Math On Demand @ Wilbur Wright College

A Modularized, Accelerated Developmental Math Program

Kevin Li, Dean of Instruction

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Background

- Similar to many higher education institutions, Wright College continues to witness incoming students' need for developmental education

- Among students completing the college's placement exams in Fall 2009:
  - 58% were placed into developmental/remedial English
  - 58% were placed into developmental/remedial Reading
  - 84% were placed into developmental/remedial Math

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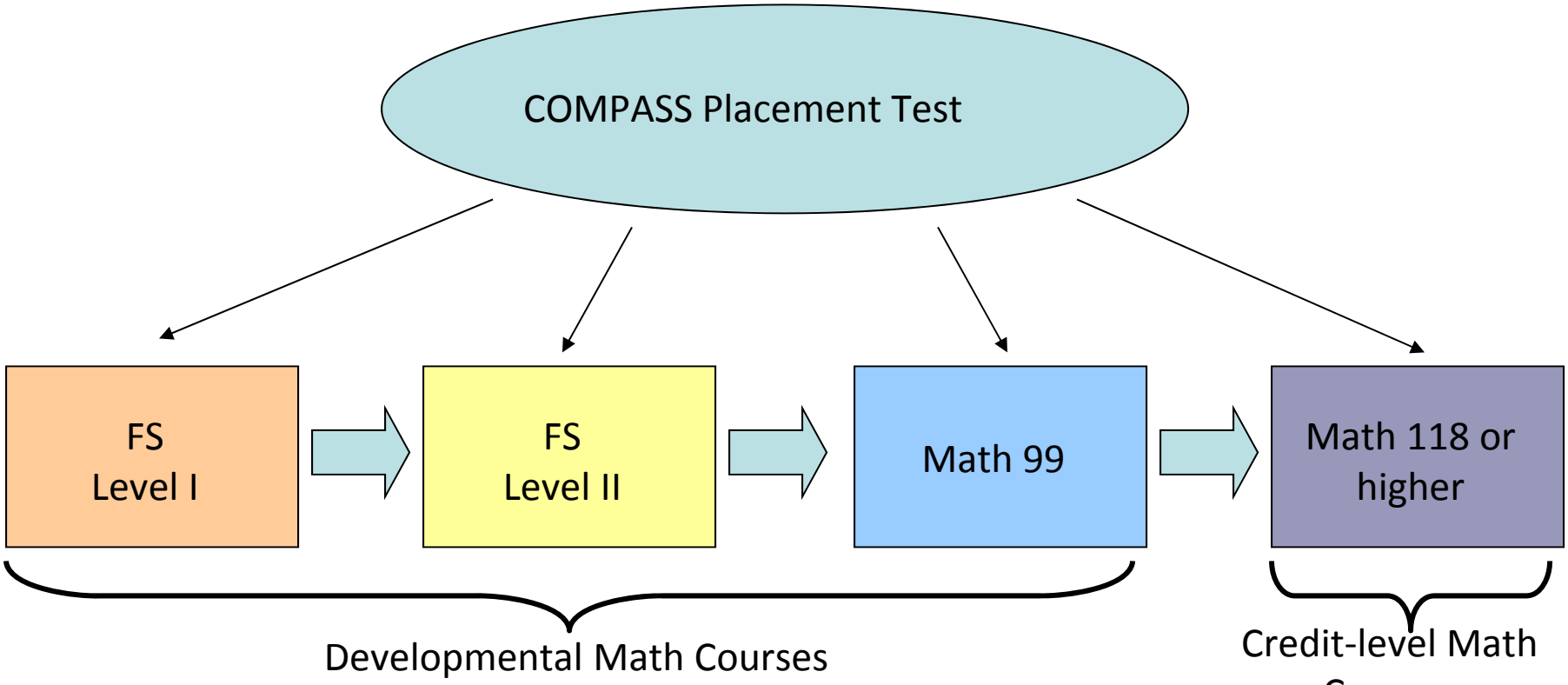
Developmental Math Course Sequence



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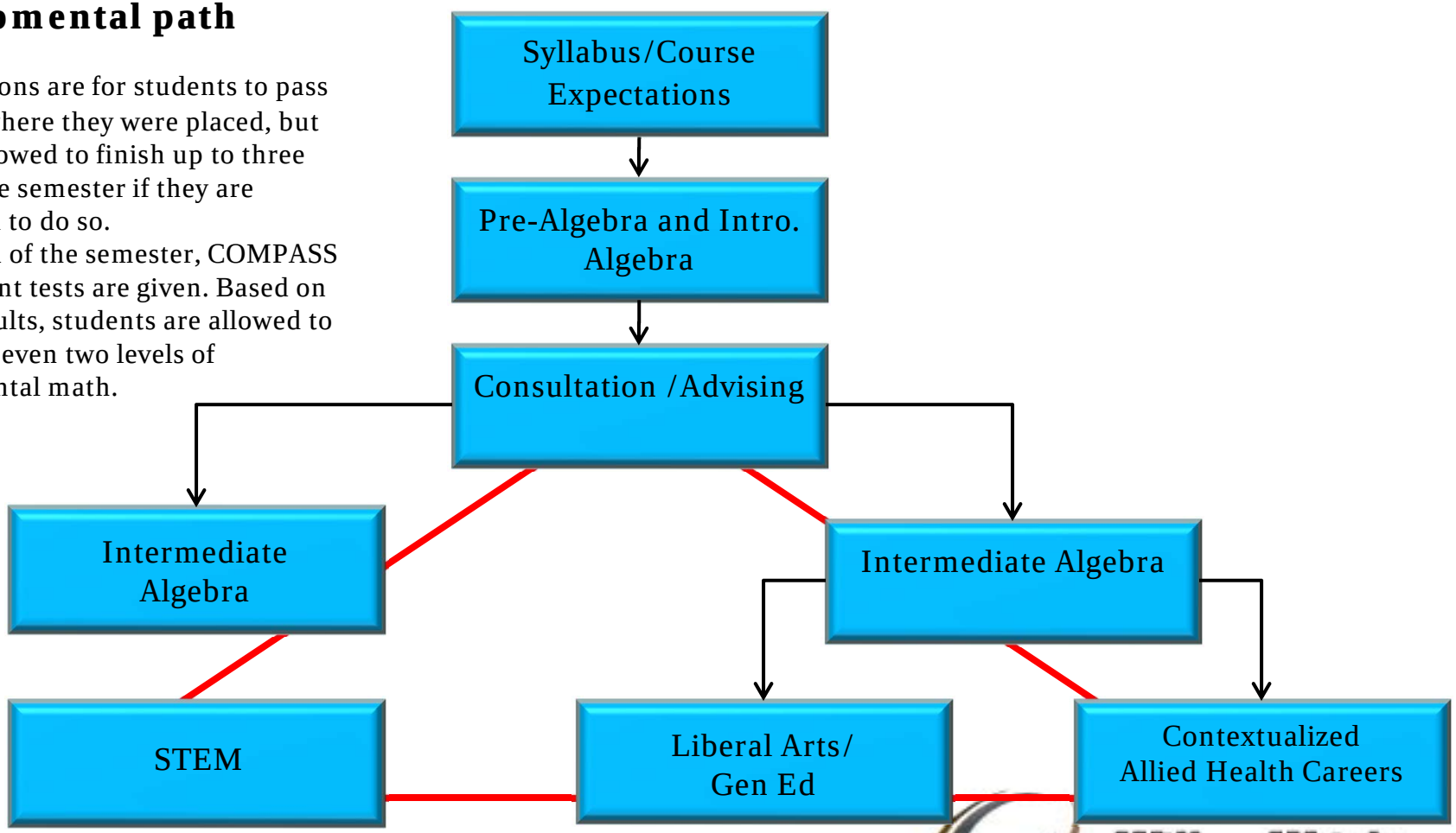
A Modularized Curriculum that Bridges High School, College, and Workforce

Shortening students' developmental path

- Expectations are for students to pass the levels where they were placed, but they are allowed to finish up to three levels in one semester if they are determined to do so.
- At the end of the semester, COMPASS re-placement tests are given. Based on the test results, students are allowed to skip one or even two levels of developmental math.



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Program Philosophy

A cough is a symptom of a cold. You can rid yourself of the cough but it doesn't necessarily cure the cold. Placement in developmental math (or writing and reading, for that matter) is a symptom of being unprepared for college and getting better at math doesn't necessarily make one prepared for college.

Many high school graduates are capable of being college graduates but being mentally and emotionally ready is just as important as being intellectually ready.

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Program Philosophy

MOD classes consist of more than just developmental math instruction. The classes offer a holistic approach to students' overall development. Students learn math by doing math but students also learn how to be college students by understanding the commitment involved and being engaged in the process. Motivation, goal setting, study skills, homework completion, registering early, participation in student clubs, networking, and utilizing resources are common attributes associated with successful college students that are often taken for granted. However, most students who require developmental course(s) need to develop these attributes as well.

While the primary focus of MOD is to improve math skills, there is the added value of exposing students to what it means to be a successful college student. It is our role to help young adults be successful college students and it is the role of the college to make them successful professionals.

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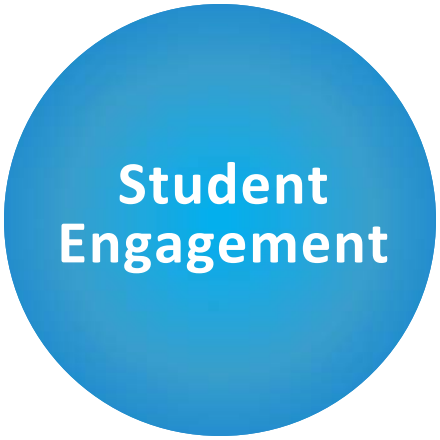
MOD Key Approaches

- Instructors work with students individually based on their strengths, weaknesses, needs, and goals



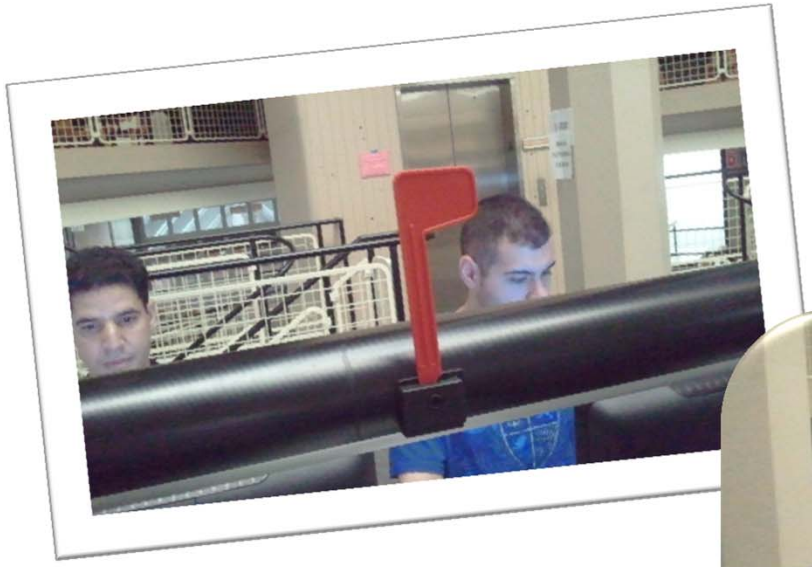
- Time spent on hands-on tasks; 4-5 hours per week in the Math Lab
- Students are asked to select their academic and career tracks early on during their academic journeys

- Learning math in context, such as in manufacturing or green technology, as well as allied health careers
- Tying math skills to the students' future career aspirations

Math On Demand Versus Lecture

	Traditional Remedial Lecture Class	Math On Demand
Students	• Learning by listening • Real-time assessment difficult • limited opportunities for one-on-one help	• Learning by doing • Real-time assessment a reality • one-on-one learning and teaching arrangements
Faculty	• Role as knowledge dispenser • More difficult to know students' individual challenges • Grading can be time consuming	• Role as collaborator and helper • Allows faculty to know students' individual challenges better • Grading is computerized within the software, allowing more time to help individual students
Technology use	• Individual faculty efforts	• Central to the program • Diagnostic features within the software allow for individualized teaching and learning

Math Lab – Help Flag



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Level II Outcomes:

Summer 2010 MOD Versus Summer 2009 Traditional

	Retention Rate	Course Success Rate
Summer 2010 MOD	97%	68%
Summer 2009 Traditional	94%	65%

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Math 99 Outcomes:

Fall 2010 MOD Versus Fall 2010 Traditional

	Retention Rate	Course Success Rate
Fall 2010 MOD	87%	62%
Fall 2010 Traditional	80%	52%

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Intermediate Algebra Outcomes:

Spring 2012 MOD Versus Spring 2012 Traditional

	Retention Rate	Course Success Rate
Spring 2012 MOD	80%	58%
Spring 2012 Traditional	78%	45%

In Spring 2012, the MOD Program served more than 1,000 Developmental Education math students

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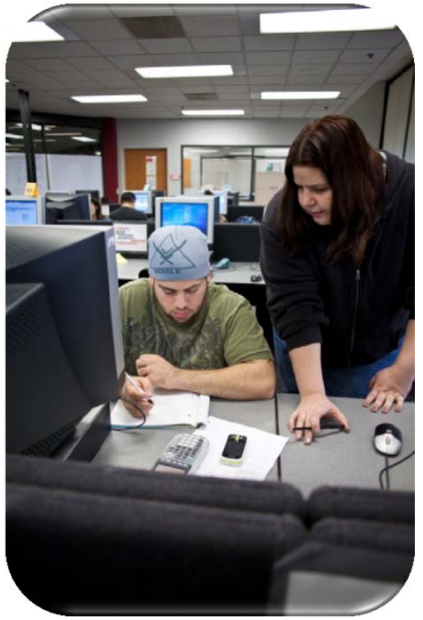
Student Comments

"I learned more math during these past few weeks than all those years in high school."



"I like that there is an online textbook that walks you through all the materials. Just by clicking a button, it will give you step-by-step instructions. I prefer this over the traditional math course."

"If I need help with my math, I get help right away from one of the teachers or tutors."

"This format is great! This MOD course has helped to increase my understanding in math. I have been getting A's and B's on all my assignments. In the previous semester with my lecture math course, I was struggling. This new design not only increased my grades, but has increased my motivation and self-confidence in math."

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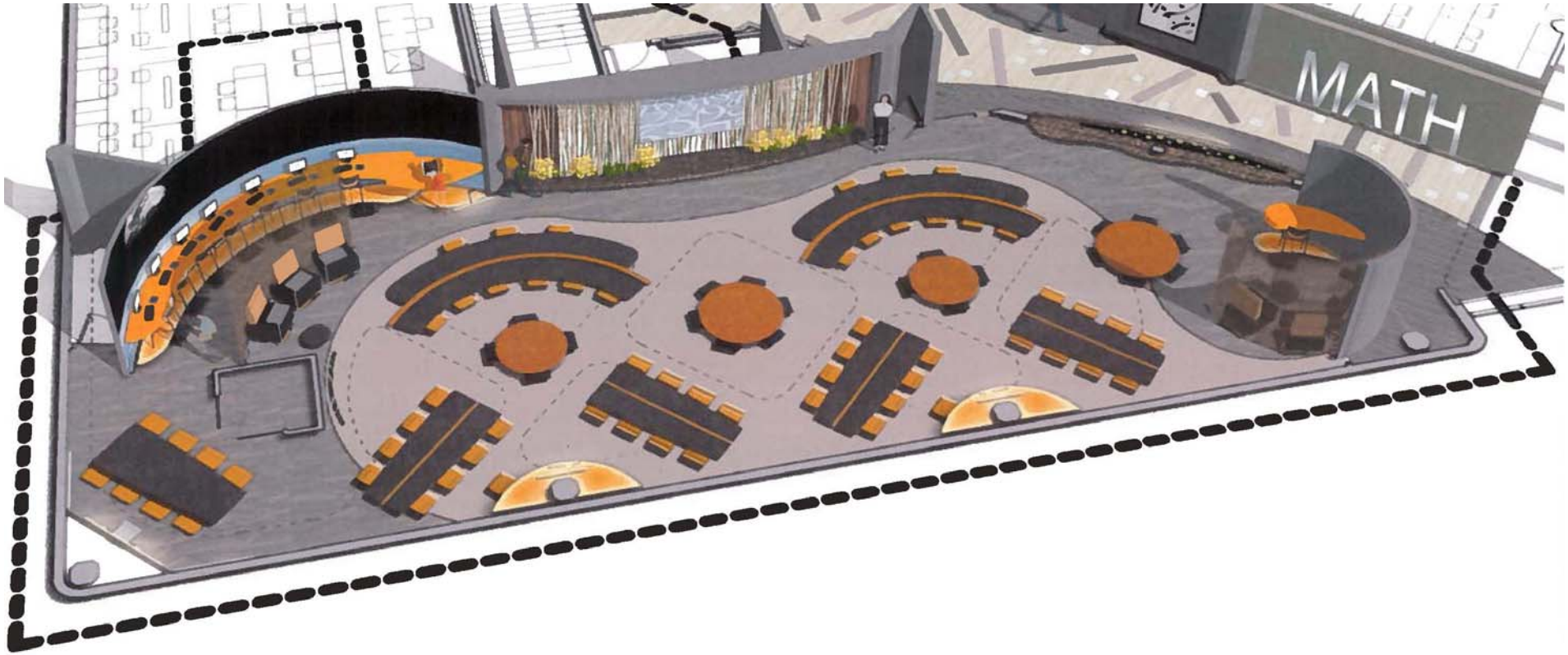
New Math Lab

- Enhanced technology
- Projected for Spring 2013, a new space for the math lab will allow for improved interaction between students, instructors, and tutors



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