



# Teacher Education and Certification

## EDUC 5100 – Course Syllabus

Course Title:	PLTW core training
Course Number:	EDUC 5100, 1-8 credit hours (variable and repeatable)
Course Schedule:	PLTW – Core training schedule
Course Location:	Kansas City (or other training hub) or online
Instructor’s Name and Contact Information:	<i>By Section:</i> Dr. Stuart Baur – Engineering, <a href="mailto:baur@mst.edu">baur@mst.edu</a> Dr. Dave Westenberg – Biomedical Science, <a href="mailto:djwesten@mst.edu">djwesten@mst.edu</a> Dr. Joe Stanley – Computer Science, <a href="mailto:stanleyj@mst.edu">stanleyj@mst.edu</a> Dr. Michelle Schwartz – Launch, <a href="mailto:schwartzem@mst.edu">schwartzem@mst.edu</a> Mr. Dave Hosick – Gateway, <a href="mailto:hosickd@mst.edu">hosickd@mst.edu</a>
Department Info:	Teacher Education and Certification Phone: 573-341-4692 Email: <a href="mailto:teachered@mst.edu">teachered@mst.edu</a>
Office Hours:	8:30am – 4:30pm
Availability:	By email
Course Description:	Graduate-level Project Lead The Way course prepares K-12 educators to become more effective teachers of STEM-focused material.
Student Outcomes:	<ul style="list-style-type: none"><li>- Students will complete PLTW core training, submit the PLTW Core Training Certificate and a graduate level paper that includes a course summary, personal reflection, implementation plan and curriculum alignment.</li><li>- Students will be fully prepared to implement PLTW in their classrooms.</li></ul>
Assignments: (Submitted by email)	<ol style="list-style-type: none"><li>1. Submit PLTW Core Training Certificate of Completion</li><li>2. Write a graduate-level paper:<ul style="list-style-type: none"><li>- Summarize the Core Training</li><li>- Include a Curriculum Alignment to your district, state and national curriculum standards across at least two disciplines.</li><li>- Create an Implementation Plan (or discuss plan implemented)</li><li>- Reflect on the core training, the learning experiences, and implications for the impact on future learning. (See Rubric)</li></ul></li></ol>
Grading Scale:	90% - 100%    A 80% - 89%     B 70% - 79%     C 60% - 69%     D Below 60%      F



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GRADE	CRITERIA AND GUIDELINES
A	Excellent
B	Superior
C	
D	
S	Satisfactory (Indicates credit has been earned for a course scheduled)
F	
I	Incomplete (Effective spring 2001 the incomplete grade time limit will require the student to complete the course work in which they are deficient within one calendar year from the close of the semester in which the “I” grade was recorded.)
U	Unsatisfactory (Indicates credit has not been earned for course scheduled.)
Professional Behavior:	Unsatisfactory professional behavior in field experiences as deemed by the professor, cooperating teacher and/or director of the program may result in the prevention of admittance to or dismissal from professional standing.
Academic Dishonesty:	<a href="https://registrar.mst.edu/academicregs/">https://registrar.mst.edu/academicregs/</a> The Student Academic Regulations handbook describes the student standard of conduct relative to the System's Collected Rules and Regulations section 200.010, and offers descriptions of academic dishonesty including cheating, plagiarism or sabotage.
Title IX:	Missouri University of Science and Technology is committed to the safety and well-being of all members of its community. US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. Furthermore, in accordance with Title IX guidelines from the US Office of Civil Rights, Missouri S&T requires that all faculty and staff members report, to the Missouri S&T Title IX Coordinator, any notice of sexual harassment, abuse, and/or violence (including personal relational abuse, relational/domestic violence, and stalking) disclosed through communication including but not limited to direct conversation, email, social media, classroom papers and homework exercises. To learn more about Title IX resources and reporting options (confidential and non-confidential) available to Missouri S&T students, staff, and faculty, please visit <a href="http://titleix.mst.edu">http://titleix.mst.edu</a> .

Missouri S&T- PLTW Core Training Graduate Paper

Criteria	Excellent-4	Proficient-3	Needs Improvement-2	Unacceptable-1	Total
<p>Mechanics:</p> <ul style="list-style-type: none"> <li>Organization</li> <li>Fluency, spelling, and grammar</li> <li>APA</li> </ul>	<p>Writing:</p> <ul style="list-style-type: none"> <li>has logical organization with appropriate transitions</li> <li>has intro and conclusion that are tightly connected</li> <li>is predominantly error free (Sp.&amp;Gr.)</li> <li>demonstrates effective word choice, and varied sentence structure</li> <li>APA is followed</li> </ul>	<p>Writing:</p> <ul style="list-style-type: none"> <li>has adequate transitions relating most ideas</li> <li>has acceptable intro and conclusion</li> <li>may have a few minor errors that do not distract</li> <li>Word choice and sentence structures are effective.</li> <li>1-2 APA requirements omitted or inaccurate</li> </ul>	<p>Writing:</p> <ul style="list-style-type: none"> <li>weak relationship between paragraphs</li> <li>Intro and conclusion lack Focus.</li> <li>frequent and distracting errors</li> <li>Word choice and sentence structures are novice but demonstrate thinking.</li> <li>several APA requirements omitted or inaccurate</li> </ul>	<p>Writing:</p> <ul style="list-style-type: none"> <li>Organization is confusing.</li> <li>Intro and/or conclusion are missing or irrelevant.</li> <li>Multiple errors limit understanding.</li> <li>Inaccurate use of words and sentence structures cause confusion.</li> <li>APA was not utilized.</li> </ul>	
Core Training Summary	Summary contains clear introduction, followed with elaboration using detailed examples of experiences.	Introduction is included, with some detailed examples.	Introduction is weak, and few detailed examples are given.	Introduction is missing or confusing, specific examples are not present.	
Curriculum Alignment Document	Alignment specifically connects PLTW to district, state, and national curriculum objectives across several disciplines.	Alignment shows general connection between PLTW to district, state and national curriculum objectives within at least two disciplines.	Alignment shows some connection between PLTW to at least two levels of curriculum objectives within at least two disciplines.	Alignment may show connection at only one level or only one discipline.	
Implementation Plan	Plan is tightly connected to curriculum alignment across disciplines and student experiences. It includes a variety of strategies for differentiating instruction.	Plan is connected to curriculum with adequate integration across content areas. Some differentiation strategies are included. Student experiences are loosely connected.	Little connection to related content areas. Differentiation strategies are vague or bare minimum. Little consideration for student experiences.	No connection to other disciplines or student experiences. Differentiation is not evident.	
Professional Reflection	The reflection is an analysis of the core training, detailing the student's learning experiences. It also includes implications for impact on future learning and value.	The reflection includes general analysis that describes some thinking and learning, including some implications for impact on future learning and value.	The reflection briefly analyzes thinking and learning experiences, with little emphasis on future learning and value.	The reflection does not describe the student's thinking/learning processes, or present implications for future learning. Analysis is minimal and does not demonstrate value.	
Total	_____ /20 X 5 = _____ /100				