



University of Wisconsin–Milwaukee
&
Mathematics Institute of Wisconsin
Emerging Math Coach Workshop
Spring 2020



Date: 10/3/19, 12/3/19, 1/13/20, 3/11/20
Time: 8:30 a.m. – 3:00 p.m.
Location: Mathematics Institute of Wisconsin in Waukesha

MIW Instructor: Paige Richards
Email: paige.richards@mathinstitutewi.org
Phone: 262.953.9353

Instructor: DeAnn Huinker Center for Mathematics and Science Education Research (CMSER)
Email: huinker@uwm.edu 2400 E. Harford Ave, 363 Enderis Hall
Phone: 414.229.4631 University of Wisconsin-Milwaukee, Milwaukee, WI 53201-0413
CMSER Phone: 414.229.6646 Email: cmser@uwm.edu

Course Information

Official UWM Course Number & Title:

CURRINS 560 Improving Mathematics Teaching and Learning: Coaching and Leadership in Mathematics Part 1

Course Description

Analysis of school and classroom practices in mathematics. Examination of the teaching, learning, and assessment of mathematics at the elementary, middle, and high school levels. Emphasis on mathematics practices and coaching skills.

UWM Credits: 2-3 undergraduate or graduate credit

Course Goals

- Identify what the Standards for Mathematical Practice look like in action.
- Understand critical standards progressions in mathematics.
- Examine shifts in classroom practice and their impact on student understanding.
- Support teachers implementing high-leverage teaching practices in mathematics.

Required Course Readings

- (1) Common Core State Standards Initiative. (2010). *Common core state standards for mathematics (CCSSM)*. Available from <http://www.corestandards.org/the-standards>.
- (2) McGatha, M. B., and Bay-Williams, J. M. *Everything You Need for Mathematics Coaching: Tools, Plans, and a Process that Works for Any Instructional Leader, K-12* (2018). Corwin.
- (3) Assigned journal articles and handouts.

Course Grading Procedures

Grades will be assigned on the following scale:

A 93–100%	A– 90–92%	B+ 87–89%	B 83–86%	B– 80–82%	C+ 77–79%
C 73–76%	C– 70–72%	D+ 67–69%	D 63–66%	D– 60–62%	F 0–59%

Your grade for this course will be determined using the following percentage allocations.

Course Requirement	Two-Credit Course Percent of Grade		Three-Credit Course Percent of Grade	
	Undergraduate Students	Graduate Students	Undergraduate Students	Graduate Students
Attendance and Participation	20%	20%	20%	20%
Focused Reflection on Learning	25%	15%	20%	10%
Homework- Readings and Written Reflections	35%	20%	30%	10%
Professional Action Plan	20%	10%	15%	15%
Professional Action Plan Implementation Paper	Not required	15%	Not required	15%
Coaching Cycle	Not required	20%	Not required	15%
Coaching Cycle Project Implementation Paper	Not required	Not required	15%	15%

Course Policies

Investment of Time: Study leading to one semester credit represents an investment of time by the average student of not fewer than 48 hours per credit earned.

Attendance: Attendance is vital to achieving the goals of this project course. Participants must attend the whole workshop, in order to be eligible for undergraduate or graduate credit.

Preparation of Assignments: Assignments are to be word processed unless otherwise stated in class or the syllabus. Present each assignment in a neat, organized, and clear manner. Keep a copy of all submitted assignments in case of questions or discrepancies.

Electronic Submission of Assignments: You are expected to provide many of your assignments in electronic format. Acceptable file types include MS Word, Google Doc, Pages, PowerPoint, Keynote, PDF, or JPEG, as appropriate to the assignment. Always name electronic files with your last name followed by a short description of the work. Also, do not include any periods other than before a file format extension. For example: jones-critique1-feb4.docx.

Late or Poor Quality Assignments: All assignments are to be turned in by midnight on the due date. You may request an extension by contacting the instructor prior to the due date provided you have a valid reason. Otherwise each late assignment is penalized by the equivalent of one letter grade for each day it is late. No rewrite of poor quality assignments allowed after the due date; meet with the instructor prior to the due date to review and discuss assignments. No extra credit assignments will be granted.

The following link provides additional information on general University Policies and Procedures:
<http://www.uwm.edu/Dept/SecU/SyllabusLinks.pdf>

Required Course Assignments

To receive UWM credit, you must attend the Mathematics Institute of Wisconsin workshop and complete additional assignments. *All materials must be received by email to paige.richards@mathinstitutewi.org by Wednesday, April 3, 2020.*

1. Attendance and Participation in the Workshop

Attend and participate in the workshop. Submit an attendance verification form signed by the instructor.

2. Focused Reflection on Learning

The purpose of this assignment is to professionally reflect upon the math coaching workshop and activities that you found to be meaningful for your practice. You will write a reflection paper (minimum 2-3 pages) that addresses the following: Identify 2-3 significant ideas from the workshop that deepened your knowledge of mathematics coaching. For each idea, (a) summarize your learning and (b) explain why this was significant for you as a learner. Be sure to make connections to workshop content, ideas shared, and professional readings.

3. Homework: Readings and Written Reflections

Homework will be assigned as part of the workshop. The purpose of homework is to engage you further with the content and ideas from the sessions. The homework will include readings and written reflections.

4. Professional Action Plan

The purpose of this paper is to highlight your major learning from the workshop and to establish professional goals for further implementation into your instructional practice. You will write a paper (minimum 2-3 pages) that identifies at least two individual professional goals that you have for implementing the learning into your instructional practice. For each goal, (a) provide a statement of your professional goal in 1-2 sentences, (b) describe in detail approximately 3 action steps you will take toward implementing the goal, and (c) include how you will measure your success while engaged in the implementation process and what you hope to see as you implement your goals.

5. Professional Action Plan Implementation Paper

The purpose of this paper is to reflect upon the journey of implementing your Professional Action Plan. You will write a paper (minimum 2-3 pages) that highlights your experience while implementing each of the goals outlined in your action plan that addresses the following: (a) analyze the implementation of each goal and how these goals helped enhance your instruction (b) evaluate the strengths and weaknesses of your implementation plan action steps (c) describe the ways in which teachers benefited from your action plan, (d) share next steps on how you will continue to grow professionally and share your learning with your colleagues.

6. Coaching Cycle Project

The purpose of this assignment is for you to implement what you have learned about coaching by engaging in the coaching cycle from start to finish. You will identify another teacher with whom to work, develop a plan or map for your coaching conversations, and engage in collegial coaching conversations about an aspect of mathematics instruction. You will keep a log of interactions, develop a coaching plan (map), and prepare a 3-4 page summary of your experience as detailed in the following statements. After the planning conversation you will prepare a 1 page summary that addresses: a) how you monitored your listening and b) what challenges surfaced that were not on your horizon. After the lesson observation you will prepare a 1 page summary

that addresses: a) your perspective as an observer during the lesson and b) the process you utilized to collect data and the data you collected. After the coaching conversation you will prepare a 1-2 page summary that addresses: a) the way(s) in which the data you collected helped with the reflecting conversation b) any additional challenges that did you not anticipate and c) how your overall planning and preparation for the conversation impacted the overall coaching conversation. Your submitted project will include your completed coaching map and your 3-4 page summary.

7. Coaching Cycle Implementation Paper

The purpose of this assignment is to reflect upon the journey of implementing your Coaching Cycle Project. You will write a paper (minimum 2-3 pages) that highlights your experience. Your paper should include the following: a) reflection on the overall experience and your coaching ability. During this section, be sure to make connections to course readings and your use of tools and resources from your coaching toolbox, b) share your next steps in order to further develop your skills and understandings for having both formal and informal coaching conversations (c) describe the ways in which your colleague benefited from this coaching conversation.