Assessment Data Template

Red items will only change if the plan is updated.

Learning Outcome:

Outcome Measure:

Criteria for Success (if applicable):

Aligned with DQP Learning Areas (circle one or more):

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

Conclusions Drawn from Data:

Changes to be Made Based on Data:

Rubric Used

Assessment Data Mathematics Outcome #2

Learning Outcome:
Mathematics Outcome #2: Students will be able to write proofs

Outcome Measure:
MTH242 Signature Assignment (each year)

Criteria for Success (if applicable):
80% of the students to score a 2.5 or higher (on a scale of 1-4 with 1 being low) in each of the four areas:

- Statement of the problem
- Logic
- Symbolism
- Justification

Aligned with DQP Learning Areas (circle one or more):

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skills/Core Competencies
4. Applied and Collaborative Learning, and
5. Civic and Global Learning

Longitudinal Data:

	Percentage of Class at 2.5 or Higher			
	2011	**2012**	**2013**	**2014**
Statement of Problem	100%	100%	100%	100%
Logic	100%	88%	100%	100%
Symbolism	100%	100%	100%	100%
Justification	86%	75%	100%	83%

Conclusions Drawn from Data:
The one point of weakness seems to be in the area of the justification of the steps of the proof.

Changes to be Made Based on Data:
Continue to emphasize the fundamental importance of the need to justify each step of the proof in MTH242 and use this rubric to assess some of the early proof assignments in the class so that students have a clear indication that their lack of justification is weak point.

Rubric Used

Proof Writing Rubric (MTH242, MTH424, MTH444)

	Unsatisfactory	Low Satisfactory	High Satisfactory	Outstanding
Statement of the Problem	Can not determine what is given and what needs to be proved	Misses one part of the hypothesis or the conclusion	Makes one minor error in identifying hypothesis or conclusion	Understands what is given and what is to be proved
Logic	Proof has major flaws that make it invalid.	Proof misses more than one major element.	Proof has the main flow of the logic correct but misses one major element	Statements flow logically from one another
Symbolism	There are many errors in the use of symbolic notation	There are more than two errors in symbolic notation	There are two or fewer minor errors in symbolic notation (e.g. missing parentheses)	All symbols are used correctly
Justification	There are several errors in the justification	There is one major mistake in justification or more than two minor errors.	There are two or fewer minor errors in justification for the steps.	Every logical step has the appropriate reason (theorem, definition, lemma, etc.)