

The University of Maryland, College Park
College of Education

How this course addresses
the MSDE Teacher Technology Standards (MTTS)
and ISTE/NETS*T Foundations for All Teachers
and INTASC Principles
and UMCP COE Conceptual Framework
and NCATE Conceptual Framework
and 21st Century Skills (Partnership for the 21st century)

Course Title: Mindtools for Investigation and Education EDUC 475/698A

Completion of any course does not certify competency in the identified area, however, it will contribute to development of the competency

Standard and Outcomes	Indicators	Addressed in this course	Examples
<p>I. Information Access, Evaluation, Processing and Application</p> <p>Access, evaluate, process and apply information efficiently and effectively.</p> <p>ISTE NETS*T IA-IE, VC, VD INTASC Principles 1, 9 UMCP Conceptual Framework 1,2,6,7 NCATE Framework 1,2,5 21st Century 2,3,4</p>	<ol style="list-style-type: none"> Identify, locate, retrieve and differentiate among a variety of electronic sources of information using technology. Evaluate information critically and competently for a specific purpose. Organize, categorize and store information for efficient retrieval. Apply information accurately in order to solve a problem or answer a question. 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>Students are given a variety of resources which they must differentiate among for given assignments. Students must research educational games products from website publicity sites vs. actual hands-on, research from UMD Research Port educational gaming articles,. Students identify, locate, and report findings. Students must evaluate a variety of resources (software, educational board games, educational teacher templates to create games/exercises, eGames etc...</p>
<p>II. Communication</p> <p>A. Use technology effectively and appropriately to interact electronically.</p> <p>ISTE NETS*T VC, VD INTASC Principles 6, 9, 10 UMCP Conceptual Framework 4,3,6 NCATE Framework 1,3 21st Century 2,3,4</p>	<ol style="list-style-type: none"> Use telecommunications to collaborate with peers, parents, colleagues, administrators and/or experts in the field. 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>Students communicate via email, video streaming/conferencing, within WebCT discussion threads, Chat rooms (general and group work), dialogue with guest speakers, and participate in other live WebCasts on a variety of subjects related to the course content. Students participate in TappedIn, MOO, ICONS simulation, a class Blog and Wiki</p>
<p>B. Use technology to communicate information in a variety of formats.</p> <p>ISTE NETS*T VC, VD INTASC Principles 6, 9 UMCP Conceptual Framework 1,4,5,6 NCATE Framework 1,3,6 21st Century 1,2,3,4</p>	<ol style="list-style-type: none"> Select appropriate technologies for a particular communication goal. Use productivity tools to publish information. Use multiple digital sources to communicate information online. 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>Selected examples of published work included in this course include : PP; website (or parts of); making use of online quizzes, tests, games, rubrics templates; Excel as a gaming/simulation application.; Board game (Group) Word and graphical applications if needed; Wiki and Blog contributions, ICONS simulations contributions; WebCT contributions (Threads & chat room); MicroWorlds & eGame creations.</p>
<p>III. Legal, Social and Ethical Issues</p>	<ol style="list-style-type: none"> Identify ethical and legal issues using technology. Analyze issues related to the 	<input checked="" type="checkbox"/> Yes	<p>Case studies/examples are used to highlight and discuss issues related to technology choices, issues and appropriateness. Fair Use, Teach Act,</p>

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INTASC - <http://www.cesso.org/content/pdfs/corestrd.pdf>
NCATE - http://www.ncate.org/standard/m_stds.htm
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<p>Demonstrate an understanding of the legal, social and ethical issues related to technology use.</p> <p>ISTE NETS*T II, VI A-E INTASC Principles 3, 4, 5, 7, 9 UMCP Conceptual Framework 2,3,4,5 NCATE Framework 3,4 21st Century 4,5,6</p>	<p>uses of technology in educational settings.</p> <p>3. Establish classroom policies and procedures that ensure compliance with copyright law, <i>Fair Use</i> guidelines, security, privacy and student online protection.</p> <p>4. Use classroom procedures to manage an equitable, safe and healthy environment for students.</p>	<p><input type="checkbox"/> No</p>	<p>copyright etc...are addressed as well as Cybersecurity issues, strategies and resources and Cybersecurity is covered included: backing up, virus protection and firewalls, hoaxes, anti spam strategies, Netiquette etc... Accessibility is addressed related to eGames, relevant to operating systems to support and run- and gender/diversity/culturally appropriateness content in development of educational games</p>
<p>IV. Assessment for Administration and Instruction</p> <p>Use technology to analyze problems and develop data-driven solutions for instructional and school improvement.</p> <p>ISTE NETS*T IV A-C INTASC Principles 1, 7 UMCP Conceptual Framework 3,4,6,7 NCATE Framework 2 21st Century 6</p>	<p>1. Research and analyze data related to student and school performance.</p> <p>2. Apply findings and solutions to establish instructional and school improvement goals.</p> <p>3. Use appropriate technology to share results and solutions with others, such as parents and the larger community.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Theoretical perspective are explored and discussed as to gaming/simulations as an alternative assessment/activity—how to assess “outcomes” of these activities and gaming theory related to learning and motivation</p>

Standard and Outcomes	Indicators	Addressed in this course	Examples
<p>V. Integrating Technology into the Curriculum and Instruction</p> <p>Design, implement and assess learning experiences that incorporate use of technology in a curriculum-related instructional activity to support understanding, inquiry, problem solving, communication and/or collaboration.</p> <p>ISTE NETS*T II, III A- III D INTASC Principles 1, 2, 3, 4, 5, 7 UMCP Conceptual Framework 1,2,3,6,7 NCATE Framework 1,3 21st Century 1,2,3,4</p>	<p>1. Assess students’ learning/ instructional needs to identify the appropriate technology for instruction.</p> <p>2. Evaluate technology materials and media to determine their most appropriate instructional use.</p> <p>3. Select and apply research-based practices for integrating technology into instruction.</p> <p>4. Use appropriate instructional strategies for integrating technology into instruction.</p> <p>5. Select and use appropriate technology to support content-specific student learning outcomes.</p> <p>6. Develop an appropriate assessment for measuring student outcomes through the use of technology.</p> <p>7. Manage a technology-enhanced environment to maximize student learning.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Through multiple mini assignments and group activities student’s learn to assess needs, identify content material and strategies for instruction and develop ways to deliver and assess their products. Students evaluate technology materials (board games, eGames, software, pre-set teacher game templates, pre-existing simulations eGames etc...)and determine their most appropriate instructional use and strategies for integration.</p>
<p>VI. Assistive Technology</p> <p>Understand human, equity and developmental issues surrounding the use of assistive technology to enhance student learning performance and apply that understanding to practice.</p>	<p>1. Identify and analyze assistive technology resources that accommodate individual student learning needs.</p> <p>2. Apply assistive technology to the instructional process and evaluate its impact on learners with diverse</p>	<p><input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Somewhat—we discuss UD for aiding all students and ethical issues that arise when students and/or schools do not have the technologies available—if content is one sided (gender/English only etc..) reading levels etc...</p>

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<p>ISTE NETS*T VI A-E INTASC Principles 3, 9 UMCP Conceptual Framework 2,3,4,5 NCATE Framework 3,4 21st Century 2,3,4</p>	<p>backgrounds, characteristics and abilities.</p>		
<p>VII. Professional Growth Develop professional practices that support continual learning and professional growth in technology.</p> <p>ISTE NETS*T IA, IB, VA INTASC Principles 9 UMCP Conceptual Framework 1,2,3,7 NCATE Framework 1,5 21st Century 3,4,5</p>	<ol style="list-style-type: none"> 1. Create a professional development plan that includes resources to support the use of technology in lifelong learning. 2. Use resources of professional organizations and groups that support the integration of technology into instruction. 3. Continually evaluate and reflect on professional practices and emerging technologies to support student learning. 4. Identify local, state and national standards and use them to improve teaching and learning. 	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>The course journey allows participants to take knowledge learned and apply to their own classroom/training setting. Multiple resources for further investigation are included. Standards at the national, state, and LSS level as well as technology standards and IT Literacy standards for both educator and student are discussed and explored in detail.</p> <p>Board Game, eGame, Microworlds products, ICONS contributions, eGame Analysis are artifacts for documentation. Additionally, a wealth of resources are acquired throughout the course and available for students to return to in the future.</p>

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Correlation of the MTTs NETS*T & INTASC & UMCP & NCATE

MTTS Addressed							COE – UMCP Addressed							NCATE Addressed						INTASC Principles Addressed															
1	2	3	4	5	6	7	1	2	3	4	5	6	7	ISTE NETS-Teacher Standards						1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10
X						X	X	X					X	X	I. Technology Operations and Concepts. Teachers demonstrate a sound understanding of technology operation and concepts.	X	X				X		X										X		
		X		X			X		X	X	X	X		II. Planning and Designing Learning Environments and Experiences. Teachers plan and design effective learning environments and experiences supported by technology.	X		X				X			X	X	X			X						
			X	X				X	X	X	X			III. Teaching, Learning, and the Curriculum. Teachers implement curriculum plans, that include methods and strategies that apply technology to maximize student learning.			X	X				X	X	X	X	X			X						
			X						X	X		X	X	IV. Assessment and Evaluation. Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.		X						X								X					
X	X					X	X	X	X				X	X	V. Productivity and Professional Practice. Teachers use technology to enhance their productivity and professional practice.			X	X										X			X	X		
		X			X		X	X	X					X	VI. Social, Ethical, Legal, and Human Issues. Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PreK-12 schools and apply those principles in practice.	X					X				X							X			

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