

Developmental Studies Student Learning Report

Revised May 2020

Department of Mathematics & Physical Sciences

Developmental Math

For 2022-2023 Academic Year

PART 1

Developmental Studies Mission and Student Learning Outcomes

A. State the school, department, and development studies missions.

University Mission	School Mission	Department Mission	Developmental Studies Mission
<p>Our mission is to ensure students develop the skills and knowledge required to achieve professional and personal goals in dynamic local and global communities.</p>	<p>Central to the mission of the School of Arts and Science is the preparation of students to achieve professional and personal goals in their respective disciplines and to enable their success in dynamic local and global communities. Seven departments comprise this School, the Departments of Biology, Communications, English and Humanities, Fine Arts, History and Political Science, mathematics and Physical Sciences, and Psychology and Sociology. These departments pledge to deliver existing and newly developed programs that meet student demands, and to be responsive to the evolving culture of academia in general and the sciences in particular.</p> <p>Our Strategy is to foster an academic setting of diverse curricula that inherently incorporates an</p>	<p>The mission of the Department of Biology at Rogers State University is to support students in their pursuit of knowledge in biology and life science. Our purposes include increasing the student's critical thinking and reasoning abilities, increasing the student's ability to interpret and understand his/her world, and helping them serve as a resource for the community.</p>	<p>Our mission in Developmental Education is to ensure that skill deficient students develop the math and science skills necessary to be successful in their college-level classes to promote their future personal and professional success in their local and global communities.</p>

University Mission	School Mission	Department Mission	Developmental Studies Mission
	environment of service and collegiality.		

B. Align school purposes, department purposes, and developmental studies learning outcomes with the appropriate University commitments.

University Commitments	School Purposes	Department Purposes	Student Learning Outcomes
To provide quality associate, baccalaureate, and graduate degree opportunities and educational experiences which foster student excellence in oral and written communications, scientific reasoning and critical and creative thinking.	The School will offer developmental courses that will prepare students for college careers that will enhance their quality of life. This will be accomplished by honing and developing analytical and communication skills.	The Biology Department will provide a remedial course to provide knowledge of basic concepts and principles of physical and life sciences. This course will facilitate the students preparation to succeed in future science course work by strengthening scientific analytical skills, creative problem solving, critical thinking and data gathering as well as process thinking.	1) Students will demonstrate mastery of scientific and mathematical principles necessary for entry-level collegiate study
To promote an atmosphere of academic and intellectual freedom and respect for diverse expression in an environment of physical safety that is supportive of teaching and learning.			
To provide a general liberal arts education that supports specialized academic programs and prepares students for lifelong learning and service in a diverse society.			
To provide students with a diverse, innovative faculty dedicated to excellence in teaching, scholarly pursuits and continuous improvement of programs.			
To provide university-wide student services, activities and resources			

University Commitments	School Purposes	Department Purposes	Student Learning Outcomes
that complement academic programs.			
To support and strengthen student, faculty and administrative structures that promote shared governance of the institution.			
To promote and encourage student, faculty, staff and community interaction in a positive academic climate that creates opportunities for cultural, intellectual and personal enrichment for the University and the communities it serves.			
To assist both freshmen and transfer students through their first year at RSU in their professional and personal goals. Learners, who feel more connected at the university and supported by faculty and staff, are more successful and more satisfied with their overall college experience.			

PART 2

Revisit Proposed Changes Made in Previous Assessment Cycle

Revisit each instructional/assessment change proposed in Part 5 of the developmental studies SLR for the preceding year. Indicate whether the proposed change was implemented and comment accordingly. Any changes the department implemented for this academic year, but which were not specifically proposed in the preceding report, should also be reported and discussed here. Please note if no changes were either proposed or implemented or this academic year.

Proposed Change	Implemented? (Y/N)	Comments
1) Formulation of assessment measures for MATH 0212 Statistics Foundations.	Fall 2023	The course was first offered in spring 2023. Assessment measures and data collection will begin in 2023-24.

2) Formulation of assessment measures for MATH 0322 Functions and Modeling Foundations.	Fall 2023	The course was first offered in spring 2023. Assessment measures and data collection will begin in 2023-24.
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PART 3

Response to University Assessment Committee Peer Review

The University Assessment Committee provides written feedback on departmental assessment plans through a regular peer review process. This faculty-led oversight is integral to RSU's commitment to the continuous improvement of student learning and institutional effectiveness. UAC recommendations are not compulsory and departments may implement them at their discretion. Nevertheless, respond below to each UAC recommendations from last year's peer review report. Indicate whether the recommendation was implemented and comment accordingly. Please indicate either if the UAC had no recommendations or if the program was not subject to review in the previous cycle.

Peer Review Feedback	Implemented (Y/N)	Comments

PART 4

Evidence of Student Learning

Evidence and analyze student progress for each of the developmental studies student learning outcomes (same as listed in Part I B above). See the *Appendix* for a detailed description of each component. Note: The table below is for the first student learning outcome. Copy the table and insert it below for each additional outcome. SLO numbers should be updated accordingly.

A. Student Learning Outcome					
SLO #1: 1. Students will demonstrate mastery of scientific principles necessary for entry-level collegiate study.					
B. Assessment Measure	C. Performance Standard	D. Sampling Method	E. Sample Size (n)	F. Results	G. Standard Met (Y/N)
1a. Chapter 1 Test/Exam scores in Elementary Algebra Plus.	1a.70% of students will score 70% or above in Chapter 1 Test/Exam.	1a. Students who completed the objectives in day, evening, online, and Zoom courses taught by fulltime and adjunct faculty on all campuses	1a. 36	1a. 35 out of 36 students scored 70% or higher on the Chapter 1 exam	1a. Yes

A.
Student Learning Outcome

SLO #1: 1. Students will demonstrate mastery of scientific principles necessary for entry-level collegiate study.

B. Assessment Measure	C. Performance Standard	D. Sampling Method	E. Sample Size (n)	F. Results	G. Standard Met (Y/N)
		in fall 2022 and spring 2023 semesters.			
1b. Unit quizzes in College Math Foundations.	1b. Students will score 70% or better on average on 10 quizzes.	1b. Students who took 10 quizzes in day or evening sections taught by fulltime and adjunct faculty on all campuses in fall and spring semesters.		1b. Pass/Fail results:	1b.
1c. Scores on assignments in units 2.3, 2.4, 2.5 and 2.7.	1c. 70% of the students will score 70% or above in assignments units 2.3, 2.4, 2.5 and 2.7.	1c. Students who took the assignments from sections 1.1, 1.2, 1.3 and 1.8 in day, evening, and online sections taught by both fulltime and adjunct faculty on all campuses in fall and spring semesters.	1c. 36	1c. 26 out of 36 students scored 70% or higher on all assignments from units 2.3, 2.4, 2.5 and 2.7. This is a challenging Performance Standard to meet. If a score <70% is made on any one of the four assignments by a student, then it does not count as positive, even if the benchmark is met on the other three assignments.	1c.
1d. Unit quizzes in College Algebra Foundations on four course objective areas of Simplify Algebraic Expressions and Evaluate Numerical Expressions, Solve Linear and Quadratic Equations/Inequalities, Graph Linear and Quadratic Equations/Inequalities, and Solve Systems of	1d. Students will score 70% or better on average on 10 quizzes.	1d. Students who took 10 quizzes in 7 sections in fall, spring and summer including online, on ground, and Zoom.	1d. 13	1d. Pass/Fail results: 9/13 students passed the quizzes with a 70% average.	1d.

A. Student Learning Outcome					
SLO #1: 1. Students will demonstrate mastery of scientific principles necessary for entry-level collegiate study.					
B. Assessment Measure	C. Performance Standard	D. Sampling Method	E. Sample Size (n)	F. Results	G. Standard Met (Y/N)
Linear Equations/Inequalities.					
H. Conclusions					

**PART 5
Proposed Instructional or Assessment Changes**

Learning outcomes assessment can generate actionable evidence of student performance that can be used to improve student success and institutional effectiveness. Knowledge of student strengths and weakness gained through assessment can inform faculty efforts to improve course instruction and program curriculum. Below discuss potential changes the department is considering which are aimed at improving student learning or the assessment process. Indicate which student learning outcome(s) will be affected and provide a rationale for each proposed change. These proposals will be revisited in next assessment cycle.

Proposed Change	Applicable Learning Outcomes	Rationale and Impact
<p>The following Measures will be implemented in 2023-24 supporting new general education math courses MATH 0212 Statistics Foundations and MATH 0322.</p> <p>1e. MATH 0212 -Statistics Foundations-Unit quizzes in Statistics Foundations.</p>		

Proposed Change	Applicable Learning Outcomes	Rationale and Impact
1f. MATH 0322 -Functions and Modeling Foundations-Unit quizzes in Functions and Modeling Foundations.	<ul style="list-style-type: none"> • Solve linear and nonlinear equations. • Solve linear inequalities. • Recognize and evaluate functions stated in various ways, including functions defined by tables or graphs. • Create a visual representation of various functions including but not limited to linear, polynomial, rational, radical, exponential, logarithmic functions • Use technology to model, analyze, and solve various business-related applications 	

PART 6

Summary of Assessment Measures

- A. How many different assessment measures were used? 4 measures total in four courses
- B. List the direct measures (see appendix): 1a Exam #1 Scores in Elementary Algebra, 1b Quizzes in College Math Foundations. 1c Assignments in Elementary Algebra, 1d Quizzes in College Math Foundations.
- C. List the indirect measures (see appendix): Success (A, B, C, D) rate in co-requisite for-credit course.

PART 7

Faculty Participation and Signatures

- A. Provide the names and signatures of all full time and adjunct faculty who contributed to this report.

Faculty Name	Assessment Role	Signature
Roya Namavar Candy Leighty	Collected assessment data Collected assessment data	

D. Reviewed by:

Titles	Name	Signature	Date
Dean	Dr. Keith Martin	<i>Keith W. Martin</i>	5/31/2023