

Student Learning Outcomes (SLOs) Report for <u>Accredited Programs</u> (updated 9/19/23)

Program Type:	Accredited Program
Program Name:	B.A. Mathematics w/ Teacher Licensure
Submitted By:	Marshall Lassak
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Submission Date:	October 6, 2023

Review Cycle:

- o Even Year
- o Odd Year

Review Round and Instructions

- Round A (Associate Dean review): Submit this cover sheet and a copy of the annual (or periodic) report most recently submitted to the accrediting agency; your accreditation report should address assessment.
- Round B (Associate Dean + VPAA review): Submit this cover sheet and the following:
 - evidence of ongoing accreditation (document confirming accreditation status, which could be a letter from the accrediting agency)
 - annual (or periodic) accreditation report submitted to agency
 - this SLO report, which provides a summary of the program's collection and evaluation of its annual assessment data*
 - an optional cover memo (not to exceed one page), which briefly describes any information or highlights the department believes would be important to demonstrate academic excellence and program quality

*If your program completed a significant review (accreditation application and/or the full 8-year IBHE report) in the last calendar year, then you may, with permission from the VPAA or designee, substitute either of these major reports for your typical Student Learning Outcomes report, in "Round B." **To be approved, these documents must substantively discuss assessment, outcomes, and data, and have been prepared and submitted within the same calendar year.**

All SLO reports are archived here: <u>https://www.eiu.edu/assess/majorassessment.php</u> DUE: **October 15**th to your Associate Dean or designee

Mathematics for Teacher Licensure Assessment Plan

Student Learning Outcomes (SLOs) for the Programs

Please list all of the student learning outcomes for your program as articulated in the assessment plan.

- 1. Demonstrate appropriate knowledge of core mathematical content.
- 2. Demonstrate appropriate knowledge of mathematical processes.
- 3. Demonstrate the ability to plan for mathematical learning.
- 4. Demonstrate the ability to teach meaningful mathematics.
- 5. Demonstrate the ability to meaningfully impact the learning of students at the secondary level.

Data is reported for program completers:	2021 - 2022 (n = 5)
	2022 - 2023 (n = 3)

Overview of Measures/Instruments

SLO(s)	Measures/Instruments	He	ow is	the i	nfor	matio	n Used?	SLO correspondence to ULG
Demonstrate appropriate knowledge of core mathematical content.	Course Grades: Grades from all required mathematics courses completed at Eastern are used as one measure of core content knowledge. Coursework is completed throughout the degree program.	Course Grad Note that thes university/stat allowed for a not counted.	es: e data e offe grade	i set c ered C of CI	ontair OVII R (cre	ns stude D accor dit). Tr	ents who used nmodations that ansfer grades are	C, Q
	State Licensure Content Test: The state	2021-2022						
	licensure content test provides an external		Α	В	С	CR]	
	measure across several content categories of	MAT 1441	1					
	student knowledge of core mathematical content.	MAT 2442	2	1	1			
	The state content test is usually completed prior	MAT 2443	3			1		
to student teaching, but a continuing COVID	MAT 2550	2	1					
	accommodation currently allows for it to be	MAT 2800	1	4				
		MAT 3271	4		1			

SLO(s)	Measures/Instruments	How is the information Used?	SLO correspondence to ULG
	completed after student teaching. The test must still be passed to obtain a teaching license.	MAT 3272 3 1 1 MAT 3530 2 2 1 MAT 3701 1 1 2 1 MAT 3701 1 1 2 1 MAT 3400 5 - - MAT 2400 4 1 - MAT 3400 3 2 - CSM 2170 2 1 2 2022-2023 - - CR MAT 1441 - - - MAT 2442 1 1 - MAT 2443 1 1 - MAT 2550 1 - - MAT 2800 1 1 1 MAT 3271 2 - - MAT 3530 2 - - MAT 3400 3 - - MAT 2400 1 2 - MAT 3400 3 - - MAT 3400 3 - - CSM 2170 2 1 - MAT	

SLO(s)	Measures/Instruments	How is the information Used?	SLO comrespondence
			to ULG
		The grade data show that students reasonably know the	
		content. The calculus sequence provides the most	
		incomplete data as many students transfer in one or more	
		of those courses. The foundations class	
		(MA1 2800) shows that most students make the	
		theoretical perspectives well enough. The linear algebra	
		through geometry sequence (MAT 2550 MAT 3271	
		MAT 3272) show that students slightly struggle but	
		ultimately respond well and are able to learn the content	
		needed. Remaining coursework (MAT 3530, MAT 3701,	
		MAT 4900) show similar trends. The mathematics	
		education classes (MAT 2270, 2400, and 3400) show	
		students are reasonably prepared to provide their students	
		with effective learning experiences and are proficient at	
		learning mathematics	
		Students appear to be reasonably prepared to pass the	
		state content test. While the test provides a small	
		measure of content assessment, it is a measure we have	
		no control over how it is written or when students take	
		the test. When a student does not pass, the Secondary	
		Education coordinator in the department contact the	
		student to make sure they are aware of the available free	
Domonstrato annroprioto	Course Credes: All courses in the program at	study materials.	C
knowledge of	Eastern address to some varying degrees the	SLO	C
mathematical processes.	mathematical process- problem solving		
Processes.	reasoning and communication mathematical	Math Teaching Portfolio:	
	modeling	0	
	mouning.	2021-2022: all candidates earned a rating of at least	
	Math Teaching Portfolio: The portfolio is a	'meets criteria' with most earning 'exceeds criteria.'	
	way for program completers to reflect on the		
	coursework they have taken. Coursework	2022-2023: all candidates earned a rating of at least	
	samples (from five different courses) are	meets criteria' with most earning 'exceeds criteria.'	

SLO(s)	Measures/Instruments	How is the information Used?	SLO correspondence to ULG
	submitted along with a narrative that addresses different mathematical processes. The portfolio is submitted the semester prior to student teaching. A three-point rubric is used to assess the submission.	Candidates appear to be able to explain and recognize understand how they experienced the different mathematical processes in their coursework.	
bemonstrate the ability to plan for mathematical learning.	 Feer Teaching Experience in MAT 3400 – Teaching Secondary Mathematics: Students are required to create a detailed lesson plan that they teach to the class and then reflect upon the experience. Part of the lesson planning process includes the completion of the Thinking Through a Lesson Protocol. This protocol is divided into pieces that are directly related to the lesson plan and implementation. The protocol contains questions that students must produce written answers to and then must share during a meeting with the instructor. The actual lesson plan written is assessed using a rubric and the actual implementation of the lesson has its own rubric. The rubric was revised twice during this assessment time frame. A rating of 'Basic' is the minimum rating to show that you have passed an observed or assessed criteria. Student Teaching Assessment: During the student teaching experience, a certified mathematics teacher serves as the cooperating teacher, mentor, and evaluator for the candidate. A supervisor (or supervisors) assigned by the College of Education from the Department of Student Teaching also evaluates the student teacher. The Student Teacher Evaluation Form is completed by the supervisor in consultation with the cooperating teacher at 	 Peer Teaching Experience in MAT 3400 – Teaching Secondary Mathematics: 2021 – 2022: 3/5 students earned at least a 'Basic' rating or better in all assessed and observed categories for both lesson plan and lesson implementation. 1/5 students earned ratings below this for two categories. 1/5 students earned ratings below this in three categories. 2022 – 2023: 3/3 students earned at least a 'Basic' rating or better in all assessed and observed categories for both lesson plan and lesson implementation. 2022 – 2023: 3/3 students earned at least a 'Basic' rating or better in all assessed and observed categories for both lesson plan and lesson implementation. The processes of peer teaching is detailed and involved. While the assessment reveals students are essentially able to write and implement a lesson there are certainly some signs of struggle. It is also the case that for several candidates this is one of their first true teaching experiences. Experiences in the initial methods course (MAT 2400) should prepare candidates for this, but it is apparent additional work needs to be done. Another issue is that more students are taking MAT 3400 earlier and that is creating some developmental challenges regarding understanding pedagogy due to a lack of clinical experiences. 	C, W, S

SLO(s)	Measures/Instruments	How is the information Used?	SLO correspondence to ULG
	mid-term and again at the end of the student teaching experience. The data presented here is the end of experience evaluation data. The Student Teacher Evaluation Form is designed to measure the student teacher's knowledge, skills and dispositions. Only 32 categories of the assessment focused on implementation of a lesson apply to our program. These measures are not content based but rather based on teaching in general. The Illinois Professional Teaching Standards (IPTS) serves as the overall categories that students are evaluated in during student teaching.	 2021 – 2022: 5/5 candidates earned a rating of at least 'meets criteria' in all applicable categories. 2022 – 2023: 3/3 candidates earned a rating of at least 'meets criteria' in all applicable categories. Ratings associated with the specified 32 elements for student teachers who are teaching mathematics provides evidence for pedagogical content knowledge. The judgment of the student teaching supervisor in these areas provide evidence for competency in planning and executing teaching strategies that are appropriate for meeting student needs in the mathematics classroom and the larger professional community. That said, this assessment provides the most tangential data for our program and may be modified regarding our use of it in the future. The categories are still a bit nebulous and are not specifically content focused. 	
Demonstrate the ability to teach meaningful mathematics	Cooperating Teacher Candidate Evaluation: All program candidates must provide to their cooperating teacher(s) a copy of the evaluation created by the Department of Mathematics and Computer Science that serves as an evaluative instrument specifically to address various teaching and pedagogical elements. This survey allows the department gather granular level data on how the candidate met or did not meet these criteria. A rating of 'competent' or higher is the goal on the three-scale rating system. The survey was revised once during this assessment time frame.	 Cooperating Teacher Candidate Evaluation: 2021 – 2022: 5/5 candidates earned ratings of competent or better across all measured categories. 2022 – 2023: 2/3 candidates earned ratings of competent or better across all measured categories. 1/3 candidates earned a rating lower than this in one measured category. Candidates seem to be able to differentiate instruction, choose effective tasks and implement effective lessons. Additionally, it appears candidates do well working with the cooperating teacher and others in the building/district in planning learning experiences. This data appears to be more useful in assessing our program than the more general Student Teaching Assessment and therefore may replace that one in the next report cycle. 	C, W, S

SLO(s)	Measures/Instruments	How is the information Used?	SLO correspondence to ULG
Demonstrate the ability to meaningfully impact the learning of students at the secondary level.	Impact on Secondary Math Student Learning Assessment: The assessment to measure candidate impact on student mathematics learning requires that each student identify a learning segment within a unit of study for her/his class during student teaching and then provide details regarding planning, implementation, and assessment measures for that unit. Candidates have flexibility as to how they want to measure learning, but any measure must show gains in knowledge beyond memorization. The learning segment is also supported via video segments or direct observation by the secondary mathematics education coordinator in the department. As part of the submission, students submit a narrative describing the central focus of the learning segment and how thy have planned this segment taking into account the needs of their students (both math and non-math specific). Students also must justify that they are implementing high cognitive demand tasks in the unit and are attempting to promote reasoning and sense making. Finally, students are required to use math specific tools and discuss how they used representations to further learning. Regarding the measures of assessment_candidates are asked to	 2021 – 2022: 2/5 candidates earned a rating of 'emerging' or better across all measured categories. 1/5 candidates earned a rating below this in one measured category. 2/5 candidates earned a rating below this in more than one measured category. 2022 – 2023: 3/3 candidates earned a rating of 'emerging' or better across all measured categories. The assessment shows that while candidates are mostly prepared to engage in student teaching, there is still some work to be done in key areas. Specifically, learning how to allow students chances to express positive dispositions towards mathematics is an area of work. Implementation of a high cognitive demand task and the chance to engage all students in reasoning and sense making need additional emphasis. On the other hand, it seems the work being done regarding questioning, use of tools, and representation is coming through in these experiences. Some of this work may need to be done with the consideration of the learning environment that does not exist in the traditional classroom. 	C, W, Q
	provide details on how they designed their assessment plan, collected data and then		

SLO(s)	Measures/Instruments	How is the information Used?	SLO correspondence to ULG
	ultimately analyzed that data to determine the outcomes of the learning segment. Details regarding types of assessment and reflections are also required. A rubric is used to assess each aspect of the narrative and provided evidence. A rating of 'emerging' or higher is the goal for the three scale rating system.		

*Please reference any University Learning Goal(s) (ULG) that this SLO, if any, may address or assess. C=Critical Thinking, W=Writing & Critical Reading; S=Speaking and Listening; Q=Quantitative reasoning; R=Responsible Citizenship; NA=Not Applicable

I am including evidence to show that the program is nationally recognized by NCTM/CAEP. There is no letter, but I have included the first page of submitted report.

NATIONAL RECOGNITION REPORT Initial Preparation of Secondary Mathematics Teachers (2020 Standards)

National recognition of this program is dependent on the review of the program by representatives of the National Council of Teachers of Mathematics (NCTM).

COVER PAGE Name of Institution Eastern Illinois University Date of Review MM DD YYYY 02 / 01 / 2023 This report is in response to a(n): O Initial Review Revised Report Response to Conditions Report Program Covered by this Review Mathematics for Teacher Licensure Grade Level⁽¹⁾ 9-12 (1) e.g. Early Childhood; Elementary K-6 Program Type First Teaching License Award or Degree Level Baccalaureate Post Baccalaureate Master's **PART A - RECOGNITION DECISION**

SPA decision on national recognition of the program(s):

- Nationally recognized
- Nationally recognized with conditions
- Further development required OR Nationally recognized with probation OR Not nationally recognized [See Part G]

Test Results (from information supplied in Assessment #1, if applicable)

Improvements and Changes Based on Assessment

[INTENTIONALLY LEFT BLANK – FOR USE IN FUTURE YEARS]

1. Provide a short summary (1-2 paragraphs or bullets) of any curricular actions (revisions, additions, and so on) that were approved over the past four years as a result of reflecting on the student learning outcomes data. Are there any additional future changes, revisions, or interventions proposed or still pending?

Departmental controlled assessments and rubrics are reviewed every academic year and revised as needed regarding clarity. In this assessment time frame, the mathematics teaching portfolio assessment was revised to better reflect the needed mathematical process and to allow for submission of coursework from non-content courses. The cooperating teacher survey was redesigned with a rubric that better allowed for rating observable actions. Further, the survey was renamed to "Cooperating Teacher Candidate Evaluation" to better reflect that this is an assessment tool. Finally, the edTPA was removed from our assessment tools. Over the past several years, this external assessment has not been required and moving forward the state has officially removed this assessment as a requirement for student teaching. In general, we have found that we get better and more targeted feedback using our "Impact on Secondary Math Student Learning Assessment" rather than the more general information edTPA provided.

As noted in the data tables, we most likely will eliminate the "Student Teaching Assessment" as a measure of outcomes relate to our program. We are finding the "Cooperating Teacher Candidate Evaluation" and the "Impact on Secondary Math Student Learning Assessment" provide more relevant information for us. We will continue to monitor that data from the "Student Teaching Assessment" but more in terms of general outcomes, rather than departmental specific ones.

2. Please provide a brief description or bulleted list of any improvements observed/measured in student learning over the past four years. Be sure to mention any intervention made that has not yet resulted in student improvement (if applicable).

As this data is for students who were coming out of or were completing work during COVID, we are hesitant to make too many conclusions or judgements. That said, we are working on making stronger connections between experiences and what is learned in MAT 2400 (the first methods course) and MAT 3400 (the second methods course). We may design an external assessment (much like the portfolio) that requires students to make specific connections between the two courses. Ideally, we would also like to have students use and implement what was learned about technology in MAT 2770 in the MAT 3400 class. However, with more students taking these classes concurrently, that may not be possible.

3. Using the form below, please document annual faculty and committee engagement with the assessment process (such as the review of outcomes data, revisions/updates to assessment plan, and reaffirmation of SLOs).

History of Annual Review

Date of Annual	Individuals/Groups who Reviewed Plan	Results of the Review (i.e., reference proposed changes from #1 above, revised
Review		SLOs, etc)
2022 (revised 2023)	NCTM/CAEP	Program is Nationally Recognized
Summer 2021	Marshall Lassak	Revisions as detailed earlier in the report.
Summer 2022	Marshall Lassak	No revisions as program was currently under NCTM/CAEP review.

CLAS Dean's Comments

The BA in Mathematics Teacher Licensure program is accredited by the NCTM and the program continues to be nationally recognized and meets all SPA standards. SLOs are linked to SPA assessment requirements and the data indicate that program learning goals are either fully or partially met. As the report notes, data are being used to improve assessment procedures and also to inform decisions about program curriculum. Overall, the program continues to meet NCTM standards and we look forward to seeing the progress at the 4-year mark (2025).

Dean or designee: Michael Cornebise

Date: 11/17/2023

Academic Affairs – Review & Feedback

B.A. Mathematics with Teacher Licensure (accredited)

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The B.A. in Mathematics with Teacher Licensure program not only meets accreditation standards of the National Council of Teachers of Mathematics, but also demonstrates a strong willingness to adapt to the developing needs of students as they prepare to become mathematics teachers. This means that the program continuously checks its measures in order to identify "signs of struggle." The program relies upon assessment data that proves useful (such as the math teaching portfolio), entertains the idea of replacing sources that are less useful (adopting the cooperating teacher evaluation instead of the student teaching assessment), and considers the consequences of students taking certain courses concurrently rather than in a more traditional sequence. The program demonstrates a thoughtful and effective approach to assessing student learning, evinced in such lines as "Implementation of a high cognitive demand task and the chance to engage all students in reasoning and sense making need additional emphasis."

hiji Kl

4/2/24

VPAA or designee Dr. Suzie Park, Asst VPAA Interim

Date