Mississippi Valley State University

Department of Teacher Education

*Holistic Transformer:*

*Transforming and developing scholars, reflective thinkers and facilitators, and responsible professionals who will change and transform the Delta and society beyond.*

**ED 512: Technology for Teachers**

**Fall 2019 Semester**

Instructor:

Class Meetings: Fall 2019 Online Course

Class Location:

Office Location:

Office Phone:

E-mail Address:

Office Hours**:**

COURSE DESCRIPTION:

The course provides skills and various techniques for applying and integrating technologies into instruction and using the hardware and digital applications to promote effective teaching and learning.

CREDIT HOURS: 3

PREREQUISITE(S):

COURSE CONTENT

 Text(s):

 Lever-Duffy, J. & McDonald, J. B. (2018). Teaching and learning with technology.

 (6th. ed) Boston: Pearson.

Selected Internet resources and education software used in K-12 classrooms will be incorporated into the content of this course.

 Other Items: USB Storage Device and Internet Access

 MVSU ED 512 Course Canvas Site

 Website: <https://www.mvsu.edu/online-students>

ED 512 is a face-to-face class that is held on campus. MVSU’s Learning Management System, Blackboard, provides candidates with online access to supplemental materials and resources.

Basic Blackboard navigation tips will be practiced in class.

 MVSU Canvas Support Contact: 662-254-3114 or 662-254-3624

**PURPOSE/RATIONALE**:

The major purpose of ED 512 is to extend the candidates potential for using currently available computer technology to promote digital literacy and enable students to acquire technology skills for their career and/or college. ED 512 is primarily designed for teachers who have little or no prior experience using digital resources for classroom instruction. ED 512 is designed to enable candidates to become knowledgeable, skillful, and confident with the challenge of infusing instructional technology into the learning environment. As stated in the ISTE Standards for Educators, to capture the potential of future technologies, teachers must exemplify a commitment to life-long learners.

**GENERAL COURSE GOALS**:

1. Understands the competencies and necessary conditions developed by the International Society for Technology in Education (ISTE) technology standards for all students and educators. (Objective C and Objective D)
2. Identifies professional learning goals to guide the exploration, application, and assessment of the use of digital resources in the learning environment. (Objective C and Objective D)
3. Explore and apply instructional design principles (TPACK/SAMR/TIM) to create innovative digital learning environments that engage and support student learning. (Objective B and Objective E)
4. Understands how the Universal Design for Learning (UDL) concepts supports the use of educational technology to differentiate instruction to support individual learner’s needs. (Objective H)
5. Within the professional learning community, share practical and efficient ways to identify, explore, evaluate, curate, and adopt new digital resources and tools for learning. (Objective B and Objective F)
6. Create learning experiences and mentor students to be responsible Digital Citizens through safe online practices of how to manage their digital identify and personal data. (Objective G)
7. Demonstrates the use of technology to design and implement a variety of formative and summative assessments as a means of obtaining student data to support instructional decisions. (Objective E and Objective H)

**MATRIX: LINKAGE OF THE HTM AND GENERAL COURSE GOALS**:

|  |  |  |  |
| --- | --- | --- | --- |
| Course Goals | HTM - KnowledgeScholar | HTM – SkillsFacilitator/Reflective Thinker | HTM-DispositionsResponsible Professional |
| 1 |  | 2.1 (Objective C) 2.2 (Objective C) | 3.2 (Objective C) |
| 2 |  | 2.1 (Objective C, D2.2 (Objective C, D | 3.2 (Objective C, D  |
| 3 | 1.2 (Objective B, E)1.3 (Objective B) |  | 3.4 (Objective B) |
| 4 | 1.2 (Objective H) | 2.4 (Objective H)  | 3.4 (Objective H) |
| 5 | 1.2(Objective B, F)1.3 (Objective B) | 2.2 (Objective B)  | 3.4 (Objective B) |
| 6 | 1.1 (Objective G)1.2 (Objective G)  | 2.2 (Objective G) |  |
| 7 | 1.2 (Objective E, H)  | 2.4 (Objective H)  | 3.4 (Objective H) |

**Holistic Transformer Competencies/Outcome: Knowledge (Scholar)**

Candidate Proficiencies- Knowledge (Scholar)

* 1.1 Candidate synthesizes in-depth knowledge of content in specific discipline with research based best practices in the teaching and learning process.
* 1.2 Candidate plans instruction and integrates technology appropriately based on best practices.
* 1.3 Candidate selects reliable and valid assessments to measure student performance.
* 1.4 Candidate knows the theoretical, historical, and philosophical foundation of diversity and equity.

**Competencies/Outcome: Skills (Facilitator/ Reflective Thinker)**

Candidate Proficiencies- Skills

* 2.1 Candidate regularly reflects on the state, national, and professional standards as a basis for continuously improving teaching and learning.
* 2.2 Candidate designs and implements unit and daily lesson plans that incorporate rigorous instructional strategies and infuse technology appropriately to enhance student learning.
* 2.3 Candidate administers formative and summative assessments to measure student learning outcomes and to facilitate data-based decisions about instruction
* 2.4 Candidate develops adaptive instructional plans to meet the educational and social needs of all studentsin collaboration with community and parental support.

**Competencies Outcome: Dispositions (Responsible Professional)**

 **Candidate Proficiencies- Dispositions**

* 3.1 Candidate actively collaborates with relevant P-20 learning communities and professional education associations as evidence of a professional commitment to professional learning and development
* 3.2 Candidate values, respects, and promotes learning for all students and incorporates instructional technology.
* 3.3 Candidate systematically analyzes individual student outcomes and makes appropriate decisions for student learning.
* 3.4 Candidate models professional, responsible, and ethical behaviors to support social justice and equity in a diverse society.

**ED 512 COURSE OBJECTIVES**

A. Compare and contrast the design elements of selected school districts’ websites which provide a digital interface to continuously inform and involve students, family, and the community. (HTM 3.1) (CAEP 1.5) (InTASC 10) (TIAI 25) (TGR 9 ) (CAEP-K6 5.1) (ISTE/Educator 4.a )

B. Evaluate a teacher-created and peer-reviewed lesson plan in terms of the selection of (1) digital materials and the (2) methods used to integrate and (3) evaluate digital content. Candidates will present and demonstrate (dependent on the availability of resources) in class the effective infusion of the technology component from the selected lesson plan. (HTM 1.2, 1.3, 2.2, 3.4) (CAEP 1.1, 1.3, 1.5,) (InTASC 3, 6,7, 8) (TIAI 4, 5, 6, 13, 15, 22, 23 ) (TGR 2, 3, 4, 5, 7) (CAEP-K6 1.b, 3.a,3.e, 4.a, 4.b)(ISTE/Educator 3.b, 4.c, 5.c, 6.b,7.b) Supports Course Goal 5,7) (Course Goal 2 and 5)

C. Utilize TPACK (Technological Pedagogical Content Knowledge), SAMR (Substitution, Augmentation, Modification, and Redefinition) and/or TIM (Technology Integration Matrix) to assess a baseline of personal preference for technology integration. Using the ISTE Standards for Educators, candidates will assess their personal dispositions towards a commitment toward maximizing technology to engage and support student learning. (HTM 3.2) (CAEP 1.1, 1.4, 1.5) (InTASC 2, 3, 5) (TIAI 11, 12, 17) (TGR 4, 7, 9) (CAEP-K6 1.b,3.f, 4.c,) (ISTE/Educator 2.b, 6.a, 6.c) (Course Goal 3 and 5)

D. Understands the implications of the “**digital use divide**” and are able to explain how the ISTE technology standards for students/educators impacts the transformation of learning when technology is successfully integrated into instruction. Each candidate will prepare a Power Point presentation which presents the ISTE standards for students. The prepared Power Point demonstrates advanced skills (embedded internal/external hyperlinks, menu slide with internal hyperlinks, multiple slide formats, imported images, slide number, slide transition, set-up slide show to loop and run with timings). (HTM 2.1, 2.2, 3.2) (CAEP 1.2,1.4, 1.5) (InTASC 2, 3, 5,7, 8)(TIAI 1, 4, 11, 12, 17) (TGR 1, 2, 4, 7) (CAEP-K6 1.b, 3.f, 4.b, 4.c) (ISTE/Educator 2.b, 5.b, 5.c, 6.a, 6.c) (Course Goal 1 and 2)

E. Prepare a demonstration instructional activity using the choice of interactive whiteboard equipment/software (SMART or Promethean Board). Two students working together will present an activity to the whole class using either SMART’s Notebook software or Promethean’s Flip Chart’s application. (HTM 1.2) (CAEP 1.1, 1.5) (InTASC 7) (TIAI 6, 24) (TGR 6) (CAEP-K6 3.c, 4.a) ISTE/Educator 4.b, 5.c) (Course Goal 3 and 7)

F. Each candidates chooses to undertake the (a) Flipped Learning activity or (b) the Open Education Resource (OER) task.

(a) Propose and prepare a lesson plan modification to convert an existing lesson using the Flipped Learning concept. Include an analysis of the advantageous and disadvantageous of ‘flipping’ a lesson. (HTM 1.2, 2.2, 2.4) (CAEP 1.1, 1.3, 1.5) (InTASC 3, 7, 8) (TIAI 4, 6,13, 15, 24) (TGR 2, 4, 5, 6) (CAEP-K6 3.c, 4.a, 4.b) (ISTE/Educator 4.c, 5.c) (Course Goal 5)

(b) Identify and select content specific Open Education Resources (OER) sources available to support classroom instructional.( HTM 1.2) (CAEP 1.5) (InTASC 7) (TIAI 6) (TGR 6) (ISTE/Educator 5.c) (Course Goal 5)

G. Select and modify a lesson plan available from an online curriculum designed to prepare K-12 students to assume their responsibilities as digital citizens. Small groups (2-3) will present the Digital Citizen lesson plans to the class. (HTM 1.2, 2.2) (CAEP 1.1,1.5) ( InTASC 3,7) (TIAI 6, 13) (TGR 5, 6) (CAEP-K6) 4.a) (ISTE/Educator 3.b, 3.c, 3.d, 6.a ) (Course Goal 6)

H. Write a (1) paper or (2) prepare a class presentation to introduce peer educators to the basic concepts and premise of Universal Design for Learning concept. (HTM 1.2, 2.4, 3.4) (CAEP 1.1, 1.4, 1.5) (InTASC 1, 3, 7. 8, 10) (TIAI 6, 16, 18, 19, 20, 22, 23) (TGR 2, 4, 5, 6, 7, 9) (CAEP-K6 1.b, 3.a, 3.e, 4.a, 4.d, 5.a) (ISTE /Educator 3.a, 3.b, 4.d, 5.a, 5.c, 6.b)

(Course Goal 4 and 7)

**TECHNOLOGY INFUSION**: **Class Assignment and Additional Online Teacher Resources**:

**Module 1: Getting to Know You-School Districts Web-based Identify**

**School Website Analysis Links:**

**1st Impressions: A Schools Website**

<https://www.thoughtco.com/schools-website-first-impression-7655>

The Seven Best School Web Designs and How they Did It

<https://morweb.org/Post-Test/best-school-websites#sci-high>

**School Website Examples**

1. New Orleans Science & Math <https://noscihigh.org/>
2. Bronx Charter School for Children <https://tbcsc.org/>
3. Times2 STEM Academy <https://times2.org/Home>
4. Round Rock Independent <https://roundrockisd.org/>
5. Poundre School District <https://www.psdschools.org/>
6. Hope Academy <https://hopeacademyct.com/>
7. Ross School <https://www.ross.org/>

U.S. Department of Education: Office of Educational Technology <https://tech.ed.gov/>

National Educational Technology Plan (2017) <https://tech.ed.gov/netp/>

Reimagine the Role of Technology in Learning (2017 National Education Technology Plan Update) <https://tech.ed.gov/files/2017/01/NETP17.pdf>

MECA (Mississippi Education Computing Association)

Website: <http://www.ms-meca.org>

**Textbook Chapter 4: Technologies in the Digital Classroom**

**Classroom Digital Inventory List**: Each teacher will compile a Digital Inventory List identifying all the various technology resources that are currently available in their classroom/school. Throughout the course, teachers will develop an additional inventory list of digital resources they have discovered they need to acquire.

**Module 2: Infusing Technology into the Lesson**

1. Common Sense – Teacher Created Lessons

<https://www.commonsense.org/education/search?contentType=flows>

1. AASL (American Association of School Librarians)

Best APPS for Teaching and Learning 2019 <https://standards.aasl.org/project/ba19/>

**Best Websites for Teaching and Learning 2019** <https://standards.aasl.org/project/bw19/>

**Archive**  <http://www.ala.org/aasl/awards/best>

1. CPALMS

Website: <http://www.cpalms.org/Public/>

Description of CPALMS <http://www.cpalms.org/CPALMS/about_us.aspx>

1. Eleven Qualities of Good Digital Content (ISTE)

<https://www.iste.org/explore/ISTE-Standards-in-Action/11-qualities-of-good-digital-content>

Bloom’s Digital Taxonomy

<https://d1pmarobgdhgjx.cloudfront.net/education/ED_Blooms_Taxonomy_RB2016.mp4>

**Introduction to the TPAC Model**

<https://d1pmarobgdhgjx.cloudfront.net/education/Intro_to_TPACK_model_RB2016.mp4>

<https://www.youtube.com/watch?v=yMQiHJsePOM>

**Introduction to the SAMR Model**

<https://d1pmarobgdhgjx.cloudfront.net/education/Intro_to_SAMR_model_RB2016.mp4>

**The SAMR Model Explained**

<https://www.youtube.com/watch?v=F4BaHIEza_w>

<https://www.youtube.com/watch?v=OBce25r8vto>

<https://www.youtube.com/watch?v=SC5ARwUkVQg>

**TIMS - Technology Integration Matrix**

Website: <https://fcit.usf.edu/matrix/>

**Florida Center for Instructional Technology**

Website: <https://fcit.usf.edu/>

**Textbook Chapter 7: The Web in the Digital Classroom**

**Module 3: Digital Use Divide and ISTE Standards for Students**

**ISTE (International Society of Technology in Education)**

**Website:** <https://iste.org/>

ISTE Standards for Students

Website: <https://iste.org/standards/for-students>

**Textbook Chapter 5: Software for Teaching and Learning**

**Module 4: Interactive White Board**SMART Technologies <https://www.smarttech.com/>

Promethean <https://www.prometheanworld.com/>

**Textbook Chapter 8: Technology for Digital Learning**

**Module 5: Flipped Learning and Open Educational Resources (OER)**

Flipped Learning -

Website: <https://flippedlearning.org/>

What is Flipped Learning (PDF)

<https://flippedlearning.org/wp-content/uploads/2016/07/FLIP_handout_FNL_Web.pdf>

YouTube – Founder of Flipped Learning

<https://www.youtube.com/watch?v=Ot_dKs_LRf0>

The Flipped Classroom Model

<https://www.youtube.com/watch?v=qdKzSq_t8k8>

Why Flipped Learning is Still Going Strong

<https://www.edsurge.com/news/2017-10-03-why-flipped-learning-is-still-going-strong-10-years-later>

**OER (Open Educational Resources)**

**Edutopia OER Article**

<https://www.edutopia.org/blog/open-educational-resources-instructional-design-andrew-marcinek>

OER Commons

Website: <https://www.oercommons.org/>

Hewlett Foundation – OER

Website <https://hewlett.org/strategy/open-educational-resources/>

Creative Commons

Website <https://creativecommons.org/>

**OER - ISTE** <https://www.iste.org/learn/open-educational-resources>

OER Examples

<https://www.qualitymatters.org/qa-resources/resource-center/articles-resources/open-ed-resources>

The Orange Grove <https://www.floridashines.org/orange-grove>

**EdReports** <https://edreports.org/>

**Textbook Chapter: 9 Technology in Schools – Implementation Issues**

**Module 6 ISTE Technology Standards for Students: Digital Citizens (Curriculum)**

**Common Sense Education (Lesson Plan and Digital Citizen Project Resource)**

Website: [www.commonsense.org/education](http://www.commonsense.org/education)

**\*\*ED 512 Students will create their own Teacher Account**

Digital Citizenship

<https://www.commonsense.org/education/digital-citizenship>

**Textbook 10: Technology in Tomorrow’s School**

**MODULE 7: Universal Design for Learning (UDL)**

CAST (The Center for Applied Special Technology) - Universal Design for Learning

Website: <http://www.cast.org>

Download ebook (FREE) Will require creating an account

<http://udltheorypractice.cast.org/login>

Universal Design for Learning: Theory and Practice (2014)

Author: Ann Meyer, David Rose, and David Gordon

**MAJOR STUDENT Evaluation**  **Course Experiential Learning Assessments**

School Website Analysis 25 Points

Selection and Evaluation of a Common Sense Education or 50 Points

CPALMS Lesson Plan

Digital Use Divide & PowerPoint Skill Demonstration (Mid-Term) 100 Points

Interactive White Board Skill Demonstration 50 Points

Flipped Learning **or** OER Project 50 Points

Digital Citizen Lesson Plan 50 Points

Universal Design for Learning (Paper or Project) Final Exam 75 Points

Total Possible Points – 400 Points

360-400 Points Grade A (90-100 %)

320-359 Points Grade B (80-89%)

280-319 Points Grade C (70-79%)

240-279 Points Grade D (60-69%)

239 Points or Less Grade F 59% or Less

**STUDENT Learning Activities**

**August 26-30 Textbook Chapter 4: Technologies in the Digital Classroom**

 **Module 1: School Website Analysis**

 **Classroom Technology Inventory**

**September 2-6 Textbook Chapter 4 (Continued)**

 **SAMR Model**

 **Education Websites--- Integrated into Mid-Term PowerPoint**

1. **Curriculum Specific Websites**
2. **Professional Websites (MDE/ National Association)**
	1. **MECA Mississippi Education Computing Association**
3. **Web Resources to Support Parental Engagement in Learning**
4. **ISTE - NETS-Students**
5. **There’s an APP for That**
6. **Webinar Options for Professional Learning Communities**

**September 9-10 Textbook Chapter 7: The Web in the Digital Classroom**

 **Technology Integration Lesson Plan**

1. **Common Sense Lesson Plan Or (2) CPALMS**

**September 16-17 Textbook Chapter 7 (Continued)**

 **Technology Integration Lesson Plan – Alignment to NETS-Student**

 **Modification / Implementation Proposal**

 **Power Point Basic Skills**

**September 23-27 Textbook Chapter 5: Software for Teaching and Learning**

 **Power Point Advanced Skills**

**September 30-Oct. 4**

**October 7-11 Mid-Term Power Point Skill Assessment/**

**Technology Lesson Plan / ISTE Alignment Project Power Point**

**October 14-18 Textbook Chapter 8: Technology for Digital Learning & Delivery**

 **Digital Citizen Curriculum**

**October 21-25 Textbook Chapter 8 (Continued)**

 **Digital Citizen Curriculum Lesson Plan Proposal**

**October 28-Nov. 1 Textbook Chapter 9: Technology in Schools – Improvement Issues**

 **TIM (Technology Integration Matrix)**

**November 4-8 Textbook Chapter 9 (Continued)**

 **Flipped Learning or Open Education Resources (OER)**

**November 11-15 Textbook Chapter 10: Technology in Tomorrow’s Schools**

 **Flipped Learning OR OER Report**

**November 18-22 Textbook Chapter 10 (Continued)**

 **Interactive White Board Skill Demonstration**

**November 25-29 Thanksgiving Holiday**

**December 2-6 Universal Design for Learning (UDL)**

**December 9-13 UDL Paper/Presentation Final Exam Week**

Specific information about each learning activity will be provided to students throughout the course.

**ADA/STUDENTS WITH SPECIAL NEEDS:**

Mississippi Valley State University is committed to providing reasonable accommodations for students with a documented disability. If you feel you are eligible to receive accommodations for a covered disability (medical, physical, psychiatric, learning, vision, hearing, etc.) and would like to request it for this course, you must be registered with the Services for Students with Disabilities (SSD) program administered by University College. It is recommended that you visit the Disabilities Office located inside the EMAP Computer Lab in the Technical Education (IT) Building to register for the program at the beginning of each semester. For more information or to schedule an appointment, please contact Mr. Billy Benson, Jr. via phone or email at 662-254-3005 or billy.benson@mvsu.edu.

**PLAGARISM/ACADEMIC INTEGRITY:**

All students enrolled at MVSU are expected to be honorable and to observe standards of conduct appropriate to a community of scholars. All acts of dishonesty in any academic work constitute academic misconduct. Verified cases of cheating, plagiarism, or fabrication will receive a zero grade on the assignment or test in which it occurs. A second case of cheating will be reported to the Vice President for Academic Affairs.

**University Dates to Know Fall 2019 Semester**

August 26 Classes Begin

Sept. 2 Labor Day Holiday

Sept. 16 Last Day to Add/Drop Course - Registration Closes

Sept. 16 Report Non-Attendance

Sept. 17 Financial Clearance

Sept. 20 Report of Non-Attendance

October 7-11 Mid-Term Exam Week

Oct. 14-16 Academic Advisement

Oct. 17 Online Registration Begins for Spring 2020 Semester

Nov. 8 Last Day to Withdraw from a Class

Nov. 16 Last Day to Withdraw from the University

Nov. 25-26 Fall Break

Nov. 26-29 Thanksgiving Holiday

Dec. 2 Classes Resume

Dec. 9-13 Final ExamWeek (ED 512 Exam Date to Be Announced)

**Disclaimer**: The information and schedule of events contained in this syllabus are subject to change.

**Textbook Chapters**

**Chapter 4: Technologies in the Digital Classroom**

Objectives

* 1. Describe the functions of computer components and peripherals for teaching and learning found in a digital classroom.
	2. Explain the role of networking in enhancing the capabilities of a digital classroom.
	3. Identify and describe the supplemental technology most useful in the digital classroom.
	4. Describe wireless technologies and their application in the digital classroom.
	5. Identify the challenges and opportunities associated with implementing traditional, mobile, and emerging technologies in the digital classroom.

**Chapter 5: Software for Teaching and Learning**

**Objectives**

5.1 Describe the types of software most likely to be included in the digital classroom**.**

5.2 Identify types of administrative software and describe how it can be applied to teaching and learning tasks.

 5.3 Categorize academic software applications and identify their role in teaching and learning.

 5.4 Locate and identify available online tools and apps that can be used for teaching and learning.

 5.5 Evaluate the challenges and opportunities associated with integrating software in the digital classroom.

Presentation Software

TechTips – Downloadable PowerPoint Enhancements

PowerPoint Skillbuilders

**Chapter 7**: **The Web in the Digital Classroom**

Objectives:

* 1. Describe the evolution of the web and it application in school.
	2. Explain the use of web-based tools applicable to research, communication, collaboration, and social interaction.
	3. Identify and evaluate web tools and resources and the opportunities and challenges of integrating them into teaching and learning.
	4. Identify the characteristics of good digital citizenship on the web and the skills necessary for participation in a global digital community.

**Chapter 8: Technology for Digital Learning and Delivery**

Objectives:

 8.1 Distinguish among the most popular digital learning delivery systems.

 8.2 Evaluate the issues associated with the implementation of digital delivery.

8.3 Describe the role that various technologies play in the alternative delivery of instruction and the issues associated with each.

 8.4 Identify the opportunities and challenges educators face when using digital learning and delivery systems in teaching and learning.

**Chapter 9: Technology in Schools: Implementation Issues**

Objectives:

* 1. Distinguish between the most compelling issues and concerns that result from the implementation of technology in an educational setting.
	2. Describe the key legal issues associated with technology integration.
	3. Determine the key social issues that educators face with regard to technology integration.
	4. Analyze the key ethical issues that educators face with regard to technology use.
	5. Identify the opportunities and challenges that educators face when addressing issues associated with technology integration.

**Chapter 10: Technology in Tomorrow’s Schools**

Objectives:

 10.1 Describe the impact of educational technologies that are present but still evolving in schools and classrooms.

 10.2 Identify the emerging technologies and horizon technologies likely for adoption and integration into education.

 10.3 Articulate the professional impact of technological changes in education.

 10.4 Describe the challenges and opportunities associated with technological change in education