ELIS 4802 - Teaching Math and Science in Grades 3-5

Fall 2026 Syllabus, Section 01, CRN 41861,

Credit hours: 4

Instructor

Marianne James

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Public Instructor Information

Instructor Title: Mrs. James

Instructor Professional Qualifications:

Ph. D/ABD Special Education, Kent State University (2005)

M.Ed Special Education, Mild to Intensive, Kent State University(1982)

B.S. Elementary Education, Grades 1 through 8, Kent State University(1972)

Instructor Office Location: BCOE, 2310

Instructor Office Phone: (330)941-1928

Course Description

4802. Teaching Math and Science in Grades 3-5. Candidates focus on identifying and modeling developmentally appropriate strategies used for problem solving, communicating, and reasoning in math and science. Candidates create effective learning environments using content-specific pedagogy to make connections to stimulate students' development of math and science concepts and skills in diverse grades 3-5 classrooms. Field hours required. Prereq.: TELS Upper Division Status, ELIS 3701, ELIS 3702, ELIS 3703, ELIS 3704. Coreq.: ELIS 4800, ELIS 4801, ELIS 4803, ELIS 4804. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Teaching mathematics to students with learning disabilities, 5th edition	Bley, N.S. (2019)	Austin, TX; Proud.
Optional	The common core mathematics companion: The standards decoded, grades 3-5	Gojak, L. & Miles, R. (2015)	Thousand Oaks, CA: Corwin Press
Optional	Picture-Perfect STEM Lessons, 3-5: Using Children's Books to Inspire STEM Learning	Morgan, E. & Ansberry, K. (2017).	NSTA Press
Optional	Mathematics Content and Activities for PreK - Grade 5 Teachers	O'Mellan, A.C. (2022)	Free PDF available on Blackboard

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Tue	8/25	BB Materials	Review Syllabus Math Group Activity Scientist - Draw a Scientist	

Thu	8/27	BB Materials	Guided Observations Directions Math - Pretest + Standards Science - Pretest + Standards	
Tue	9/1	BB Materials	Math - Technology/Manipulatives Science _ Inquiry + 5Es	
Thu	9/3	BB Materials	Math - Technology/Manipulatives Science - Inquiry/5Es	MA & SC Pretest Analysis
Tue	9/8	BB Materials	Lesson Planning & Objectives	
Thu	9/10	BB Materials		
Tue	9/15	BB Materials	Math - Academic Language + Productive Struggle/Groupwork Science - Academic Language + STEM Pres	Science STEM Presentations
Thu	9/17	BB Materials		MA & SC Lesson Ideas
Tue	9/22	BB Materials	Math - MKT Science - Finish STEM Presentations	
Thu	9/24	BB Materials		Technology Portfolio
Tue	9/29	BB Materials	Math - Motivation Science -NOS	
Thu	10/1	BB Materials		MA & SC Single Plans on SLL
Tue	10/6	BB Materials	Math - Topic of Choice Science - Culture and Science	
Thu	10/8	BB Materials		
Tue	10/13	BB Materials	Lesson Plan Workshop	
Thu	10/15	BB Materials		MA & SC Second Single Plan on SLL
Tue	10/20	BB Materials	SPED Review	
Thu	10/22	BBk Materials		
Tue	10/27	BB Materials		
Thu	10/29	BB Materials	Asynch - Math, Science & SPED	MA & SC Guided Observations
Tue	11/3	BB Materials		
Thu	11/5	BB Materials	Asynch _ Math, Science & SPED	
Tue	11/10	BB Materials		
Thu	11/12	BB Materials	Asynch - Math, Science, & SPED	SPED Activity
Tue	11/17	BB Materials		
Thu	11/19	BB Materials	Asynch - Math, Science, SPED	Khan assignments
Tue	11/24		Thanksgiving Week	
Thu	11/26		Thanksgiving Week	
Tue	12/1		Asynch - Math, Science, SPED	
Thu	12/3		Asynch - Math, Science, SPED	Reflections (SPED & Gen. Ed)
Tue	12/8	Optional support		
Thu	12/10	Optional support		

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.