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

Course Title: **Assessment and Design Strategies for Improving Student Learning: Utilizing Data with Technology Tools for Instructional Decisions**

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
I. Information Access, Evaluation, Processing and Application Access, evaluate, process and apply information efficiently and effectively. **ISTE NETS*T IA-IE, VC, VD** **INTASC Principles 1, 9** UMCP Conceptual Framework 1,2,6,7 NCATE Framework 1,2,5	1. Identify, locate, retrieve and differentiate among a variety of electronic sources of information using technology. 2. Evaluate information critically and competently for a specific purpose. 3. Organize, categorize and store information for efficient retrieval. 4. Apply information accurately in order to solve a problem or answer a question.	☒ **Yes** ☐ **No**	Students are asked to a) identify on their own and b) explore a wide selection of online resources, electronic tools (assessments and interactive surveys) and databases --students must evaluate, crtique, synthesize and organize data profiles on a number of case studies (including their own school/class) to solve a variety of questions
II. Communication **A**. Use technology effectively and appropriately to interact electronically. **ISTE NETS*T VC, VD** INTASC Principles **6, 9, 10** UMCP Conceptual Framework 4,3,6 NCATE Framework 1,3	1. Use telecommunications to collaborate with peers, parents, colleagues, administrators and/or experts in the field.	☒ **Yes** ☐ **No**	Students participate electronically via email, WebCT discussion threads, weekly chats, online guest speakers and through other online environments (Tapped-In ENT)
B. Use technology to communicate information in a variety of formats. **ISTE NETS*T VC, VD** INTASC Principles **6, 9** UMCP Conceptual Framework 1,4,5,6 NCATE Framework 1,3,6	1. Select appropriate technologies for a particular communication goal. 2. Use productivity tools to publish information. 3. Use multiple digital sources to communicate information online.	☒ **Yes** ☐ **No**	Students participate electronically via email, WebCT discussion threads, weekly chats, online guest speakers and through other online environments (Tapped-In ENT) Students also produce a varity of elctronically created materials to include, spreadsheets with EXCEL, online units through interactive online templates, tables, word documents with team editing and a variety of multi/hypermedia mini projects
III. Legal, Social and Ethical Issues Demonstrate an understanding of the legal, social and ethical issues related to technology use.	1. Identify ethical and legal issues using technology. 2. Analyze issues related to the uses of technology in educational settings. 3. Establish classroom policies	☒ **Yes** ☐ **No**	Ethical, social and legal issues are touched on throughout the course with particular emphasis and discussion devoted towards data collection impact on social, students and teacher rights and data confidentiality, as well as, assessment strategies and differential instruction that address cultural, gender, learning styles differences as well as NCLB mandates

Developed by:
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MTTS developed from Maryland's *Preparing Tomorrow's Teachers to Use Technology (PT3),* USDOE Catalyst Grant, May 2002.
Performance assessment materials to be available for each standard on the PT3 website: www.smcm.edu/msde-pt3/.
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For additional information, please contact Dr. Louise A. Tanney, PT3 Director, 410-767-0416.
ISTE/NETS -Educational Technology Standards and Performance Indicators for All Teachers http://cnets.iste.org/teachers/t_stands.html
INTASC - http://www.ccsso.org/content/pdfs/corestrd.pdf
NCATE - http://www.ncate.org/standard/m_stds.htm
UMCP COE Conceptual Framework www.edtechoutreach.umd.edu

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	and procedures that ensure compliance with copyright law, *Fair Use* guidelines, security, privacy and student online protection. 4. Use classroom procedures to manage an equitable, safe and healthy environment for students.		towards MSP/IMAP/AYP.
IV. Assessment for Administration and Instruction Use technology to analyze problems and develop data-driven solutions for instructional and school improvement. **ISTE NETS*T IV A-C** INTASC Principles **1, 7** UMCP Conceptual Framework 3,4,6,7 NCATE Framework 2	1. Research and analyze data related to student and school performance. 2. Apply findings and solutions to establish instructional and school improvement goals. 3. Use appropriate technology to share results and solutions with others, such as parents and the larger community.	☒ **Yes** ☐ **No**	This course was designed to address this standard. Please see course syllabi and outline.

Standard and Outcomes	Indicators	Addressed in this course	Examples
V. Integrating Technology into the Curriculum and Instruction 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. **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	1. Assess students' learning/ instructional needs to identify the appropriate technology for instruction. 2. Evaluate technology materials and media to determine their most appropriate instructional use. 3. Select and apply research-based practices for integrating technology into instruction. 4. Use appropriate instructional strategies for integrating technology into instruction. 5. Select and use appropriate technology to support content-specific student learning outcomes. 6. Develop an appropriate assessment for measuring student outcomes through the use of technology. 7. Manage a technology-enhanced environment to maximize student learning.	☒ **Yes** ☐ **No**	Addresses this standard briefly by highlighting the importance of including students in the process of developing rubrics, assessments, having students visit and utilize the online state assessment examples to both practice taking and scoring, having their students keep track of their own grades and learning goals via technology applications, and having participants become familiar and comfortable enough with spreadsheets and databases that they can utilize strategies and techniques to integrate within their own classroom.
VI. Assistive Technology Understand human, equity and developmental issues surrounding the use of assistive technology to enhance student learning performance and apply that understanding to practice. **ISTE NETS*T VI A-E** INTASC Principles **3, 9** UMCP Conceptual Framework 2,3,4,5	1. Identify and analyze assistive technology resources that accommodate individual student learning needs. 2. Apply assistive technology to the instructional process and evaluate its impact on learners with diverse backgrounds, characteristics and abilities.	x **Yes** x **No**	This course briefly investigates multiple learning styles and assessments and data modifications (IMAP) but does not investigate AT resources/devices

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INTASC - http://www.ccsso.org/content/pdfs/corestrd.pdf
NCATE - http://www.ncate.org/standard/m_stds.htm
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NCATE Framework 3,4			
VII. Professional Growth Develop professional practices that support continual learning and professional growth in technology. **ISTE NETS*T IA, IB, VA** INTASC Principles **9** UMCP Conceptual Framework 1,2,3,7 NCATE Framework 1,5	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.	☒ **Yes** ☐ **No**	The courses 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.

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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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