



Midwest Teachers Institute
Teachers Helping Teachers

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MTI 503-Learning and Implementing Common Core Math for Middle and High School

Instructor Information:	
Instructor Name:	Allison Spangler- M.Ed
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Instructor Background:	Ms. Spangler has a Masters of Education degree specializing as a Reading Specialist, from Olivet Nazarene University. Ms. Spangler is currently an elementary teacher involved in many leadership roles including grade level team leader and grade level math curriculum head for her district. Ms. Spangler also has extensive training in facilitating the PBIS framework Positive Intervention and Supports (PBIS) and serves as the internal coach within her building.

Course Information	
Course Format (distance learning, online, webinar, experiential onsite courses):	Online Course The LMS for delivering the course will be Canvas. An invitation will be sent to you by your instructor during the week prior to the start of your course. If you have not received an invitation, please email us at the MTI email address listed above.
Prerequisites	All MTI courses are designed for educators who have a minimum of a bachelor's degree and professional educator license. Prior to beginning the course, check with your district office to ensure that credit will be accepted for salary increase and professional development. All courses are for 3 graduate semester hours/credits. You may choose which partnering university you would like your transcript from when you register.

Required Books and Materials	<ul style="list-style-type: none"> ● Common Core Mathematics in a PLC at Work, Zimmermann, Carter, Kanold, Toncheff, SOLUTION TREE PRESS, Bloomington, Indiana, 2012. ISBN# 9781936765508 (<i>provided FREE with registration</i>) ● Internet access ● LMS- Canvas Account and Login ● Lesson plans and unit plans
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Learning Outcomes/Competencies:

At the completion of this course, the learner will be able to:

- Identify and describe the five essential paradigms to implement the CCSS for mathematics. InTASC 7, 8
- Work with fellow teachers as a collaborative team to improve learning for all students. InTASC 9, 10
- Use the various resources provided to find activities ready for immediate use in the classroom. InTASC 1, 4, 5
- Have a thorough understanding of the Standards for Mathematical Practice and Standards for Mathematical Content. InTASC 4
- Understand the importance of providing interventions and supports to help students successfully learn rigorous standards for college or career. InTASC 4, 5, 7, 8

Course Description: This course will provide teachers with strategies and resources to understand Common Core State Standards for mathematics and implementing lessons in their classroom. Teachers will be guided to improve teaching and learning through collaboration, instructional design, content and assessment shifts, as well as incorporating a response to intervention program.

Learning Strategies: Professional literature analysis, personal reflection, project-based learning.

Experiential Learning Opportunities: Students will be reflecting on the assessments and tools that they develop/learn about in class and measuring/estimating the intended impact on student learning in the classroom. Students will learn by doing while completing a variety of activities throughout the course.

Assessments		Approximate contact hours for each assessment
Answer and Discuss- Weekly Questions Posted By Instructor to Online Classroom at Canvas Forum. Questions Found On Canvas Classroom. One question per week for 5 weeks. 9 points per question.	45 points	6 hours
Reflect and Respond to 2 Posts Weekly (10 posts total) Made By Colleagues Online at Canvas Classroom Forum. 9 points per response.	90 points	9 hours

Application Assignments#1 and #2 (45 points ea)	90 points	10 hours
Research Project- Due end of week # 4	100 points	10 hours
Evaluation/Reflection Paper- Due end of week #5	100 points	10 hours
Total	425 points	45 hours
Grading Scale: A (90-100%); B (80-89%) <i>*Anything below a B will not receive graduate credit and result in a failing grade of F.</i>		
<p>If you do not receive a B or higher, your work will be returned to you for further correction and completion. You will be allowed one (1) re-submit to your instructor to achieve a grade of B or higher. If after your re-submit, you still do not achieve a B or higher you will receive a failing grade of F and therefore forfeit the 3 graduate credits.</p>		

Answer and Discuss Rubric- 5 questions @ 9 points each			
Category	Superior (3 pts)	Sufficient (2 pts)	Minimal(1pt)
<i>Supporting Evidence in Practice</i> ___/3	Response shows strong evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows some evidence of ideas and insights from this course and how they are applied to the classroom.
<i>Accuracy</i> ___/3	All supporting facts and statistics are accurately represented.	Almost all supporting facts and statistics are accurately represented.	Some of the supporting facts and statistics are accurately represented.
<i>Grammar and Spelling</i> ___/3	Response includes 0-1 mistakes in grammar or spelling.	Response includes a few grammar and spelling mistakes.	Response includes several grammar and spelling mistakes.

Reflect and Response Rubric- 10 responses @ 9 points each			
Category	Superior (3 pts)	Sufficient (2 pts)	Minimal(1pt)
<i>Supporting Evidence in Practice</i> ___/3	Response shows strong evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows some evidence of ideas and insights from this course and how they are applied to the classroom.
<i>Accuracy</i> ___/3	All supporting facts and statistics are accurately represented.	Almost all supporting facts and statistics are accurately represented.	Some of the supporting facts and statistics are accurately represented.
<i>Grammar and Spelling</i> ___/3	Response includes 0-1 mistakes in grammar or spelling.	Response includes a few grammar and spelling mistakes.	Response includes several grammar and spelling mistakes.

Application Rubric- 2 assignments @45 points each			
Category	Superior (15-13 pts)	Sufficient (12-10 pts)	Minimal(9-7pts)
Supporting Evidence in Practice ____/15	Response shows strong evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows some evidence of ideas and insights from this course and how they are applied to the classroom.
Accuracy ____/15	All supporting facts and statistics are accurately represented.	Almost all supporting facts and statistics are accurately represented.	Some of the supporting facts and statistics are accurately represented.
Grammar and Spelling ____/15	Response includes 0-1 mistakes in grammar or spelling.	Response includes a few grammar and spelling mistakes.	Response includes several grammar and spelling mistakes.

Project Rubric-100 points			
Category	Superior (20-18 pts)	Sufficient (17-16 pts)	Minimal (15-14pts)
Understanding of web tool ____/20	Shows strong understanding of activity, concept, or tool and maximize learning	Shows adequate understanding of activity, concept, or tool and benefit learning.	Shows little understanding of activity, concept, or tool and may not benefit learning.
Practical evidence ____/20	Shows strong evidence of ideas and insights gained from this course and how they are applied to classroom.	Shows evidence of ideas and insights from this course and how they are applied to classroom.	Shows little evidence of ideas and insights from this course or how they are applied to the classroom.
Completion ____/20	Completed in a thoughtful and meaningful manner.	Completed, but with minimal quality.	Not all projects are completed and of those that are, some are minimal quality.
Grammar and Spelling ____/20	Includes no mistakes in grammar or spelling.	Includes few grammar and spelling mistakes.	Includes numerous grammar and spelling mistakes.
Sequencing ____/20	Sequenced, showing if-then thinking and the logical order required to complete skill, solve problem, or use tool.	Not always sequenced, showing incomplete if-then thinking and understanding of logical order required to complete skill.	Confusing making it difficult to replicate activities; little understanding of logic or if-then thinking evidenced.

Evaluation Rubric- 100 points				
Category	Superior (20-17 pts)	Sufficient (16-13 pts)	Minimal(12-9pts)	Below Standard (8 pts)
Supporting Evidence in Practice ____/20	Response shows strong evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows some evidence of ideas and insights from this course and how they are applied to the classroom.	Response shows little evidence of ideas and insights from this course and there is little evidence they are applied to the classroom.

Accuracy ____/20	All supporting facts and statistics are accurately represented.	Almost all supporting facts and statistics are accurately represented.	Some of the supporting facts and statistics are accurately represented.	Many of the supporting facts and statistics are inaccurately represented.
Grammar and Spelling ____/20	Response includes 0-1 mistakes in grammar or spelling.	Response includes a few grammar and spelling mistakes.	Response includes several grammar and spelling mistakes.	Response includes numerous grammar and spelling mistakes.
Logical Sequencing ____/20	Response is written in a clear, concise, and well organized manner. Thoughts are presented in a coherent and logical manner.	Response is mostly clear, concise, and well organized. Thoughts are presented in a coherent and logical manner.	Response is somewhat unclear and/or disorganized. Some thoughts are presented in a coherent and logical manner.	Response is mostly unclear and/or disorganized. Many thoughts are presented in an incoherent and illogical manner.
Reflection ____/20	Response demonstrates an in-depth reflection on, and personalization of, the theories, concepts, and /or strategies presented in this course.	Response demonstrates some reflection on, and personalization of, the theories, concepts, and /or strategies presented in this course.	Response demonstrates a minimal reflection on, and personalization of, the theories, concepts, and /or strategies presented in this course.	Response demonstrates no reflection on, and personalization of, the theories, concepts, and /or strategies presented in this course.

Course Schedule

**All assignments must be completed the week assigned. In emergencies, please contact instructor.*

Week 1 – Introduction to Course and LMS-Canvas Tutorial

- Syllabi/Assignment Review
- Read Chapter 1 in your textbook.
- Answer and Discussion Activity- Answer Week #1 Instructor Posted Online Question by Tuesday.
- Reflect and Respond Activity- Post/Communicate 2 Responses Online To Your Colleagues Answers by Thursday.

Week 2 – CCSS Mathematical Practice

- Read Chapter 2 in your textbook.
- Answer and Discussion Activity- Answer Week #2 Instructor Posted Online Question by Tuesday.
- Reflect and Respond Activity- Post/Communicate 2 Responses Online To Your Colleagues Answers by Thursday.

Application #1- Due Sunday end of week #2 (45 points)

Choose a unit in one of your current classes and complete the CCSS Mathematical Lesson Planning tool.

Week 3 –CCSS Mathematics Content

- Read Chapter 3 in your textbook.
- Answer and Discussion Activity- Answer Week #3 Instructor Posted Online Question by Tuesday.

- Reflect and Respond Activity- Post/Communicate 2 Responses Online To Your Colleagues Answers by Thursday.

Application #2- Due Sunday end of week #3 (45 points)

Using one of the resources provided at the end of every chapter, find a Common Core aligned task you could use with your students. Explain what Mathematical Practices will be encountered addressing which Mathematical Standard(s). Explain where your students may struggle and what advancing and assessing questions you will ask. What formative feedback will you provide and how will you address student misconceptions? Consider the various questions provided in Chapter 2 to analyze the use of this task in your classroom. Write 2 to 3 pages

Week 4 –Teaching-Assessing-Learning Cycle

- Read Chapter 4 in your textbook.
- Answer and Discussion Activity- Answer Week #4 Instructor Posted Online Question by Tuesday.
- Reflect and Respond Activity- Post/Communicate 2 Responses Online To Your Colleagues Answers by Thursday.

Research Assignment- Due Sunday end of week #4 (100 points)

Research this course topic and locate a relevant article that relates to the course content. You will write an article review and personal reflection connecting the article with this course content and your current school environment.

** Please include a copy of your article with submission of your work

** Reflection should be 3 to 5 pages in APA format.

** Include personal experiences and perspectives.

** Use several informative references to substantiate your paper.

** Cite your work

Week 5 –Response to Intervention

- Read Chapter 5 in your textbook
- Answer and Discussion Activity- Answer Week #5 Instructor Posted Online Question by Tuesday.
- Reflect and Respond Activity- Post/Communicate 2 Responses Online To Your Colleagues Answers by Thursday.

Final Evaluation Assignment due by Sunday night end of week # 5 (100 points)

Choose a course you teach and review the current curriculum. Use what you have learned in the book as well as Appendix B and C to discuss in depth the necessary changes that need to be made to align with the Common Core. If your curriculum is already aligned, explain what process was used.

Available online are several examples of how other states have transformed their curriculum. Cite any sources you use. Write 3 to 5 pages.

End of Course Survey

Now that you are finished with this class, please take the time to help us improve our product. In order to make sure that we are providing the best possible service, please take our [survey](#).

We appreciate your help and your commitment to the profession.

Academic Honesty

Academic dishonesty is any form of cheating which results in students giving or receiving unauthorized assistance in an academic exercise or receiving credit for work which is not their own. Any academic dishonesty is grounds for dismissal. Any student judged to be engaged in cheating may receive a failing grade for the course, or any other penalty, which the instructor finds appropriate. Academic dishonesty is a behavioral issue, not an issue of academic performance. As such, it is considered an act of misconduct and is also subject to the University disciplinary process as defined in the Student Code of Conduct.

Acts of Dishonesty Include:

- Cheating—intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit or hours.
- Fabrication—intentional and unauthorized falsification or invention of information or citation in an academic exercise.
- Facilitating Academic Dishonesty—intentionally or knowingly helping or attempting to help another to violate a provision of the institutional code of academic integrity.
- Plagiarism—the deliberate adoption or reproduction of ideas, words, or statements of another person as one’s own without acknowledgement.

Unauthorized Collaboration—intentionally sharing information or working together in an academic exercise when the course instructor does not approve such actions.

ADA Statement

The University abides by the Americans with Disability Act and Section 504 of the Rehabilitation Act of 1973, which stipulates that no student shall be denied the benefits of an education “solely by reason of a handicap.” If you have a documented disability that may affect your work in this class and for which you may require accommodations, please contact the Disability Resource Coordinator as soon as possible to arrange accommodations. In order to receive accommodations, you must be registered with and provide documentation of your disability to the Disability Resource Office.

The Disability Resource office will provide Extended Studies with documentation of the disability and any accommodations that are needed.

InTASC Principles

The ten INTASC standards are listed below. Specific standards for knowledge, dispositions, and performances accompany each principle, but space does not permit listing them below. For a complete copy of the INTASC standards, contact Jean Miller, Director of INTASC, Suite 700, One Massachusetts Avenue NW, Washington DC 20001-1431.

The InTASC Model Core Teaching Standards (April 2011)

The Learner and Learning

Standard #1: 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.

Standard #2: Learning Differences

The teacher uses 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.

Content Knowledge

Standard #4: Content Knowledge

The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

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.

Instructional Practice

Standard #6: Assessment

The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

Standard #7: Planning for Instruction

The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills,

and pedagogy, as well as knowledge of learners and the community context.

Standard #8: Instructional Strategies

The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Professional Responsibility

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.

Standard #10: Leadership and Collaboration

The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.