
ILLINOIS CO-REQUISITE IMPLEMENTATION GUIDE

Developed by Staff at the Illinois Community College Board



October 2018

CONTENTS

<i>Introduction</i>	<i>2</i>
Definition 2	
Math Pathways 2	
<i>Step-By-Step Guide</i>	<i>3</i>
Prepare 3	
Research 4	
Think Specifics 5	
Develop 6	
Implement 8	
Moving Forward 8	
<i>Conclusion</i>	<i>9</i>
<i>Contact Information</i>	<i>10</i>
<i>References.....</i>	<i>10</i>

Introduction

Under Illinois' traditional model, only 23 percent of remedial math students were completing gateway math courses within one academic year (June 2017). Similarly, for first time, full time students that number is 25 percent. Traditional remediation consumes time and money, and often does not accelerate students into college-level courses, increase retention, and lead to college completion.

Through the state's completion agenda, the Illinois Board of Higher Education (IBHE) and the Illinois Community College Board (ICCB) have committed to the goal of ensuring that 60% of all adults have a college or career credential by 2025. One way to accomplish this goal is through co-requisite courses.

The IBHE and ICCB have committed to scaling co-requisite courses throughout the state. Statewide scale is defined as: **At least one co-requisite course offered in both English and math at each community college and public university in the state of Illinois.** The purpose of this implementation guide is to aid colleges in their efforts to start co-requisite courses at their institution. If there are any questions regarding this guide, please contact:

Emily Buhnerkempe
Director for Academic Affairs
Illinois Community College Board
emily.buhnerkempe@illinois.gov

Definition

The agencies define co-requisite courses in the following way:

A course design in which students who are assessed below college-ready in Math, English, or Reading are enrolled in a first-year college credit-bearing course and receive additional academic support or otherwise are instructed in college-level content concurrently with the college-level material. The model ensures that a student has the opportunity to complete a college-level gateway course within one academic year.

This model works best when students enroll in college-level mathematics or English while concurrently receiving just-in-time remediation in mathematics, English, or reading. The college-level credit bearing course experience should be identical to that taken by students who meet established measures of college readiness for initial college-level placement.

Math Pathways

The American Mathematical Association of Two Year Colleges (AMATYC) agrees that Intermediate Algebra content is a stepping-stone to algebra-based courses that lead to calculus (i.e., College Algebra). In addition, students headed to courses other than College Algebra can be successful without completing [Intermediate Algebra](#). "Prerequisite courses other than intermediate algebra can adequately prepare students

for courses of study that do not lead to calculus (Position on The Appropriate Use of Intermediate Algebra as a Prerequisite Course, 2014).”

These statements are only one example of a nationwide push toward promoting math pathways. Mathematicians agree that students needing only a general education mathematics course to fulfill degree requirements do not need a traditional Intermediate Algebra course to be successful in their college-level gateway course. Thus, many initiatives promoting math pathways have arisen in the state of Illinois, for example Preparatory Mathematics for General Education (PMGE) and Transitional Math as it relates to the Postsecondary and Workforce Readiness (PWR) Act.

Co-requisites in math work best when math pathways have been established at the college. If your institution has not already implemented math pathways, the first step in this guide recommends doing so.

Step-By-Step Guide

The following steps are a guide for implementing co-requisite courses at your institution. There are many posed questions to help you consider options and what is best for your students. Please reach out to IBHE or ICCB staff if you have any questions.

The steps listed in each category are not listed in a specific order. Please adjust the order of these, as needed, for your institution.

Prepare

- Develop meta-majors showing required math courses to provide support to academic advisors who would be the first to converse with new students about their majors and the need to take the “right” math, ideally in the first semester, but definitely during the first year. Math pathways describe the required math course(s) for every program offered by the college. Additionally, determine if multiple English pathways are needed (technical writing and composition).
- Create a team on campus that is committed to the co-requisite reform project. This team should include, but is not limited to:
 - faculty teaching the courses and creating the curriculum,
 - department/division chair overseeing the area implementing the co-requisite model,
 - an advisor with knowledge of the area and/or math pathway being implemented,
 - an academic counselor,
 - a dean/VP overseeing the course development area,
 - a data/IR staff member,
 - a representative from the Registrar’s Office, and
 - a representative from the Admissions Office.

This team must meet regularly during the development and implementation stages.

Best Practice: Lake Land College employs content area advisors. When the math department wanted to start a co-requisite course, the Math advisor met with them to determine questions/issues/comments. This advisor then reported to all the other advisors with updates.

- Create buy-in by discussing as a team the reasons to implement co-requisite courses. The team should be committed to improving student acceleration, success, retention, and persistence through reforming developmental education.
- Create an overview and timeline for the implementation. Include information about when you would like to offer the first course and when you would like to be at scale. Include a definition for what “scale” means at your institution.
 - a. The IBHE and ICCB define institutional scale as: The college or university is offering co-requisite courses in both math and English; all students who can benefit are enrolled into these co-requisite courses.
 - b. Data, including pilot data with Illinois colleges and universities, shows that co-requisite courses work with students of varied preparedness levels.
 - c. Tennessee has moved to [full scale](#) statewide. The [data](#) from the full pilot study in Tennessee is also available.
- As a team, set goals for the project including number of students served and definitions of success (successful completion of college-level courses in the first years, acceleration, retention, and persistence goals). Align these with the college mission/vision/values and current institutional initiatives.
- Script sample dialogues between academic advisors and new students to explain why it is so important to identify a major. Explain that this determines the required mathematics and English courses. Additionally, guide students to take these mathematics and English courses in the first year of college.
- Develop multiple measures placement at your college. Then determine the impact of multiple measures placement and placement exam cut scores on students in a co-requisite course. Revise measures of placement to support the co-requisite project, if needed.

Research

- Seek out a mentor college or university. A mentor school can provide guidance during implementation. If you do not know which college or university to ask to be a mentor, work with IBHE or ICCB to get that set up.
- Use the agencies as a resource during implementation. IBHE and ICCB want to help encourage you in this process.
- Research and apply for grants to aid in funding your project.
- Determine the model you wish to implement.

- i. Sample Models to research: Accelerated Learning Program (ALP), Developmental Studies Redesign Initiative, Texas State University-San Marcos FOCUS Program, and University of Maryland at College Park.

Think Specifics

- Working with the team, begin brainstorming the structure of the course.
- Determine the targeted students for the course. Items to think about:
 - a. Are co-requisite and non-co-requisite students mixed in the gateway course? Are there only co-requisite students in each gateway section?
 - i. The answer to this may be different for math and English.
 1. *Lewis and Clark Community College, for example, uses a blend of co-requisite and non-co-requisite students in English courses. However, math courses are not blended. Some sections of math courses are designated for co-requisite students only.*
 - b. How many credits will the co-requisite be? This will likely be determined by:
 - i. Whether you decide to combine or separate the course(s), and
 - ii. Whether to offer each part as developmental education, transfer, or CTE.

See details on [credit hour development](#) below.

- c. How will the sections be scheduled? For example: Will students do the gateway course Monday/Wednesday/Friday and the co-requisite Tuesday/Thursday? Or should students do the co-requisite immediately following/before the gateway course?
- d. Eligibility criteria:
 - i. What types of students do you want to target for enrollment?
 - ii. Will it be open to anyone or just those who need the remediation?
 - iii. What placement criteria will you use to determine eligibility for the course? Think about multiple measures: ACT/SAT, placement test scores, High School GPA, etc.
 1. To view Tennessee's [criteria](#), visit the Tennessee Board of Regents website and explore the "Resources."
 2. Seek out resources on multiple measures placement, including [webinars](#).
 3. The Illinois Community College Chief Academic Officers and Chief Student Service Officers have recommended system-wide placement methods and scores.
- e. Will students have the same instructor for the co-requisite portion as they do for the gateway portion?
 - i. *Best Practice: Students have the same instructor for both the co-requisite and the gateway course.*

- f. Consider implications on overload schedules, transferability (The Illinois Articulation Initiative), financial aid, dual credit, faculty qualifications, and other student related issues.
- Determine a minimum course enrollment number to offer the section.
 - a. *Best Practice: Lewis and Clark Community College suggests setting a rule that courses must reach “break-even” in enrollment to run.*
- Establish the tuition and fees costs for students in the co-requisite course. Ensure that you are setting up a financially sustainable model for your campus.
 - a. *Lewis and Clark Community College suggests that students pay the tuition for the gateway portion and the co-requisite portion; they suggest that colleges NOT absorb the cost for the co-requisite course.*

Develop

- Faculty begin creating curriculum. Items to think about:
 - a. What types of lessons will you provide during the co-requisite for just-in-time remediation?
 - i. *Best Practice: Harper College has developed worksheets for their co-requisite sections that align with the timing of the gateway course that help facilitate discussion and work on skills that students will need to be successful in the gateway course. Some of these are skills for the lessons they just saw and others are for those that are coming up.*
 - ii. Try mapping out a side-by-side syllabus showing the support material matched up with the college-level material.
 - b. With input from administration, determine grading in the two courses. Pass/fail versus a grade. Will the co-requisite grade be attendance based? Will the co-requisite course have the same grade as the gateway? How will this affect GPA?
 - c. For English courses specifically, determine what will happen with reading. How do reading requirements fit into the co-requisite course? Will the reading be integrated into the co-requisite?
- Administration work on “behind the scenes” items.
 - a. [For Community Colleges only] Suggestion from colleges who have successfully implemented co-requisites: *Use existing courses to help “get the ball rolling.” Find a course already approved by ICCB that is not currently being taught, if possible. Use this as the co-requisite course.* Reach out to ICCB if a course title, credit hours, or PCS code change is needed (contact Tricia Broughton at tricia.broughton@illinois.gov). This will help get the course started. At a later time, you can submit a co-requisite course to ICCB for approval.
 - b. Work with advisors to determine number of sections that will be offered and scheduling concerns.
 - c. Train the advising staff. Explain to them the student you are seeking and what the benefits are to the course. Advisors need to be comfortable

answering questions about the course from students. Advisors will be the first line of “advertisement” for the course. If you are running a pilot with only a few sections, tell advising staff to fill the co-requisite sections first (using your pre-determined placement criteria).

- d. Determine how you plan to advertise the course to students. This is something students may not have heard of before. How will you tell students about the course?
 - e. Communication is key. Think about a broad communication strategy that will inform the entire campus about the changes. Everyone from the registrar’s office, orientation staff, advising, non-English/math faculty needs to be aware of the reform.
 - f. Meet with the financial aid office to discuss the implications. Work with the office to ensure students can use financial aid toward the course, and use this to help “sell” the course to the students.
 - g. If you chose not to combine the co-requisite and the gateway courses, determine what to do when a student passes one portion of the co-requisite /gateway and fails the other. Be sure to engage faculty in this discussion. How will this affect financial aid?
 - h. Meet with Institutional Research on campus to let them know that data will need to be collected on these students. If there are certain types of data you would like to focus on, make that clear. Some suggestions for data to be collected include success, completion, retention, and acceleration rates.
 - i. *Best Practice: Lewis and Clark Community College created a “data packet” after the first round of implementation that summarized all the data they collected on the students in the course.*
 - i. Determine the credit hours designated for the course. For example, the gateway course could be 3 credit hours and the co-requisite 2; or you could combine the two courses and have a 5 credit hour course. Debate the plusses and minuses to each of these alternatives (2+3 versus 5) thinking about all factors, including financial aid, military benefits, scheduling, credit hour reimbursement, transferability (The Illinois Articulation Initiative), dual credit, etc. Address questions to your mentor school and/or ICCB as appropriate.
- Advising
- a. Work on a flowchart. This can be used to show both students and advisors where a student currently placed and what courses/coursework the student needs to complete toward their degree. This should be specific to the students’ math pathway.
 - i. *Best Practice: Lewis and Clark Community College and Lake Land College have these set up with meta-majors.*
 - b. Work on a flyer to explain the concept and the benefits of the co-requisite to students.

- c. If faculty at your college or university also advise, create professional development opportunities to teach faculty about the co-requisite. Help them understand the initiative so they are able to better advise students.
- d. Advisors should attend department meetings to keep abreast of issues occurring during development/implementation phases.
- e. Create sample schedules that emphasize math and English completion in the first semester or year.
- f. Script sample dialogues between academic advisors and students to explain the co-requisite courses, including the benefits.

Implement

- ☐ Create multiple co-requisite sections in multiple pathways for both English and math.
- ☐ Based on adjustments in measures of college readiness, register qualified students for the co-requisite sections. Make sure sections are full.
 - a. If you are only offering a few sections of the course during a pilot phase and not publicizing those sections to students, faculty should help to recruit students. Do not rely on advising to do all of this work. Think about students you already know that could be successful and meet the criteria you set forth for the course.
 - b. If you are eliminating all traditional developmental education sections and replacing them with co-requisite sections, recruitment is not necessary. All students who meet the course placement criteria can register for co-requisite courses.
- ☐ Teach the course
 - a. Remind students what a “sweet deal” they are getting. This helps spread the word about the course and will help fill sections for the following semester. Students also appreciate the opportunity more.
- ☐ Collect data on the students and evaluate this data with the team.

Moving Forward

- ☐ Continue to meet as an implementation team. Provide updates, evaluate data, monitor progress, and discuss adaptations for the future.
 - a. *Lewis and Clark Community College suggests meeting twice a semester.*
- ☐ Survey the co-requisite students partway through the semester. Share the results with the implementation team.
- ☐ Adjust items to improve the process focused on data including acceleration, retention, persistence, student performance in their next course (if applicable), and success rates.
- ☐ Evaluate the syllabus and placement cut scores after each semester. Adjust these items as needed.
- ☐ Run the course again and again. Collect data and evaluate.

- Identify champions and experts on your campus who can support the scaling efforts. Additionally, identify campus leaders who can support current champions and experts as well as create opportunities for new champions and experts to emerge.
 - a. The Dana Center released a document titled [Building Faculty Engagement and Leadership Tool](#). This document discusses faculty engagement as it relates to Math Pathway implementation, however it can be easily modified to meet the needs of a co-requisite implementation.
- As the course scales up to more sections, provide faculty professional development training as needed.
- [For Community Colleges only] When you are ready, submit courses to ICCB for approval. If appropriate, submit to the Illinois Articulation Initiative panels.
- Show off and celebrate your success! Tell your campus what you have accomplished. This can happen at a semester kick-off event or a professional development session. Please share your success with IBHE and ICCB staff as well.

Conclusion

The Illinois Board of Higher Education and Illinois Community College Board have committed to increasing the number of co-requisite remedial programs, which will reduce the time-to-degree and the completion rates of students entering postsecondary who are not college ready. The agencies hope that this guide is useful as you work to create and implement co-requisite courses in both English and math at your institution. Thank you for your commitment to developmental education re-design through the development of co-requisite courses at your institution.

Contact Information

Should you have any questions, please reach out to the appropriate agency staff:

Illinois Board of Higher Education

Malinda Aiello
Associate Director for Academic Affairs
aiello@ibhe.org

Illinois Community College Board

Emily Buhnerkempe
Director for Academic Affairs
emily.buhnerkempe@illinois.gov

Tricia Broughton
Associate Director for Academic Affairs
tricia.broughton@illinois.gov

References

Position on The Appropriate Use of Intermediate Algebra as a Prerequisite Course. (2014). AMATYC. Retrieved from <https://amatyc.site-ym.com/page/PositionInterAlg>