GGC’s Corequisite Mathematics model

- **Non-STEM**: Quantitative Skills & Reasoning with Support: MATH 1001 (3 cr.) + MATH 0997 (2 cr. -inst.)
- **STEM**: College Algebra with Support: MATH 1111 (3 cr.) + MATH 0999 (2 cr. -inst.)
- Placement based on Mathematics Placement Index (MPI)
  - Quantitative Skills and Reasoning with Support: 1075 - 1164
  - College Algebra with Support: 1075 - 1264
- Students must register for both courses (separate CRNs, but linked by section number) and cannot drop either section.
- The same instructor leads both sections (taught back-to-back), both sections have the same students enrolled, and small class sizes are maintained.
- Students exit Learning Support by passing the MATH 1001 or MATH 1111 course with a grade of C or better.
Corequisite Mathematics Outcomes

• **Fall 2017 Enrollment**

  • **Quantitative Skills and Reasoning with Support:** 188
    • Approximate 34% decrease from Fall 2016 and Spring 2017.

  • **College Algebra with Support:** 360
    • Comparable to Spring 2017 enrollment, but down by approximately 12% from Fall 2016.
Corequisite Mathematics Outcomes

• Spring 2017 results (preliminary)
  • Quantitative Skills and Reasoning with Support - Approx. 77% Pass Rate (C or better)
    • Decrease in the 86% pass rate for Fall 2016
  • Stand - alone Quantitative Skills and Reasoning (MATH 1001) - Approx. 79% Pass rate (C or better)
  • College Algebra with Support - Approx. 76% Pass Rate (C or better)
    • Increase in the 68% pass rate for Fall 2016
  • Stand alone College Algebra (MATH 1111) - Approx. 80% Pass rate (C or better)

• ACCESS MATH Students in MATH 1113 Pre-Calculus
  • Of about 90 students who took MATH 1113 in SP17 after passing College Algebra with support in FA16, approximately 44% passed with a grade of C or better. (transactional data only)
Corequisite MATH: What is Working Well

- Pass rates continue to be robust in the paired co-requisite ACCESS Mathematics model.

- Tutors in Classrooms (TIC), assigned Student Success Advisors, and related efforts appear to be supporting success.

- Corequisite ACCESS sections included in learning communities.

- Currently, almost 25% of students in GGC’s Honors Program got their start in at least one Learning Support course.
Corequisite MATH: Challenges

• Promote greater engagement in MATH 0999/MATH 0997 sections.
• Improve subsequent performance (beginning with MATH 1113) for students passing ACCESS MATH.

• Identify characteristics of students who both do well and who struggle to earn a C or better in MATH 1001 and MATH 1111:
  • MPI/placement-related correlates (test scores, HS GPA, others)
  • Review for any shifts in, e.g., HS GPA, course load, or other characteristics for incoming co-requisite MATH students.
  • How are they doing in other classes?
  • Are they involved in campus life?
Takeaways/Lessons Learned

• Supporting the transition to MATH 1113 and beyond
• Supporting students who change from the Non-STEM to STEM track
• Link to other first-year student support (e.g., FYS, Advisors, tutoring)
• Involvement of peer leaders
• Refine corequisite Mathematics model based on data, review, and best practices
• Provide support to students who change from Non-STEM to STEM track
• Manage pre-requisite requirements
• Thank you!