal.</b></p>
6/6	Introduction to the course  Introduction to TPACK  Introduction to SAMR	<p>Read: Foulger, T.S., Graziano, K.J., Schmidt-Crawford, D. &amp; Slykhuis, D.A. (2017). Teacher educator technology competencies. <i>Journal of Technology and Teacher Education</i>, 25(4), 413-448. Waynesville, NC USA: Society for Information Technology &amp; Teacher Education. Retrieved May 21, 2019 from <a href="https://www-learntechlib-org.mutex.gmu.edu/primary/p/181966/">https://www-learntechlib-org.mutex.gmu.edu/primary/p/181966/</a>.</p> <p>Read: Cherner, T., &amp; Curry, K. (2017). Enhancement or transformation? A case study of preservice teachers' use of instructional technology. <i>Contemporary Issues in Technology and Teacher Education</i>, 17(2), 268-290.</p> <p><b>Write in Reflective Journal.</b></p>
6/7 Online	Online: TPACK Module	<p>Complete online module by 4:30 on 6/11, Tuesday.</p> <p><b>Write in Reflective Journal.</b></p>
6/11	Unpacking the various standards – TETC, ISTE, Virginia SOLs	<p>Read: Lewis, C. L. (2015). Preservice teachers' ability to identify technology standards: Does curriculum matter? <i>Contemporary Issues in Technology and Teacher Education</i>, 15(2), 235-254.</p> <p><b>Write in Reflective Journal.</b></p>
6/13	Systems Change: Change Systems	<p>Read: Norton, P. &amp; Hathaway, D. (2017). Using a Design Pattern Framework to Structure Online Course Content: Two Design Cases. <i>International Journal on E-Learning</i>, 16(2), 175-193. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE). Retrieved May 21, 2019 from <a href="https://www-learntechlib-org.mutex.gmu.edu/primary/p/149399/">https://www-learntechlib-org.mutex.gmu.edu/primary/p/149399/</a>.</p> <p><b>Write in Reflective Journal.</b></p>

6/14 Online	Online: Teaching Online	Complete online module by 4:30 on 6/18, Tuesday. <b>Write in Reflective Journal.</b>
6/18	Planning for EDIT 504	Read: Hathaway, D. & Norton, P. (2015). A Preservice Secondary Education Technology Course: Design Decisions And Students' Learning Experiences. In D. Rutledge & D. Slykhuis (Eds.), <i>Proceedings of SITE 2015--Society for Information Technology &amp; Teacher Education International Conference</i> (pp. 925-933). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved May 21, 2019 from <a href="https://www.learntechlib-org.mutex.gmu.edu/primary/p/150112/">https://www.learntechlib-org.mutex.gmu.edu/primary/p/150112/</a> .  Hathaway, D. & Norton, P. (2016). A Preservice Secondary Education Technology Course: Attitudes, Knowledge, and Learner Outcomes. In G. Chamblee & L. Langub (Eds.), <i>Proceedings of Society for Information Technology &amp; Teacher Education International Conference</i> (pp. 690-697). Savannah, GA, United States: Association for the Advancement of Computing in Education (AACE). Retrieved May 21, 2019 from <a href="https://www.learntechlib-org.mutex.gmu.edu/primary/p/171753/">https://www.learntechlib-org.mutex.gmu.edu/primary/p/171753/</a> .  <b>Write in Reflective Journal.</b>
6/20	1:1 Initiatives  Planning for EDIT 504	Hollebrands, K., & Lee, J. K. (2012). Toward a new learning ecology: Professional development for teachers in 1:1 learning environments. <i>Contemporary Issues in Technology and Teacher Education</i> , 12(2). Retrieved from <a href="http://www.citejournal.org/vol12/iss2/currentpractice/article1.cfm">http://www.citejournal.org/vol12/iss2/currentpractice/article1.cfm</a>  <b>Write in Reflective Journal.</b>
6/21 Online	Online: Mentoring Module	Complete online module by 4:30 on 6/25, Tuesday.  <b>Write in Reflective Journal.</b>  <b>EDIT 504 begins on Monday, 6/24.</b>
6/25	Issues with technology integration  Planning for EDIT 504	Read: Rust, J. (2017). Pedagogy meets digital media: A tangle of teachers, strategies, and tactics. <i>Contemporary Issues in Technology &amp; Teacher Education</i> , 17(2), 168-193.  Read: Hughes, J. E., Liu, S., & Lim, M. (2016). Technological modeling: Faculty use of technologies in preservice teacher education from 2004 to 2012. <i>Contemporary Issues in Technology &amp; Teacher Education</i> , 16(2), 184-207.  <b>Write in Reflective Journal.</b>

6/27	<p>Preparing for 1:1 initiatives in K-12</p> <p>Planning for EDIT 504</p>	<p>Read: Kay, R. &amp; Schellenberg, D. (2019). Comparing BYOD and One-to-One Laptop Programs in Secondary School Classrooms: A Review of the Literature. In K. Graziano (Ed.), <i>Proceedings of Society for Information Technology &amp; Teacher Education International Conference</i> (pp. 1862-1866). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved May 21, 2019 from <a href="https://www-learntechlib-org.mutex.gmu.edu/primary/p/207900/">https://www-learntechlib-org.mutex.gmu.edu/primary/p/207900/</a>.</p> <p>Read: Kaufman, D. &amp; Kumar, S. (2018). Student Perceptions of a One-to-One iPad Program in an Urban High School. <i>International Journal of Research in Education and Science</i>, 4(2), 454-470. Retrieved May 21, 2019 from <a href="https://www-learntechlib-org.mutex.gmu.edu/p/191034/">https://www-learntechlib-org.mutex.gmu.edu/p/191034/</a>.</p> <p>Read: Schwartz, J. &amp; Szabo, Z. (2018). One-to-One Computer Program Implementation in Hawaii: Lessons Learned. In <i>Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education</i> (pp. 1158-1163). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved May 21, 2019 from <a href="https://www-learntechlib-org.mutex.gmu.edu/primary/p/185077/">https://www-learntechlib-org.mutex.gmu.edu/primary/p/185077/</a>.</p> <p><b>Write in Reflective Journal.</b></p>
6/28 Online	Online: International Module	<p>Complete online module by 4:30 on 7/2, Tuesday</p> <p><b>Write in Reflective Journal.</b></p>
7/2	<p>What is happening in other countries</p> <p>Planning for EDIT 504</p>	<p>Read: Liu, L. B., Baker, L. L., &amp; Milman, N. B. (2014). Technological innovation in 21st century multicultural teacher preparation. <i>Journal for Multicultural Education</i>, 8(1), 54-67.</p> <p><b>Write in Reflective Journal.</b></p>
7/4	No Class - Independence Day!	
7/5 Online		<b>Begin co-teaching EDIT 504.</b>
7/9	Addressing any issues within EDIT 504	<p>Read: Strickland, J. &amp; Drake, J. (2018). Co-Teaching Graduate, Online Teacher Education Courses: A Preliminary Look at the Advantages and Disadvantages. In T. Bastiaens, J. Van Braak, M. Brown, L. Cantoni, M. Castro, R. Christensen, G. Davidson-Shivers, K. DePryck, M. Ebner, M. Fominykh, C. Fulford, S. Hatzipanagos, G. Knezek, K. Kreijns, G. Marks, E. Sointu, E. Korsgaard Sorensen, J. Viteli, J. Voogt, P. Weber, E. Weippl &amp; O. Zawacki-Richter (Eds.), <i>Proceedings of EdMedia: World</i></p>

		<p><i>Conference on Educational Media and Technology</i>(pp. 2127-2131). Amsterdam, Netherlands: Association for the Advancement of Computing in Education (AACE). Retrieved May 21, 2019 from <a href="https://www.learntechlib-org.mutex.gmu.edu/primary/p/184454/">https://www.learntechlib-org.mutex.gmu.edu/primary/p/184454/</a>.</p> <p><b>Check EDIT 504.</b></p> <p><b>Write in Reflective Journal.</b></p>
7/11	No class – work on EDIT 504.	<p><b>Check EDIT 504.</b></p> <p><b>Write in Reflective Journal.</b></p>
7/12 Online		<p><b>Check EDIT 504.</b></p> <p><b>Write in Reflective Journal.</b></p>
7/16	Addressing any issues within EDIT 504	<p>Read: Sims, B., Hudiburg, M., Mascher, E. &amp; Dellasega, S. (2018). Exploring the Realities of Technology Enhanced Feedback in Online Courses. In <i>Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education</i> (pp. 1063-1067). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved May 21, 2019 from <a href="https://www.learntechlib-org.mutex.gmu.edu/primary/p/185065/">https://www.learntechlib-org.mutex.gmu.edu/primary/p/185065/</a>.</p> <p>Work on Teacher Development Plan</p> <p><b>Check EDIT 504.</b></p> <p><b>Write in Reflective Journal.</b></p>
7/18	No class – work on EDIT 504.	<p>Work on Teacher Development Plan</p> <p><b>Check EDIT 504.</b></p> <p><b>Write in Reflective Journal.</b></p>
7/19 Online		<p>Complete online module by 4:30 on 7/23, Tuesday.</p> <p>Work on Teacher Development Plan</p> <p><b>Check EDIT 504.</b></p> <p><b>Write in Reflective Journal.</b></p>
7/23	Addressing any issues within EDIT 504	<p>Read: Kritz, M. &amp; Shonfeld, M. (2018). Promoting Satisfaction in Online Courses. In T. Bastiaens, J. Van Braak, M. Brown, L. Cantoni, M. Castro, R. Christensen, G. Davidson-Shivers, K. DePryck, M. Ebner, M. Fominykh, C. Fulford, S. Hatzipanagos,</p>



		<p>G. Knezek, K. Kreijns, G. Marks, E. Sointu, E. Korsgaard Sorensen, J. Viteli, J. Voogt, P. Weber, E. Weippl &amp; O. Zawacki-Richter (Eds.), <i>Proceedings of EdMedia: World Conference on Educational Media and Technology</i> (pp. 2263-2270). Amsterdam, Netherlands: Association for the Advancement of Computing in Education (AACE). Retrieved May 21, 2019 from <a href="https://www-learntechlib-org.mutex.gmu.edu/primary/p/184591/">https://www-learntechlib-org.mutex.gmu.edu/primary/p/184591/</a>.</p> <p><b>Submit Reflective Journals</b></p> <p>Work on Teacher Development Plan</p> <p><b>Check EDIT 504.</b></p>
7/25	Sharing of Teacher Development Plans	<p><b>Submit Teacher Development Plans</b></p> <p><b>Close out EDIT 504.</b></p>

Note: Course activities and readings may change due to needs of students.

### Teacher Development Plan Rubric

<b>Criteria</b>	<b>Meets Requirements 5 points</b>	<b>Meets Partial Requirements 3 points</b>	<b>Needs Improvement 1 point</b>
Teacher Plan focuses on integrating technology to support student learning.	The plan focuses on ways teachers can use technology to help their students learn. There are clear integration ideas.	The plan focuses on mostly on improving the teachers' technology skills. There is some integration, but it is secondary.	The plan does not address technology integration or the focus is not on supporting student learning.
The teacher plan is feasible to implant.	The teacher plan is able to be implemented as described. It is not too expensive and does not require specialized technology or personnel. The technology used is typical of most schools.	The teacher plan is able to be implemented with some modifications. It is not too expensive and does not require specialized technology or personnel. The technology used is typical of most schools.	The teacher plan is not able to be implemented even with some modifications. It is too expensive and requires specialized technology or personnel. The technology used is typical of most schools
The plan considers the barriers to technology integration.	The plan addresses the four major reasons why teachers resist technology.	The plan addresses two-three of the major reasons why teachers resist technology.	The plan addresses zero-one of the major reasons why teachers resist technology. There are no suggestions in the plan for addressing these barriers.
The plan provides suggestions for overcoming barriers.	There are strong suggestions in the plan for addressing all of the barriers.	There are suggestions in the plan for addressing some of these barriers. The suggestions may not work.	There are no suggestions for addressing the barriers. The suggestions are not effective.

<p>The plan includes a variety of resources.</p>	<p>The plan identifies at least ten resources that can be used to help teachers integrate technology. These resources can include people, books, websites, apps, or other forms of technology. The resources identified follow the theme of the plan.</p>	<p>The plan identifies 5-9 resources that can be used to help teachers integrate technology. These resources can include people, books, websites, apps, or other forms of technology. The resources identified somewhat follow the theme of the plan.</p>	<p>The plan identifies less than five resources that can be used to help teachers integrate technology. The resources are mostly technology based and do not consider other sources. The resources identified do not follow the theme of the plan.</p>
<p>The teacher plan includes a rational for the model chosen.</p>	<p>A strong rational is provided. It connects to the model chosen.</p>	<p>A rational is provided, but it is not a very strong one.</p>	<p>No rational or a weak rational is provided. It does not connect to the model chosen.</p>
<p>The rational is supported by the literature.</p>	<p>The rational is supported by at least eight references. At least three of these references are not from course readings.</p>	<p>The rational is supported by 5-7 references. At least one of these references is not from course readings.</p>	<p>The rational is supported by less than five references. All of the references are from course readings.</p>
<p>Grammar and Spelling Errors</p>	<p>There are no grammar and spelling errors noted.</p>	<p>There are few grammar or spelling errors noted. They do not distract from the meaning.</p>	<p>There are many grammar and spelling errors noted. They distract from the meaning.</p>