## UMBC UGC New Course Request: EDUC 412M Introduction to Middle Level Teaching and Learning

Date Submitted: 11/10/2015

Proposed Effective Date: TBD

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#### **COURSE INFORMATION:**

Course Number(s)	EDUC 412M
Formal Title	Introduction to Middle Level Teaching and Learning
Transcript Title (≤30c)	Intro Middle Teaching Learning
Recommended Course Preparation	EDUC 310, EDUC 311 OR PSYC 200
Prerequisite NOTE: Unless otherwise indicated, a prerequisite is assumed to be passed with a "D" or better.	Department Consent Required
Credits	3
Repeatable?	🗌 Yes 🖾 No
Max. Total Credits	3 This should be equal to the number of credits for courses that cannot be repeated for credit. For courses that may be repeated for credit, enter the maximum total number of credits a student can receive from this course. E.g., enter 6 credits for a 3 credit course that may be taken a second time for credit, but not for a third time. Please note that this does NOT refer to how many times a class may be retaken for a higher grade.
Grading Method(s)	Reg (A-F) Audit Pass-Fail

#### PROPOSED CATALOG DESCRIPTION (no longer than 75 words):

This course is an introduction to a systematic approach to instruction for middle grades (4-9). Special emphasis is placed on formal lesson plan development, use of research-supported strategies, and methods of differentiation. The use of technology resources in instructional planning is emphasized. Students will develop skills to create meaningful learning experiences for students of diverse cultural, ethnic, linguistic and intellectual backgrounds. These skills are then practiced in actual peer teaching situations that may occur off campus.

#### RATIONALE FOR NEW COURSE:

The Maryland State Department of Education (MSDE) has added middle school (grades 4-9) to its areas of teacher certification. In order to be competitive within the State and serve the UMBC students who want to specialize in STEM education at the middle school level, the education department is proposing a new Middle School STEM Education degree. To meet rigorous standards for middle grades teachers established by the Association for Middle Level Education, EDUC412M will be offered annually as an upper level course.

This course will introduce middle grades preservice teachers to the formal lesson planning process. This course is a critical prerequisite to the internship experience, which is required by the state of Maryland for teacher certification. Similar courses already in existence focus on issues specific to secondary and elementary education. Middle grades, however, offer a unique set of issues (e.g., developmental, content) not addressed directly in existing courses. By placing this course at the 400 level, it is situated after the introductory courses but before the final internship experiences.

#### ATTACH COURSE OUTLINE (mandatory):

#### EDUC 412/602 Analysis of Teaching and Learning Fall 2012

Section: 01-LEC (1845) Instructor: Dr. Christopher Rakes Office: Sherman Hall A Room 415 Email: <u>rakes@umbc.edu</u>

The mission of the UMBC Teacher Education Unit is to research teaching and learning and to develop educators who are caring, thoughtful, knowledgeable, skilled, and responsive. We expect our graduates to respect diversity, and to be developing the dispositions that will ensure they can become leaders in their schools, and advocates for democracy and social justice.

## **Course Description**

This course is an introduction to a systematic approach to instruction for middle grades (4-9). Special emphasis is placed on formal lesson plan development, use of research-supported strategies, and methods of differentiation. The use of technology resources in instructional planning is emphasized. Students will develop skills to create meaningful learning experiences for students of diverse cultural, ethnic, linguistic and intellectual backgrounds. These skills are then practiced in actual peer teaching situations that may occur off campus.

#### **Classroom Accommodations for Students with Disabilities**

If you are a student with a documented disability who requires an academic adjustment, auxiliary aids, or similar accommodations, please contact the Office of Student Support Services at 410-445-3250.

#### UMBC Department of Education Conceptual Framework (CF)

#### **Tenet One - Academic Strength**

Initial certification candidates demonstrate academic strength by completing both a disciplinary major and a program of professional courses. Advanced program candidates demonstrate knowledge and skills by completing a program focused on content, pedagogy, leadership, and research.

#### **Tenet Two - Professional Development Continuum**

Initial certification candidates develop professional teaching competencies through sequenced academic and pedagogical experiences in various learning and field-based contexts. Advanced program candidates increase their mastery of content, pedagogy, leadership, and clinical research in their respective professional contexts.

#### **Tenet Three: Diversity**

Candidates in initial and advanced programs demonstrate and apply proficiencies related to diversity and equity in teaching and learning. Candidates provide learning experiences that engage students of varying backgrounds and abilities, and practice inclusive pedagogy accommodating students' strengths and needs.

#### **Course Relationship to Conceptual Framework**

In this course, candidates will develop critical thinking skills regarding research based learning theories and teaching strategies (CF 1). They will use their inquiry, critical thinking and reflective skills through planning and implementing lessons and assessing student growth to maximize the learning of students with varying backgrounds and abilities (CF 2, 3). Through personal reflection and evaluation of the classroom teaching and learning experiences candidates will become problem solvers and improve their knowledge and pedagogy (CF 2). Candidates will develop collaborative relationships and demonstrate service through class group work, field work partnerships with local schools and communicating with UMBC faculty (CF 2). Advocacy and professional leadership will emerge as the candidates become more confident in their knowledge of teaching (CF 1, 2).

#### **Course Overview and Objectives**

In this course, students will:

- Use pre-assessment of middle grades students' needs and diverse backgrounds to develop and evaluate instructional outcomes, strategies and plans that promote learning (AMLE Standards 1, 3; INTASC Principles #1, 2; CF2).
- 2. Develop and evaluate behavioral objectives that address cognitive, affective, and psychomotor domains of learning (AMLE Standard 4; INTASC Principle #7).
- 3. Develop and evaluate instructional opportunities that encourage critical thinking, problemsolving, and performance skills (AMLE Standards 1, 3, 4; INTASC Principle #4, 5, 7).
- 4. Enhance student motivation to achieve learning goals by activating prior knowledge, addressing multiple learning styles and intelligences, and incorporating a variety of instructional techniques in lesson planning (AMLE Standards 1, 3, 4; INTASC Principles #2, 8).
- 5. Assess student learning systematically by planning assessment that is based upon the curriculum goals and behavioral objectives (AMLE Standards 2, 4; INTASC Principles #6, 7).
- 6. Develop and evaluate a variety of different types of assessments, including formal and informal, criterion-referenced, norm-referenced, performance- and portfolio-based evaluations (AMLE Standard 4; INTASC Principles #6, 8).
- 7. Create short and long-range learning plans that are linked to curriculum goals (AMLE Standards 2, 4; INTASC Principle #7).
- 8. Evaluate lesson plans and learning experiences in relation to short-range and long-range goals (AMLE Standards 2, 4; INTASC Principles #6, 7, 9).
- 9. Adjust instructional plans to meet student needs and enhance learning, based on classroom monitoring strategies, student responses, and assessment data (AMLE Standards 1, 2, 3, 4; INTASC Principles #6, #8).
- 10. Enhance lesson plans and student learning with multimedia communication and technological resources (AMLE Standard 4; INTASC Principles #4, 5, 7, 8).

#### **Plagiarism and Academic Dishonesty Statement**

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community, in which everyone's academic work and behavior are held to the highest standards of honesty. **Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong.** Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal.

All assignments, quizzes, and examinations are under the Academic Integrity Policy. You **must** cite the sources of your ideas, activities, diagrams, and other information for papers and lesson plans. For example, if you use an activity from an elementary school mathematics textbook for one of your lesson plans, provide the source. Since a major purpose of written course assignments is to give you experience in using various sources of information and ideas, incorporating ideas from the other sources is encouraged as long as you cite. Generally, however, when you are preparing final copy for graded assignments, I will expect the assignment to be written in your own words. Please ask if you ever have doubts about what is acceptable collaboration.

#### TK20

The Secondary Education Program uses TK20 for all key assessments in its courses and internship. If you do not already have a TK20 account, you are required to purchase one. A TK20 student membership may be purchased at <u>https://umbc.tk20.com/campustoolshighered/admissions1.do</u>. The student fee is \$103 for a five-year account.

## **Class Schedule**

Week	Торіс	Reading to Prepare for Class	Assignments Due		
1	Classroom Management	In Class Readings:			
	Behavior Management	<ul> <li>Epstein et al (2008)</li> </ul>			
	Reform Pedagogy	Shrewsbury (1993)			
	Designing Classroom Environments	http://www.simplypsychol			
	Student Motivation	ogy.org/kohlberg.html			
2	Learning Theory	How People Learn Chapters 1, 4,	TK-20 Account		
	<ul> <li>Planning and Teaching</li> </ul>	and 7	Purchased		
	Preparation of Lesson #1				
3	Meet the Students of Violetville	• https://www.cmu.edu/teac	Praxis Content		
	Introduction to Assessment	hing/assessment/	Reflection (TK-20)		
	Rigor-Relevance (R/R) Framework				
	Preparation of Lesson #1				
4	Intelligence, Temperament, Learning	http://www.tecweb.org/st			
	Styles	yles/gardner.html			
	<ul> <li>Preparation of Lesson #1</li> </ul>	<ul> <li>Paschler et al. (2007)</li> </ul>			
5	Teach Lesson #1 (R/R Framework)		Lesson 1 (Draft)		
6	Planning for Diversity: UDL	http://beyondpenguins.ehe.osu.	Lesson 1 (Final)		
	Classroom Assessment Techniques:	edu/issue/energy-and-the-			
	Questioning	polar-environment/questioning-			
	Preparation of Lesson #2	techniques-research-based-			
		strategies-for-teachers			
7	<ul> <li>Preparation of Lesson #2</li> </ul>				
	Introduction to Task Rotation				
8	<ul> <li>Teach Lesson #2 (R/R Framework, MI, UDL)</li> </ul>		Lesson 2 (Draft)		
9	Task Rotation (Continued)		Lesson 2 (Final)		
	Choosing Tasks and Problems to Support				
	Student Learning				
	<ul> <li>Preparation of Lesson #3</li> </ul>				
10	<ul> <li>Normative and Criterion Referenced</li> </ul>	<u>http://www.edpsycinteract</u>			
	Tests	ive.org/topics/measeval/cr			
	Preparation of Lesson #3	<u>nmref.html</u>			
11	<ul> <li>Teach Lesson #3 (Task Rotation, R/R</li> </ul>		Lesson 3 (Draft)		
	Framework, MI, UDL)				
12	Concept Maps	https://www.cmu.edu/teaching	Lesson 3 (Final)		
	<ul> <li>Preparation of Lesson #4</li> </ul>	/assessment/assesslearning/con			
		<u>ceptmaps.html</u>			
13	Teach Lesson #4 (Concept Map, Task     Detation D (D Framework Mt UD))		Lesson 4 (Draft)		
	Rotation, R/R Framework, MI, UDL)				
14	Professional Growth Discussion		Lesson 4 (Final)		
Finals Week					
Lesson Enhancements (TK-20)					

## Course Assessment, Evaluation, and Grading

RequirementOverviewof PointsActive class participation and interactions with colleaguesEach class will require you to be actively engaged and contribute to the participation and interactions with colleaguesInteractions with sourcesstion with your best thinking. When you are absent, the learning you miss will affect your success in teaching effectively for this course. Group lesson planning is an integral component of this course. Positive, professional interactions are required. Clear communication between group members is critical to success.50Prasis Content Reflection AssignmentYou will reflect on your preparedness for the middle school mathematics and science knowledge licensure exams (Test Codes 5169 and 5440). You will reflect on your initial perceptions of your preparedness level, complete a practice exam, and reflect on the results of the practice exam.50Prasis Principles of surgeis and Teaching (PLT 5-9) ReflectionYou will reflect on their preparedness for the licensure exam of general teaching of your preparedness level, complete a practice exam, and reflect on the results of the practice exam.50Prasis Principles of teled Placement Lessons4 content-based group lessons planned and then taught at a local PDS field placement o 100 points per lesson400Pield Placement Lesson sneed to align to the MD State curriculum standard provided. Apply all of the knowledge, skills, strategies, dispositions, and performances that we have learned throughout this course to your lesson design. Each lesson #1: Rigor & Relevance (R/R) Framework i Lesson #3: Task Rotation, R/R Framework, MI, UDL i Lesson #3: Task Rotation, R/R Framework, MI, UDL i Lesson #3: Task Rotation, R/R Framework, MI, UDL i Lesso	Course		Number	
participation and interactions with colleagues       conversation with your best thinking. When you are absent, the learning you miss will affect your success in teaching effectively for this course. Positive, professional interactions are required. Clear communication between group members is critical to success.         Praxis Content       You will reflect on your preparedness for the middle school mathematics and science knowledge licensure exams (Test Codes 5169 and 5440). You will reflect on your initial perceptions of your preparedness level, complete a practice exam, and reflect on the results of the practice exam.       50         Praxis Principles of Learning and Teaching (PLT 5-9) Reflection       You will reflect on your preparedness for the licensure exam of general teaching strategies and differentiated instruction. You will reflect on your initial perceptions of your preparedness level, complete a practice exam, and reflect on the results of Assignment       50         Field Placement Lessons       • 4 content-based group lessons planned and then taught at a local PDS field placement • 100 points per lesson • Each content group will plan, design, and teach four 50-minute lessons to a population of high needs students. • The lessons are devoleded as small groups based on common discipline and available students. • Lessons need to align to the MD State curriculum standard provided. Apply all of the knowledge, skills, strategies, dispositions, and performances that we have learned throughout this course to your lesson design. Each lesson will include at least one required component based on topics learned in class.: • Lesson #3: Task Rotation, R/R Framework, MI, UDL • Lesson #2: R/R Framework, MI, UDL • Lesson #3: Task Rotation, R/R Framework, MI, UDL • Lesson #4 Concept Map, Task Rotation, R/R Framework, MI, UDL • Lesson #4 Concept Map, T	Requirement	Overview	of Points	
Reflection Assignment       science knowledge licensure exams (Test Codes 5169 and 5440). You will reflect on your initial perceptions of your preparedness level, complete a practice exam, and reflect on the results of the practice exam.         Praxis Principles of       You will reflect on their preparedness for the licensure exam of general teaching strategies and differentiated instruction. You will reflect on the results of the practice exam.       50         Praxis Principles of       You will reflect on their preparedness for the licensure exam of general teaching strategies and differentiated instruction. You will reflect on the results of Assignment       50         Field Placement       • 4 content-based group lessons planned and then taught at a local PDS field placement       400         Lessons       • 100 points per lesson       • 100 points per lesson       400         • Each content group will plan, design, and teach four 50-minute lessons to a population of high needs students.       • The lessons are developed as small groups based on common discipline and available students.       • Lessons need to align to the MD State curriculum standard provided.         Apply all of the knowledge, skills, strategies, dispositions, and performances that we have learned throughout this course to your lesson design. Each lesson #1: Rigor & Relevance (R/R) Framework       • Lesson #1: Rigor & Relevance (R/R) Framework, MI, UDL       • Lesson #2: R/R Framework, MI upL       • Lesson #2: R/R Framework, MI, UDL       • Lesson #3: Task Rotation, R/R Framework, MI, UDL       • Lesson #3: Task Rotation, R/R Framework, MI, UDL       • Take into consideration the classroom e	participation and interactions with colleagues	conversation with your best thinking. When you are absent, the learning you miss will affect your success in teaching effectively for this course. Group lesson planning is an integral component of this course. Positive, professional interactions are required. Clear communication between group members is critical to success.		
Learning and Teaching (PLT 5-9) Reflection Assignmentstrategies and differentiated instruction. You will reflect on your initial perceptions of your preparedness level, complete a practice exam, and reflect on the results of the practice exam.Field Placement Lessons• 4 content-based group lessons planned and then taught at a local PDS field placement40000 points per lesson • Each content group will plan, design, and teach four 50-minute lessons to a population of high needs students. • The lessons are developed as small groups based on common discipline and available students. • Lesson need to align to the MD State curriculum standard provided. Apply all of the knowledge, skills, strategies, dispositions, and performances that we have learned throughout this course to your lesson design. Each lesson will include at least one required component based on topics learned in class.: • Lesson #2: R/R Framework, Multiple Intelligences (MI), Universal Design for Learning (UDL) • Lesson #3: Task Rotation, R/R Framework, MI, UDL • Lesson #3: Task Rotation, R/R Framework, MI, UDL • Take into consideration the classroom environment/climate, activating prior knowledge, aligning objectives with lesson activities and appropriate assessment(s). • Incorporate multiple learning styles and/or intelligences.100Lesson Enhancements You will reflect on one of the four lessons taught during the course. Based on that reflect on, you will revise the lesson and create two enhancements to improve student learning.100		science knowledge licensure exams (Test Codes 5169 and 5440). You will reflect on your initial perceptions of your preparedness level, complete a practice exam, and	50	
Lessons       placement         • 100 points per lesson         • Each content group will plan, design, and teach four 50-minute lessons to a population of high needs students.         • The lessons are developed as small groups based on common discipline and available students.         • Lesson sneed to align to the MD State curriculum standard provided. Apply all of the knowledge, skills, strategies, dispositions, and performances that we have learned throughout this course to your lesson design. Each lesson will include at least one required component based on topics learned in class.: <ul> <li>Lesson #1: Rigor &amp; Relevance (R/R) Framework</li> <li>Lesson #2: R/R Framework, Multiple Intelligences (MI), Universal Design for Learning (UDL)</li> <li>Lesson #3: Task Rotation, R/R Framework, MI, UDL</li> <li>Lesson #4 Concept Map, Task Rotation, R/R Framework, MI, UDL</li> <li>Take into consideration the classroom environment/climate, activating prior knowledge, aligning objectives with lesson activities and appropriate assessment(s).</li> <li>Incorporate multiple learning styles and/or intelligences.</li> </ul> <li>Lesson Enhancements</li> <li>You will reflect on one of the four lessons taught during the course. Based on that reflection, you will revise the lesson and create two enhancements to improve student learning.</li>	Learning and Teaching (PLT 5-9) Reflection	strategies and differentiated instruction. You will reflect on your initial perceptions of your preparedness level, complete a practice exam, and reflect on the results of	50	
reflection, you will revise the lesson and create <b>two</b> enhancements to improve student learning.	Lessons	<ul> <li>placement</li> <li>100 points per lesson</li> <li>Each content group will plan, design, and teach four 50-minute lessons to a population of high needs students.</li> <li>The lessons are developed as small groups based on common discipline and available students.</li> <li>Lessons need to align to the MD State curriculum standard provided. Apply all of the knowledge, skills, strategies, dispositions, and performances that we have learned throughout this course to your lesson design. Each lesson will include at least one required component based on topics learned in class.: <ul> <li>Lesson #1: Rigor &amp; Relevance (R/R) Framework</li> <li>Lesson #1: Rigor &amp; Relevance (R/R) Framework</li> <li>Lesson #2: R/R Framework, Multiple Intelligences (MI), Universal Design for Learning (UDL)</li> <li>Lesson #3: Task Rotation, R/R Framework, MI, UDL</li> <li>Lesson #4 Concept Map, Task Rotation, R/R Framework, MI, UDL</li> <li>Take into consideration the classroom environment/climate, activating prior knowledge, aligning objectives with lesson activities and appropriate assessment(s).</li> <li>Incorporate multiple learning styles and/or intelligences.</li> </ul></li></ul>		
	Lesson Enhancements	reflection, you will revise the lesson and create two enhancements to improve	100	
	Total	student learning.	700	

Graung State				
А	90–100%	630-700 points		
В	80-89%	560-629 points		
С	70–79%	490-559 points		
D	60–69%	420-489 points		
F	<60%	$\leq$ 419 points		

## **Grading Scale**

#### **Bibliography**

- Andrade, H., & Valtcheva, A. (2009). Promoting learning and achievement through self-assessment. *Theory Into Practice*, 48, 12-19.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). Taxonomy of educational objectives: The classification of educational goals; Handbook I: Cognitive domain. New York, NY: Longmans.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school.* Washington, DC: Committee on Developments in the Science of Learning, National Academies Press.
- Coleman, J. S. (1967a). '*Equality of educational opportunity,' reconsidered.* Washington, DC: U.S. Department of Health, Eduction & Welfare Office of Education. (ERIC Document Reproduction Service No. ED015893)
- Coleman, J. S. (1967b). *The concept of 'Equality of educational opportunity*.' Washington, DC: U.S. Department of Health, Eduction & Welfare Office of Education. (ERIC Document Reproduction Service No. ED015157)
- Coleman, J. S. (1968). *The evaluation of 'Equality of educational opportunity*. 'Washington, DC: U.S. Department of Health, Education, & Welfare Office of Education. (ERIC Document Reproduction Service No. ED026721)
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. L. (1966). *Equality of educational opportunity*. Washington DC: U.S. Department of Health, Eduction & Welfare Office of Education. (ERIC Document Reproduction Service No. ED012275)
- Daggett, W. R. & Kruse, B. (1999). Taming the educational dinosaur. Rexford, NY: Leadership Press.
- Dermitzaki, I., Leondari, A., & Goudas, M. (2009). Relations between young students' strategic behaviours, domain-specific self-concept, and performance in a problem-solving situation. *Learning and Instruction, 19*, 144-157.
- Finn, C. E. (2005, January 26). Grading school standards: A tale of two studies. *National Review Online, 57*. Retrieved on June 29, 2009, from http://www.nationalreview.com/comment/finn200501260740.asp
- Gardner, H. (1987). The theory of multiple intelligences. Annals of Dyslexia, 37, 19-35.
- Gardner, H. (1989). Beyond a modular view of mind. In W. Damon (Ed.), *Child development today and tomorrow* (pp. 222-239). San Francisco, CA US: Jossey-Bass.
- Gardner, H. (2009). The five minds for the future. School Administrator, 66, 16-21.
- Gardner, H., & Hatch, T. (1989). Multiple intelligences go to school: Educational implications of the theory of multiple intelligences. *Educational Researcher*, *18*, 4-9.
- Hatch, T. C., & Gardner, H. (1986). From testing intelligence to assessing competencies: A pluralistic view of intellect. *Roeper Review*, *8*, 147-150.
- Izsak, A. (2004). Students' coordination of knowledge when learning to model physical situations. *Cognition and Instruction*, 22, 81-128.
- Jones, F. H. (1987). Positive classroom discipline. Columbus, OH: McGraw-Hill.
- Maher, F. A., & Tetrault, M. K. T. (2001). *The feminist classroom* (2nd ed.). Oxford: Rowman & Littlefield.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teacher knowledge. *Teachers College Record*, 108, 1017-1054.
- Ronau, R. N., & Rakes, C. R. (2011). Aspects of teacher knowledge and their interactions: A comprehensive framework for research. In R. N. Ronau, C. R. Rakes, & M. L. Niess (Eds.), *Educational technology, teacher knowledge, and classroom impact: A research handbook on frameworks and approaches* (pp. 59-102). Hershey, PA: IGI Global. DOI: 10.4018/978-1-60960-750-0.ch004

- Ronau, R. N., & Rakes, C. R. (2011). Making the grade: Reporting educational technology and teacher knowledge research. In R. N. Ronau, C. R. Rakes, & M. L. Niess (Eds.), *Educational technology, teacher knowledge, and classroom impact: A research handbook on frameworks and approaches* (pp. 323-332). Hershey, PA: IGI Global. DOI: 10.4018/978-1-60960-750-0.ch014
- Rudasill, K. M., Gallagher, K. C., & White, J. M. (2010). Temperamental attention and activity, classroom emotional support, and academic achievement in third grade. *Journal of School Psychology*, *48*, (113-134).
- Saul, M., Assouline, S., & Sheffield, L. J. (Eds.) (2010). The peak in the middle: Developing mathematically gifted students in the middle grades. Reston, VA: NCTM, National Association of Gifted Children, & National Middle School Association.
- Shrewsbury, C. M. (1993). What is feminist pedagogy? Women's Studies Quarterly, 3-4, 8-15.
- Silver, H. F., Brunsting, J. R., & Walsh, T. (2008). *Math tools grades 3-12: 64 ways to differentiate instruction and increase student engagement*. Thousand Oaks, CA: Corwin Press.
- Silver, H., Strong, R., & Perini, M. (1997). Integrating learning styles and multiple intelligences. *Educational Leadership*, 55, 22-27.
- Slavin, R. E., & Karweit, N. L. (1982). Student teams and mastery learning: A factorial experiment in urban math nine classes. Baltimore, MD: Johns Hopkins University, Center for Social Organization of Schools. (ERIC Document Reproduction Service No. ED215904)
- Stemler, S. E., Elliott, J. G., Grigorenko, E. L., & Sternberg, R. J. (2006). There's more to teaching than instruction: Seven strategies for dealing with the practical side of teaching. *Educational Studies*, 32, 101-118.
- Strong, R. W., Perini, M., Silver, H., & Thomas, E. (2004). Creating a differentiated mathematics classroom. *Educational Leadership*, *61*, 73-78.
- Strong, R. W., Silver, H. F., & Perini, M. J. (2001). Making students as important as standards. *Educational Leadership*, 59, 56-61.
- Tenenbaum, G. (1986). The effect of quality of instruction on higher and lower mental processes and on the prediction of summative achievement. *Journal of Educational Research*, *80*, 105-114.
- Von Glasersfeld, E. (1987). Learning as a constructive activity. In C. Janvier (Ed.), *Problems of representation in the teaching and learning of mathematics* (pp. 3-18). Hillsdale, NJ: Lawrence Erlbaum.

#### Lesson Plan Adaptation/Enhancement Key Assessment EDUC 412M

## **Overview**

Teacher candidates will reflect on one of four lessons taught during the course. Based on that reflection, candidates will revise the lesson and create two adaptations/enhancements to improve student learning.

## **Purpose and Relationship to Conceptual Framework**

Teachers often reflect and revise lessons between classes, semesters, and school years. The Lesson Plan Adaptation/Enhancement provides teacher candidates the opportunity to demonstrate their ability to plan, teach, reflect, and revise a lesson, thereby providing evidence of proficiency in the three tenets of the UMBC Education Conceptual Framework: Academic Strength, Professional Development, and Diversity.

## In this assignment, teacher candidates:

- Develop a lesson plan based on research-based learning theories and teaching strategies (UMBC Conceptual Framework Academic Strength Tenet)
- Revise a lesson based on reflection of formative and summative assessments (UMBC Conceptual Framework Academic Strength Tenet)
- Create meaningful learning experiences for students of diverse cultural, ethnic, linguistic and intellectual backgrounds (UMBC Conceptual Framework Diversity Tenet)
- Enhance a lesson through reflection and evaluation of the classroom teaching and learning experience (UMBC Conceptual Framework Professional Development Tenet)

#### **Connections to Standards**

**CAEP Standard 1.1** Candidates demonstrate an understanding of the 10 InTASC standards at the appropriate progression level(s) in the following categories: the learner and learning; content; instructional practice; and professional responsibility.

#### Requirements

This assignment requires two components: (1) a lesson plan, original and revised versions; (2) a description of the two adaptations/enhancements.

# 1. The lesson plan must include the following elements (Secondary Lesson Plan Template):

## Standards

Must include national and/or local standards.

#### Objectives

Must be written as performance objectives using Bloom's Taxonomy verbs. The targeted Bloom's taxonomy level should be included with each objective.

#### Assessment

#### Formative

Describe how the teacher will determine that students are making progress toward the objective: [Note: Most lessons include "observing" the students. What are you specifically looking for to tell you that the students are learning/need more attention?]

#### **Summative**

Describe how the teacher will determine that students have reached the objective

#### Context

#### **Background Information/Demographics**

Grade level, number of students, number of students with an IEP or identified as Gifted/Talented or Limited English Proficiency (LEP)

#### Differentiation

Differentiation for students with special needs (e.g., IEP, ESL, Gifted/Talented) or students who struggle with the material.

#### Alignment within Unit

How this lesson fits into the substance of the unit; where it falls in the unit

#### **Materials**

Include all materials not normally present in the classroom

#### Procedures

#### Introduction (Engagement)

What will the teacher do to draw students in on the lesson and focus on the learning that follows? How will the teacher ensure that all students are engaged in the introductory activities?

#### Core Learning Activities (Explore-Explain-Elaborate)

This section should include the specifics of what both the students and teacher will be doing, but <u>not scripted</u>: It should be detailed enough for someone else to teach the lesson if needed.

- Step by Step, Accounts for every minute
- Includes Potential Questions/Problems
- Includes Relationship of Activities to Assessment and Objectives
- Includes Relationship to UDL Principles: Multiple Means of Action and Expression, Engagement, and Representation.
- Includes all Tasks, Worksheet Questions, etc.

#### Closure (Evaluate)

- How will the lesson be wrapped up?
- How will the teacher/students connect all the different ideas and concepts that have been learned in the lesson?

- Do not forget about the metacognitive aspects of your lesson. Revisit with the students why this lesson was important and how they could use it in their lives. Remember that you have to be able to answer this question yourself.
- Include an explanation of how the teacher will ensure that all students are engaged in the closure activity.

## Reflection

## **On the Lesson Plan**

- Rationale for this Lesson
- Research Addressed
- Explain How UDL Principles are Addressed
- Relevant Feedback from Pre-Observation Conference or Lesson Plan Feedback

#### On the class time:

- What went well, What didn't go well, and Why
- Relevant Feedback from Post-Observation Conference

## What would I do differently or the same next time?

- Describe potential changes or enhancing something that worked
- Include a rationale for why changes/enhancements are expected to improve student learning;
- Evidence from the class to support the rationale. Relevant Feedback from Post-Observation Conference

## 2. Each adaptation/enhancement must include the following elements:

## Adaptation 1

#### Description of Adaptation

Explain what the adaptation is

## Difference Between Original and Adapted Version

Explain how the adaptation changes the original lesson

## Rationale for why Adaptation is Expected to Improve Student Learning

Explain how the adaptation will increase student depth of understanding For example, does the adaptation

- take the lesson to a higher targeted level on Bloom's Taxonomy,
- the level of relevance of the lesson,
- the clarity with which the content is taught (for example, the UDL Principle of Multiple Representations),
- the degree of student engagement (UDL Engagement Principle),
- the number and/or types of opportunities for students to express their understanding (UDL Action and Expression Principle),
- the smoothness of transitions within the lesson

• the ability of the lesson to meet the needs of special populations of learners (such as special education, gifted/talented, limited English proficiency)?

#### Evidence

Explain what happened when you taught the lesson that led you to develop this adaptation. For example, did something go well for some students but not others? Did something not go well? Did students give you feedback during/after the lesson that led you to the adaptation?

## Adaptation 2

#### Description of Adaptation

Explain what the adaptation is

#### Difference Between Original and Adapted Version

Explain how the adaptation changes the original lesson

#### Rationale for why Adaptation is Expected to Improve Student Learning

Explain how the adaptation will increase student depth of understanding For example, does the adaptation

- take the lesson to a higher targeted level on Bloom's Taxonomy,
- the level of relevance of the lesson,
- the clarity with which the content is taught (for example, the UDL Principle of Multiple Representations),
- the degree of student engagement (UDL Engagement Principle),
- the number and/or types of opportunities for students to express their understanding (UDL Action and Expression Principle),
- the smoothness of transitions within the lesson
- the ability of the lesson to meet the needs of special populations of learners (such as special education, gifted/talented, limited English proficiency)?

#### Evidence

Explain what happened when you taught the lesson that led you to develop this adaptation. For example, did something go well for some students but not others? Did something not go well? Did students give you feedback during/after the lesson that led you to the adaptation?

#### Process

- 1. Choose the lesson to be enhanced.
- 2. Determine the target audience of the enhancement.
- 3. Determine the objective for the enhancement.
- 4. Revise the lesson so that it includes the enhancement.
- 5. Write up how the original and enhanced lessons are different.
- 6. Clarify why the enhancement is expected to improve student learning.
- 7. Provide evidence from teaching the original lesson to support your expectation that the enhancement will improve student learning.
- 8. Develop at least two enhancements.

9. Turn in original lesson, adapted lesson, and enhancement components: description, explanation of difference between original and enhanced, rationale for how enhancement will improve student learning, and classroom evidence to support rationale.

Rubric Link				
Indicator Description	Limited (1)	Developing (2)	Proficient (3)	Exemplary (4)
Adaptation 1Description	Description is missing or hard to follow.	Description is somewhat vague.	Description is sufficiently clear and comprehensive.	Description is clear, comprehensive, and concise.
Adaptation 1Difference Between Original and Adapted	Adaptation is unlikely to enhance the lesson for the target population.	Description of Difference is missing details that will determine whether the adaptation will enhance the lesson for the target population.	Adaptation most likely enhances the lesson for the target population.	Adaptation clearly enhances the lesson for the target population.
Adaptation 1Rationale for Improved Student Learning	Adaptation is unlikely to improve learning for the target population.	Description of Difference is missing details that will determine whether the adaptation will improve learning for the target population.	Adaptation most likely improves learning for the target population.	Adaptation clearly improves learning for the target population.
Adaptation 1Evidence Supporting Adaptation	Adaptation is minimally supported by evidence.	Adaptation is somewhat supported by evidence.	Adaptation is sufficiently supported by evidence.	Adaptation is strongly supported by evidence.
Adaptation 2Description	Description is missing or hard to follow.	Description is somewhat vague.	Description is sufficiently clear and comprehensive.	Description is clear, comprehensive, and concise.
Adaptation 2Difference Between Original and Adapted	Adaptation is unlikely to enhance the lesson for the target population.	Description of Difference is missing details that will determine whether the adaptation will enhance the lesson for the target population.	Adaptation most likely enhances the lesson for the target population.	Adaptation clearly enhances the lesson for the target population.
Adaptation 2Rationale for Improved Student Learning	Adaptation is unlikely to improve learning for the target population.	Description of Difference is missing details that will determine whether the adaptation will improve learning for the target population.	Adaptation most likely improves learning for the target population.	Adaptation clearly improves learning for the target population.
Adaptation 2Evidence Supporting Adaptation	Adaptation is minimally supported by evidence.	Adaptation is somewhat supported by evidence.	Adaptation is sufficiently supported by evidence.	Adaptation is strongly supported by evidence.

#### **Rubric Link**

## Connection(s) to Other Assessments

- 1. Focus Lessons (Methods Course)
- 2. Pre-Internship Interview (Spring Semester Prior to Internship Year)
- 3. Unit Plan (Developed in Methods Course and Internship Phase I, Enacted in Internship Phase II)
- 4. Enacted Lessons (Internship Phase II)
- 5. Effect on Student Learning (Portfolio, Internship Phase II)
- 6. Clinical Practice Performance Assessment (CPPA) Evaluations (Internship Phases I and II)
- 7. Transition from Internship Phase I to Phase II (End of Phase I).

#### Graders

#### **Course Instructor**

## **Additional Resources**

- 1. Multiple Intelligences: <u>http://howardgardner.com/multiple-intelligences/</u>
- 2. Assessment: <u>http://www.amle.org/Publications/WebExclusive/Assessment/tabid/1120/Defaul</u> <u>t.aspx</u>
- 3. Cooperative Learning: <u>http://www.cehd.umn.edu/research/highlights/coop-learning/</u>
- 4. Fostering Higher Order Thinking in Authentic Contexts: http://www.leadered.com/rrr.html
- 5. Universal Design for Learning: <u>http://www.cast.org/udl/index.html</u>
- 6. Task Rotation: <u>http://www.ascd.org/publications/books/110129.aspx</u>
- 7. Inquiry Based Learning: <u>http://www.teachinquiry.com/index/Introduction.html</u>
- 8. Scaffolding: <u>http://www.edutopia.org/blog/scaffolding-lessons-six-strategies-rebecca-alber</u>
- 9. Think-Pair-Share: http://serc.carleton.edu/introgeo/interactive/tpshare.html
- 10. Frayer Models: http://www.readingeducator.com/strategies/frayer.htm
- 11. K-W-L: http://www.readwritethink.org/classroom-resources/printouts/chart-a-30226.html
- 12. Gallery Walks: <u>http://serc.carleton.edu/introgeo/gallerywalk/index.html</u>
- 13. Chunking: <u>http://www.skillstoolbox.com/career-and-education-skills/learning-skills/effective-learning-strategies/chunking/</u>

#### **Overview**

The Praxis II Principles of Learning and Teaching Key Assessment is a selfassessment intended to allow teacher candidates to reflect on their preparedness for the Praxis II Principles of Learning and Teaching (PLT) Grades 5-9 licensure exam (Test Code 5623). Teacher candidates will reflect on their perceptions of their preparedness level, complete a practice exam, and reflect on the results of the practice exam.

#### Purpose

Knowing content is not enough to teach content well. While teachers need deep content understanding, teaching strategies are also needed for helping all students develop their own deep content understanding. The Praxis II Principles of Learning and Teaching (PLT) Grades 5-9 licensure exam (Test Code 5623) evaluates candidates' knowledge and understanding of educational practices foundational to beginning a career as a professional teacher. The Praxis II Pedagogy Key Assessment provides candidates an early opportunity to assess their progress toward being ready to take the exam.

#### **Connections to Standards**

**CAEP Standard 1.1** Candidates demonstrate an understanding of the 10 InTASC standards at the appropriate progression level(s) in the following categories: **the learner and learning**; content; **instructional practice**; and **professional responsibility**.

#### Requirements

The Praxis II Content Key Assessment must include the following:

- 1. **Pre-Reflection Paragraph**. Candidates reflect on their comfort level with the content described on the cover page of the Praxis II PLT Grades 5-9 exam (Test Code 5623).
- 2. **Performance Analysis Paragraph.** Candidates report on the number of correct and incorrect responses and a description indicating that they are aware of which responses are incorrect and why. A holistic analysis of overall level of preparation should be included.
- 3. **Future Growth Paragraph.** Candidates describe a plan for future growth in content understanding. Response should provide connections between identified strengths and weaknesses with specific courses/ experiences that should be taken in the future.

#### Process

#### **Pre-Reflection**

1. **Review** page 5 of the **PRAXIS II PLT Grades 5-9 Exam Study Companion** (<u>http://www.ets.org/s/praxis/pdf/5623.pdf</u>). Use a 5 pt. Scale (1 – not

comfortable with knowledge, 5 – very comfortable with knowledge) rank your knowledge comfort level for Content Categories I-IV (p. 5).

2. **Construct** a paragraph(s) that includes your comfort level rankings and a rationale for your stated level of comfort.

## **Performance Analysis**

- 3. **Complete** the Practice Praxis II PLT Exam.
- 4. **Grade** your exam using the provided responses.
- 5. Analyze Performance:
  - a. Score: Written response that includes the number of correct and incorrect responses and a description indicating that you are aware of which responses are incorrect and why.
  - b. **Current Level of Preparation**: Written response that reflects on your current level of preparation as it relates to your prior/current content preparation. Response should provide connections between identified strengths and weaknesses and previously completed courses/experiences.

## **Future Growth**

- 6. **Future Growth Plan:** Written description that describes a plan for future growth in content understanding. Response should provide connections between identified strengths and weaknesses with specific courses/ experiences that should be taken in the future.
  - i. State overall feeling
  - ii. Include specifics strengths/weaknesses based upon performance
  - iii. Include description of specific content courses OR relevant experiences that may improve content understanding
  - iv. Describe strategy for how to continue growth of content knowledge after program completion.

## **Rubric link**

Component	1	2	3	4
Pre-Reflection	Pre-Reflection paragraph is provided but lacking comfort rating for some Praxis II PLT (5-9) categories; rationale for included categories may be provided.	Pre-Reflection paragraph includes 5-point scale comfort rating for every Praxis II PLT (5-9) category AND rationale for most ratings or an overall rationale provided.	Pre-Reflection paragraph includes 5-point scale comfort rating for every Praxis II PLT (5-9) category AND rationale for every rating.	Pre-Reflection paragraph includes 5-point scale comfort rating for every Praxis II PLT (5-9) category AND clear, detailed, and succinct rationale for every rating.
Performance Analysis	Performance analysis includes the number of correct and incorrect responses. Performance analysis reflection is minimal.	Performance analysis includes the number of correct and incorrect responses and a brief description of why original responses were incorrect. Performance analysis reflects on current level of preparation as it relates to prior/current content preparation.	Performance analysis includes the number of correct and incorrect responses and a general description of why original responses were incorrect. Performance analysis reflects on current level of preparation as it relates to prior/current content preparation. Response provides sufficient connections between identified strengths and weaknesses and previously completed courses/experiences.	Performance analysis includes the number of correct and incorrect responses and a description of each individual incorrect item indicating awareness of why original responses were incorrect. Performance analysis reflects on current level of preparation as it relates to prior/current content preparation. Response provides insightful connections between identified strengths and weaknesses and previously completed courses/experiences.
Future Growth Plan	Strategy for growing in pedagogical knowledge addresses some areas noted as deficient in the performance analysis.	Strategy for growing in pedagogical knowledge addresses most areas noted as deficient in the performance analysis.	Strategy for growing in pedagogical knowledge addresses all areas noted as deficient in the performance analysis.	Strategy for growing in pedagogical knowledge insightfully addresses all areas noted as deficient in the performance analysis.

## **Connections to other assessments**

- 1. Pre-Internship Interview (Prior to Phase I)
- 2. Praxis II PLT Grades 5-9 Licensure Exam (During Internship)

## Grader(s)

## **Course Instructor**

#### **Additional Resources**

- 1. Multiple Intelligences: <u>http://howardgardner.com/multiple-intelligences/</u>
- 2. Assessment: <u>http://www.amle.org/Publications/WebExclusive/Assessment/tabid/1120/</u> <u>Default.aspx</u>
- 3. Cooperative Learning: <u>http://www.cehd.umn.edu/research/highlights/coop-learning/</u>
- 4. Fostering Higher Order Thinking in Authentic Contexts: http://www.leadered.com/rrr.html
- 5. Universal Design for Learning: <u>http://www.cast.org/udl/index.html</u>
- 6. Task Rotation: <u>http://www.ascd.org/publications/books/110129.aspx</u>

- 7. Inquiry Based Learning: http://www.teachinguiry.com/index/Introduction.html
- 8. Scaffolding: <u>http://www.edutopia.org/blog/scaffolding-lessons-six-</u><u>strategies-rebecca-alber</u>
- 9. Think-Pair-Share: http://serc.carleton.edu/introgeo/interactive/tpshare.html
- 10. Frayer Models: <u>http://www.readingeducator.com/strategies/frayer.htm</u>
- 11. K-W-L: <u>http://www.readwritethink.org/classroom-resources/printouts/chart-a-30226.html</u>
- 12. Gallery Walks: http://serc.carleton.edu/introgeo/gallerywalk/index.html
- 13. Chunking: <u>http://www.skillstoolbox.com/career-and-education-skills/learning-skills/effective-learning-strategies/chunking/</u>

#### Praxis II Content Key Assessment EDUC 412M

#### **Overview**

The Praxis II Content Key Assessment is a self-assessment intended to allow teacher candidates to reflect on their preparedness for the middle grades mathematics and science licensure exams (Test Codes 5169 and 5440). Teacher candidates will reflect on their perceptions of their preparedness level, complete a practice exam, and reflect on the results of the practice exam.

#### Purpose

Teachers need deep content understanding to be able to help students understand the meaning of concepts, connections between concepts, and relationships between their discipline and others. The Praxis II Content Knowledge licensure exams evaluate candidates' content knowledge and understanding foundational to beginning a career as a professional teacher. The Praxis II Content Knowledge Key Assessment provides candidates an early opportunity to assess their progress toward being ready to take the exams.

#### **Connections to Standards**

**CAEP Standard 1.1** Candidates demonstrate an understanding of the 10 InTASC standards at the appropriate progression level(s) in the following categories: the learner and learning; **content**; instructional practice; and professional responsibility.

#### Requirements

The Praxis II Content Key Assessment must include the following:

- 1. **Pre-Reflection Paragraph**. Candidates reflect on their comfort level with the content described on the cover page of both Praxis II content exams (Test Codes 5169 and 5440).
- 2. **Performance Analysis Paragraph.** Candidates report on the number of correct and incorrect responses and a description indicating that they are aware of which responses are incorrect and why. A holistic analysis of overall level of preparation should be included.
- 3. **Future Growth Paragraph.** Candidates describe a plan for future growth in content understanding. Response should provide connections between identified strengths and weaknesses with specific courses/ experiences that should be taken in the future.

## Praxis II Content Key Assessment EDUC 412M

#### Process

## **Pre-Reflection**

- 1. **Review** the cover page of both **PRAXIS II Content Knowledge Exams** (Test Codes 5169 **and** 5440). Use a 5 pt. Scale (1 not comfortable with knowledge, 5 very comfortable with knowledge) rank your knowledge comfort level for the overall content area as well as for each of the listed content categories.
- 2. **Construct** a paragraph(s) that includes your comfort level rankings and a rationale for your stated level of comfort.

## **Performance Analysis**

- 3. **Complete** both Practice Praxis II Content Knowledge Exams (Test Codes 5169 and 5440).
- 4. Grade your exam using the provided responses.
- 5. Analyze Performance:
  - a. Score: Written response that includes the number of correct and incorrect responses and a description of each individual incorrect item indicating that you are aware of which responses are incorrect and why.
  - b. **Current Level of Preparation**: Written response that reflects on your current level of preparation as it relates to your prior/current content preparation. Response should provide connections between identified strengths and weaknesses and previously completed courses/experiences.

## **Future Growth**

- 6. **Future Growth Plan:** Written description that describes a plan for future growth in content understanding. Response should provide connections between identified strengths and weaknesses with specific courses/ experiences that should be taken in the future.
  - i. State overall feeling
  - ii. Include specifics strengths/weaknesses based upon performance
  - iii. Include description of specific content courses OR relevant experiences that may improve content understanding
  - iv. Describe strategy for how to continue growth of content knowledge after program completion.

## Praxis II Content Key Assessment EDUC 412M

#### Rubric

Component	Minimal (1)	Developing (2)	Proficient (3)	Exemplary (4)
Pre- Reflection	Pre-Reflection paragraph is provided but lacking comfort rating for some Praxis II content categories; rationale for included categories may be provided.	Pre-Reflection paragraph includes 5-point scale comfort rating for every Praxis II content category AND rationale for most ratings or an overall rationale provided.	Pre-Reflection paragraph includes 5-point scale comfort rating for every Praxis II content category AND rationale for every rating.	Pre-Reflection paragraph includes 5-point scale comfort rating for every Praxis II content category AND clear, detailed, and succinct rationale for every rating.
Performance Analysis	Performance analysis includes the number of correct and incorrect responses. Performance analysis reflection is minimal.	Performance analysis includes the number of correct and incorrect responses and a brief description of why original responses were incorrect. Performance analysis reflects on current level of preparation as it relates to prior/current content preparation.	Performance analysis includes the number of correct and incorrect responses and a general description of why original responses were incorrect. Performance analysis reflects on current level of preparation as it relates to prior/current content preparation. Response provides sufficient connections between identified strengths and weaknesses and previously completed courses/experiences.	Performance analysis includes the number of correct and incorrect responses and a description of each individual incorrect item indicating awareness of why original responses were incorrect. Performance analysis reflects on current level of preparation as it relates to prior/current content preparation. Response provides insightful connections between identified strengths and weaknesses and previously completed courses/experiences.
Future Growth Plan	Strategy for growing in content knowledge addresses some areas noted as deficient in the performance analysis.	Strategy for growing in content knowledge addresses most areas noted as deficient in the performance analysis.	Strategy for growing in content knowledge addresses all areas noted as deficient in the performance analysis.	Strategy for growing in content knowledge insightfully addresses all areas noted as deficient in the performance analysis.

#### **Connections to other assessments**

- 1. Content Expertise (Methods Course)
- 2. Pre-Internship Interview (Prior to Phase I)
- 3. Praxis II Content Licensure Exam (During Internship)

## Grader(s)

#### **Course Instructor**

#### **Additional Resources**

- 1. The National Council of Supervisors of Mathematics (NCSM) website: http://www.mathedleadership.org/
- National Council of Teachers of Mathematics (NCTM) research briefs: <u>http://www.nctm.org/news/content.aspx?id=8468</u>. Students may find the following research briefs particularly helpful:
  - a. Algebraic Thinking in Arithmetic
  - b. Algebraic Reasoning in School Algebra
  - c. Selecting the Right Curriculum
  - d. Producing Gains
  - e. Formative Assessment
- 3. National Science Teachers Association: https://www.nsta.org/