Year	2022-23
Course number and Name:	INEN 2301 Quantitative Methods
Component area:	Other
Number of sections offered:	Spring 23 one section, Fall 23 one section
Number of students enrolled:	10 +18 = 28
Contact Person (include email & Phone#)	James Curry <u>James.curry@lamar.edu</u> 248-802-5891

Summary of Continuous Improvement Efforts since Last Report

Provide a brief description of how assessment results have been used for core course improvement. Point to a specific example of how an assessment provided the department with data it could use for improvement and what that improvement was, if possible, also show evidence of the improvement. You may look at data from the two previous academic years to support this case.

Respond here:

Improvement 1

Identification

This course uses a website provided by the publisher of the textbook. Students were having difficulties maneuvering through the website. This inability caused students to miss out on learning tools provided by the publisher.

Improvement

A video was produced titled "A Tour of Mylab." In the video students are shown how to navigate the website and unlock the tools provided by the publisher.

Result

Data collected will be analyzed at the end of the Spring 2023 semester.

Improvement 2

The majority of online students are not watching lecture videos. Approximately 40% of the students watch videos. Not watching the lectures leads to confusion and poor understanding of the subject matter.

Improvement

A percentage of the student's exam grades will come from watching the lecture videos.

Result

Data collected will be analyzed at the end of the Spring 2023 semester.

Improvement 3

Students are not reading the syllabus. This is evident by students asking questions that are answered in the syllabus and by losing points on laboratories, quizzes, and exams.

Improvement

A video was produced and distributed to the students titled "Syllabus Discussion."

Result

Eighteen of twenty-seven students, 66%, have watched the video before the first three weeks of the semester. Sixty-six percent will be the baseline for further improvements

Improvement 4

Most students work. The schedules they work vary from straight days to different variations of shift work. Because of these constraints, some students can only work on classwork on weekends. Students sometimes need answers to questions they cannot ask during regular weekly schedules. Because their questions can't be answered, their understanding of the topic is suboptimal, and their grade suffers.

Improvement

I have made mys	self accessible to s	students on weekends	as necessary, in-	cluding email, r	phone conferences.	and meetings of	n Collaborate Ultra.
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Result

Students' questions are answered, giving them the tools they need to succeed in this course.

Course highlights Since Last Report

Identify and briefly discuss any changes made to the course since the last report.

Respond here:

None beyond the above improvement plans.

Table 1. Assessment Results and Analysis for Current Cycle

Stage 1: PLAN			STAGE 2: DO		Stage 3: STUDY	
General	Assessment	Proficiency – e.g.	Benchmark – e.g.	Results of course	Analysis of	Recommendations
Education	Method(s) – e.g.	the proficient	80% of students	assessment(s)	results – e.g.	for Course based
Competencies	pre/post tests,	student will	taking the final		strengths and	on assessment
Addressed in this	embedded	correctly answer	exam will		weaknesses	
Course:	questions,	5 out of the 6	correctly answer		What does this	
	portfolio	embedded	5 of the 6		data tell you?	
	evaluation,	questions on the	embedded		How will you use	
	rubric-scored	final exam	questions on the		this data? How	
	essay; list only		final exam		were data from	
	activities for				the last cycle	
	which you are				used to make	
	reporting				changes during	
	assessment data				this cycle, and	
					what were the	
					results of those	
					changes?	
Communication		Shows ability to	80% of students	83.3% successful	The changes	
(required)	Review of student	define key terms	demonstrate an		implemented in	
	work on exam for	and concepts,	ability to do the		the course have	
	related questions.	determine	tasks.		resulted in good	
		random variable,			performance on	
		find and interpret			the tasks.	
		the covariance				
		and correlation				
		between two				
		random variables,				
		find and interpret				
		the expected				
		value and				
		standard				
		deviation or				

		variance of random variables.			
Critical Thinking (required)	Review of student work on exam for related questions.	Is able to use the language of probability to represent uncertain outcomes as random variables, manipulate the mean, variance, and standard deviation of random variables when transformed, and find the mean, standard deviation, and variance of random. variables.	80% of students demonstrate an ability to do the tasks.	88%	

Select One:x_Empirical & Quantitative SkillsTeamworkSocial responsibilityPersonal Responsibility	Review of student work on exam for related questions.	Shows a good ability to speak, read, and understand the language and concepts of probability, find complements, intersections, and unions of events, work with the Law of Large Numbers, apply rules of probability.	80% of students demonstrate an ability to do the tasks.	94%	We need to work	
Select One: xEmpirical & Quantitative SkillsTeamwork _Social responsibilityPersonal Responsibility	Review of student work on exam for related questions.	Has a good ability to distinguish joint, marginal, and conditional probabilities, use the rules and notation of probability, find	80% of students demonstrate an ability to do the tasks.	83%	We need to work on more direct measures of social responsibility.	

conditional probabilities, and use conditional probability to describe dependent events.		

Table 2. Continuous Improvement Results Since Last Report

STAGE 4: ACT		
Actions/Goals based on data	Status	Discussion of status
results	C=Complete	If C, describe efforts that led to accomplishment of actions/goals
*copy last cycles actions/goals	P=Progressing	If P, provide update on progress made toward accomplishing actions/goals
and report on progress toward	N=No action taken	and what tasks remain
continuous improvement on		If N, discuss why action toward accomplishing actions/goals has been
those here		delayed and what work will be initiated toward accomplishment.
Review topics of BSIT degree to	N	
make sure pre-rec structure is		
correct.		
Adjust our assessment to better	P	We are working on measures of Personal Responsibility in the assessement
cover all the areas.		of the course. Next year we will use percent of video watched and
		assignment / course completion.