



## Corequisite Models Around the Nation

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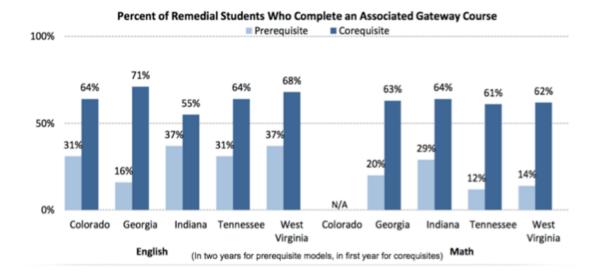
### What is a corequisite model?

- Structure of a corequisite model
- Teaches skills needed to succeed in the gateway course.
- Takes place of prerequisite course.
- Shortens time for student to get to the gateway course.
- States that have implemented corequisite models: Colorado, West Virginia, Georgia, Tennessee, Indiana, New York, California, Arizona, Texas, Arkansas, Oklahoma, probably others.

### Why a corequisite model?

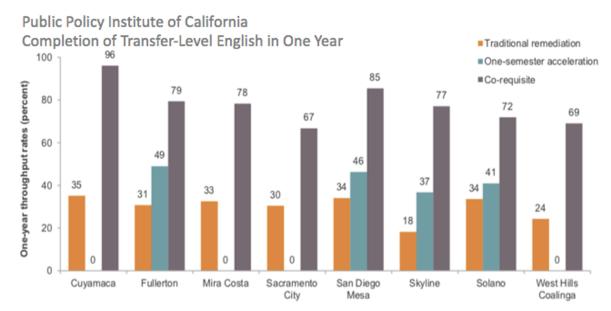
Student success in gateway English and math courses improved.

#### National Data on Corequisite Implementation



Complete College America, Spanning the Divide

## CA Early Implementers of Corequisite English 2016-17



SOURCE: Authors' analysis of COMIS data.

NOTES: In the calculation of throughput rates we restrict the analysis to transfer seeking students for which the co-requisite or the onesemester accelerated course was their first course. Porterville College is not included because we only have one term of data.

Source: PPIC 2018

## CA Early Implementers of Corequisite Math 2016-17

Public Policy Institute of California Completion of Transfer-Level Math in One Year Traditional remediation One-semester acceleration 100 ■Co-requisite One-year throughput rate (percent) 80 72 69 60 40 33 32 20 20 12 0 Los Medanos Cuyamaca . . . . . . . . . . . . . . . . . . . Source: PPIC 2018

### Types of corequisite models?

- Co-mingled
- Cohort

# Considerations when starting a corequisite model

- 1. Course Content
- 2. Placement
- 3. Student support
- 4. Teacher support
- 5. Not for every student or college

### AMATYC position statement

- <u>The Appropriate Use of Intermediate Algebra as a</u>
  <u>Prerequisite Course</u>
- <u>Mathematics for Liberal Arts</u>
- Both and other position statements found on <u>amatyc.org</u>

MAT 142: 3 credit hours

#### **Course Outcomes**

Upon successful completion of this course, student will:

- 1. solve applied financial problems;
- 2. understand the differences between linear, exponential, and logistic growth;
- 3. solve various types of growth problems;
- 4. utilize probability theory to solve applied probability problems;
- 5. understand the basic elements of the normal distribution;
- 6. create and interpret statistical graphs;
- 7. calculate and interpret numerical descriptive statistics;
- 8. and solve problems involving optional topics.

#### MAT 140: 5 credit hours

#### **Course Outcomes**

Upon successful completion of this course, student will:

- 1. solve applied financial problems;
- 2. understand the differences between linear, exponential, and logistic growth;
- 3. solve various types of growth problems;
- 4. utilize probability theory to solve applied probability problems;
- 5. understand the basic elements of the normal distribution;
- 6. create and interpret statistical graphs;
- 7. calculate and interpret numerical descriptive statistics;
- 8. solve problems involving optional topics;
- 9. and use various developmental algebraic techniques to solve problems.

#### MAT 140: 5 credit hours

Course Content added:

review:

- a. evaluating formulas;
- b. ratio, proportions, and variation;
- c. using radicals to solve equations;
- d. exponentials and logarithms; e. graphing functions;
- e. solving quadratic equations with the quadratic formula;
- f. the Pythagorean Theorem;

#### ENG 101: 3 credit hours

#### Course Outcomes:

#### Students will:

- 1. analyze and evaluate academic and other non-fictional print and electronic texts;
- 2. apply strategies for generating ideas, organizing, drafting, revising, and editing;
- 3. compose writing in non-fiction genres, making rhetorical choices appropriate to context, purpose, and audience;
- 4. identify and employ academic genre conventions, including thesis statements, organization patterns, paragraph and sentence structures, grammar, and punctuation;
- 5. critique their own and other students' writing through the peer-review process;
- 6. revise and edit writing for coherence, conciseness, clarity, diction, and conventions of Standard Written English;
- 7. research, evaluate, analyze, and document sources;
- 8. integrate evidence to support their own ideas, using quoting, paraphrasing, and summarizing;
- 9. and choose and apply an academic documentation style to suit purpose and audience.

#### ENG 101A: 5 credit hours

#### Course Outcomes:

#### Students will:

- 1. achieve competency in sentence, paragraph, and essay composition through practice of basic writing skills
- 2. analyze and evaluate academic and other non-fictional print and electronic texts
- 3. apply strategies for generating ideas, organizing, drafting, revising, and editing
- 4. compose writing in non-fiction genres, making rhetorical choices appropriate to context, purpose, and audience
- 5. identify and employ academic genre conventions, including thesis statements, organization patterns, paragraph and sentence structures, grammar, and punctuation
- 6. critique their own and other students' writing through the peer-review process
- 7. revise and edit writing for coherence, conciseness, clarity, diction, and conventions of Standard Written English
- 8. research, evaluate, analyze, and document primary and secondary sources
- 9. integrate evidence to support their own ideas, using quoting, paraphrasing, and summarizing
- 10. choose and apply an academic documentation style to suit purpose and audience

#### ENG 101A: 5 credit hours

Course Content added:

grammar/punctuation/syntax:

- a. subject/verb agreement;
- b. tense consistency;
- c. subject/pronoun agreement;
- d. sentence fragments;
- e. run-on sentences;
- f. punctuation;
- g. and capitalization;

### Structure of courses

- Math courses are all structured the same way and has set group work and quizzes to learn the prerequisite material.
- English has a variety of how the course is structured. Some teachers allow extra time in class for students to work on making sure the grammar and sentence structure is correct using instructor and peer revisions. Others have quizzes that students can retake until they learn the prerequisite material.

# Success rates of corequisite courses at Coconino Community College

- MAT 142 from 2016-2019: 63%
- MAT 140 from 2016-2019: 59.7%
- ENG 101 from 2015-2019: 69%
- ENG 101A from 2019: 70.5%

### Webinar resource

Webinar series of AMATYC

Developing Effective Co-Requisite Course Designs and Support, Paul Nolting, April 22, 2019

# Arizona community colleges with math corequisite

- Coconino Community College
- Maricopa Community College District
- Mohave Community College
- Pima Community College

### References

- "Remedial Education Reforms at California's Community Colleges: Early Evidence on Placement and Curricular Reforms" A study by the Public Policy Institute of California, August 2018 <u>https://www.ppic.org/publication/remedial-education-reforms-at-californias-community-colleges-early-evidence-on-placement-and-curricular-reforms</u>
- Tennessee Board of Regents. (2016). Retrieved from https://www.tbr.edu/sites/tbr.edu/files/media/2016/12/TBR CoRequisite Study - Full Implementation 2015-2016.pdf

### Questions?

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