

AUGUST 2015

REPORT ON THE ASSESSMENT OF STUDENT LEARNING

INSTITUTION: Hutchinson Community College

AREA ASSESSED: Mathematics and Analytical Reasoning

Assessment Instrument(s):

To assess the learning outcomes for the courses at Hutchinson Community College, faculty report the number of completers and achievers for each of the course outcomes. The completers are those students who have completed the assessment (exam, assignment, report, project, etc.) while the achievers are those students who have successfully completed the assessment with a “C” or better. Outcomes from the courses have been mapped to the areas of mathematics/quantitative/analytical reasoning.

Outcomes used from the following courses provided our data to assess this area:

MA098 Basic Algebra, MA105 Intermediate Algebra, MA106 College Algebra, MA107 Plane Trigonometry, MA108 Elements of Statistics, MA111 Analytical Geometry and Calculus I, MA113 Analytical Geometry and Calculus II, and MA206 Differential Equations

In addition to course outcome reporting, HCC also uses success rates for MA106 College Algebra to assess Mathematics and Analytical Reasoning

Assessment Results:

Fall 2012 –72.7% Successfully Completed the Outcomes (Achievers=612 Completers=841)
Spring 2013 –72.9% Successfully Completed the Outcomes (Achievers=859 Completers=1179)

Fall 2013 –73.3% Successfully Completed the Outcomes (Achievers=776 Completers=1058)
Spring 2014 –70.7% Successfully Completed the Outcomes (Achievers=504 Completers=712)

Fall 2014 –71.7% Successfully Completed the Outcomes (Achievers=868 Completers=1211)
Spring 2015 –77.8% Successfully Completed the Outcomes (Achievers=1349 Completers=1736)

MA106 Success Rates*

Fall 2012 –73.82% Successfully Completed MA106 (344 out of 466 students)
Spring 2013 –77.55% Successfully Completed MA106 (342 out of 441 students)

Fall 2013 –75.75% Successfully Completed MA106 (381 out of 503 students)
Spring 2014 –75.96% Successfully Completed MA106 (297 out of 391 students)

Fall 2014 –74.45% Successfully Completed MA106 (370 out of 497 students)
Spring 2015 –76.44% Successfully Completed MA106 (318 out of 416 students)

*The Success Rates is based upon students who earned an A, B, or C compared to students who earned an D or F or withdrew from the class.

Explain how your institution makes use of the assessment results:

Faculty assess the student learning taking place through the assessment instruments they utilize.

They then make adjustments accordingly based upon student achievement in terms of meeting the course outcomes. The assessment results are also used in program reviews to make data-driven decisions about modifications that need to occur.

Comments:

In July 2014, HCC hired an Integration Specialist to work with students in the technical areas who were struggling with mathematics. Then in Spring and Summer of 2015, HCC initiated Math Prep Sessions to help students combat math anxiety and also refresh their mathematics skills before they took their placement tests which guide student enrollment into the appropriate mathematics course for their skill level. HCC is also now offering a combination of Basic and Intermediate Algebra in the same semester (Basic in the first 8 weeks and Intermediate in the second 8 weeks) and a combination of Intermediate and College Algebra (the same format as above). These courses are being marketed to students and advisors for those students who place very high to the cutoff score for the next level course but did not quite surpass the required score. The students are likely those who need to go over material covered in Basic Algebra but will be able to progress through the topics at a more accelerated pace, which will allow them to move to Intermediate Algebra sooner and without a long break between the two courses. The same format is present for the Intermediate and College Algebra combination. The goal for all of three of these is to help improve the student learning occurring at HCC.