## WRIGHT COLLEGE

## PROGRAM/DISCIPLINE ASSESSMENT FORM

Program/Discipline: Mathematics Instructional Manager: Kevin Li

Semester/Year: Fall 2012
Assessment Coordinator: Julius Nadas Email:jnadas@ccc.edu

Plan Title:

Part A: Initial Plan: due to your assessment coordinator for review before the Aug 26 Assessment Committee meeting
Part B: Midsemester Update: due to your assessment coordinator for review before the Oct 21 Assessment Committee meeting
Part C: Further Updates: due date will be determined
The current submission is which of the following:

$$
\text { X Initial Plan date: } 9 / 5 / 12
$$

$\square$ Mid-year update date:
$\square$ Final Report date:

College Mission: Wright College is a learning-centered, multi-campus institution of higher education offering students of diverse backgrounds, talents, and abilities a quality education leading to baccalaureate transfer, career advancement, and/or personal development.
Program/Discipline Mission: The Department of Mathematics offers students of diverse backgrounds and skills a variety of mathematics courses so that students will develop the ability to explore, conjecture, reason logically, and effectively solve mathematical problems using multiple methods and current technology to acquire the knowledge necessary to succeed in their future endeavors.

## Area of Focus:

Your department efforts are to improve learning in what topic/area?

## Evidence:

What past results have led your department to conclude that this is an area needing attention?

## A. Initial Assessment Plan

1. Intermediate Algebra; measuring and addressing math anxiety, introducing int. alg. students to college support services in an effort to increase persistence and success in Math 99: Intermediate Algebra.
2. Math 99 Final Exam comparisons between MOD and traditional formats for Spring 2012 and Fall 2012 to improve exam and map trends of SLO success.
3. Conduct Math 99 instructor meetings to share ideas and best practices.

Consistently low persistence rates and success rates in Math 99, a gateway course to college level math and therefore a requirement for most students has led the department to investigate what factors instructors could influence that would lead to greater success for our students. "One of the most notable consequences of math anxiety is poor math achievement and poor math grades" (Shields, 2005). Shields goes on to include comments from earlier research that state "the most dominant factor in molding student attitudes is teacher attitudes."

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## Course(s) of Interest:

What courses will be involved in your plan?

## Intended Program Student Learning Outcomes (SLOs)

List each relevant SLO that this project pertains to.

## Involved Faculty:

List the instructor(s)
participating in the
assessment process for each outcome listed above.

## Assessment/Intervention Process

Address the following questions:

What approach will be used?
Why was this process selected?
How will student learning be measured?
When will data collection be completed?
Who will analyze the results?

Math 99 Intermediate Algebra with Geometry

Because experiencing high math anxiety may impact performance and as a result academic achievement in math (Hamza Helal, Hagstrom, 2011), the math department believes by addressing math anxiety we can address all Math 99 student learning outcomes.

All Math 99 instructors

What:

- presentations by support staff
- pre and post survey for math anxiety
- course meetings
- final exam comparisons

Why:

- to introduce students to college support services
- to let students and instructors gauge math anxiety
- faculty development regarding math anxiety
- standard analysis for criterion reference exams

How:

- invite staff to 99 classes
- administered in classes by $5^{\text {th }}$ and again $14^{\text {th }}$ week of classes
- meeting will be called during $8^{\text {th }}-10^{\text {th }}$ week of classes
- Test reliability, item analysis


## When:

- during first half of semester
- see above
- see above
- Sp12 exam analysis by December 2012

Who:

- each Math 99 instructor invites support service staff, draft letter emailed to instructors
- surveys administered in class, students calculate anxiety levels, instructors record
- meetings called by course coordinator
- analysis done by Lidia Dobria

Completely describe all actions that have
occurred since this past
August with respect to
your department's
Assessment Plan.
Attach any relative documents (rubrics, surveys, other assessment tools).

Are there any obstacles to the implementation of the plan that the Assessment Committee should know about or can assist with?

Summary of Results and Analysis of Data Collected

What were the results of the assessment process?

What was learned from the results?

## Action Plan Based on

Results and Analysis
Based on what was
learned, what additional
steps will be taken to
improve student learning?

