Mc Graw Hill

ALEKS® PPL

PLACEMENT, PREPARATION & LEARNING

Implementation of ALEKS PPL

at Waukesha County Technical College

ALEKS PPL

Retention and student success are top priorities at WCTC. ALEKS PPL was initially implemented to ensure accurate placement, particularly in Calculus, reducing unnecessary prerequisite courses and accelerating time to graduation.

The program's personalized approach allows students to improve their skills and placement scores through the Prep & Learning Modules. Faculty emphasize the importance of repeated assessments combined with prep time to maximize ALEKS PPL's effectiveness.

> As we expand our math offerings and transfer partnerships, ALEKS PPL will be a crucial tool in helping students make informed course selections and achieve their academic goals."
>
> —Professor Beth Brown



Beth Brown
Professor
Waukesha County
Technical College

Implementation Model

Waukesha County Technical College (WCTC) has been utilizing ALEKS PPL for approximately 11 years. Initially introduced in the Spring of 2013 to support students struggling in Calculus 1, the program provided students access to prep materials before retaking the course. By Fall 2014, ALEKS PPL became the required placement tool for Calculus-track students in the engineering associate degree programs, ensuring proper placement from Intermediate Algebra through Calculus 1.

Today, ALEKS PPL remains mandatory for Calculus-track students and is encouraged for students in other programs. However, a challenge persists due to the variety of available placement options (ACT, GPA, other tests, prior coursework), leading to inconsistent use of ALEKS PPL. With the expansion of Liberal Arts transfer degrees and collaborations with four-year institutions, WCTC is motivated to broaden ALEKS PPL usage to further support student success.

To facilitate student success, WCTC follows a structured approach to assessments. The first ALEKS PPL assessment is unproctored and serves as a practice attempt. This allows students to familiarize themselves with the assessment format and gain an initial understanding of their placement level without the pressure of an official score. After this, students must complete a minimum of three hours in the Prep & Learning Modules before attempting a proctored assessment, which serves as their official placement score. Up to three additional proctored assessments are available. Proctoring is conducted through the WCTC Testing Center, either in person or remotely via Respondus Lock Down Browser and Respondus Monitor. This approach ensures that students have an opportunity to improve their skills before taking an official placement test, resulting in more accurate placement outcomes.

We have seen firsthand how ALEKS PPL can set students up for success in their math courses by ensuring they start at the right level."

WCTC ALEKS PPL Cut Scores

ALEKS PPL Cut Scores	WCTC courses
0-5%	Basic Math
6 - 13%	Pre-Algebra Industrial Math 1
14 - 29%	Elementary Algebra College Math College Tech Math 1A Math w/ Business Apps Quantitative Reasoning
30 - 45%	Intermediate Algebra College Tech Math 1B Math & Logic
46 - 60%	College Algebra College Tech Math 2 College Algebra & Trig Survey in Calculus
61 - 75%	Trigonometry
76 - 99%	Calculus 1

The ALEKS Math and Applied Research Teams have developed recommended placement cut scores based on the analysis of math content, the ALEKS Knowledge Structure (Artificial Intelligence), data collected from ALEKS users, and the experience of other institutions using ALEKS PPL.

Recommendations are offered for the most frequently taught college math courses, ranging from traditional Basic Math to Calculus I, and includes courses outside the "traditional sequence" such as Business Calculus and Finite Math.

WCTC Cohort Approach

First Assessment	Practice (not proctored)
Required Time in Prep Modules	3 hours
Second Assessment	Proctored
Required Time in Prep Modules	3 hours
Third Assessment	Proctored
Required Time in Prep Modules	3 hours
Fourth Assessment	Proctored
Required Time in Prep Modules	3 hours
Fifth Assessment	Proctored

Results

WCTC's analysis of ALEKS PPL placement data highlights the program's effectiveness:

Spring 2025 Cohort
(n=25 with official placement scores)

- 56% took 2 assessments; 20% took 3; 12% took 4; 12% took 5.
- 12% gained 3 class levels after working in prep modules for more than 18 hours.
- 48% gained 1 class level when they used the 2nd, 3rd, or 4th assessment
- 20% placed into the same class level after multiple assessments, confirming accurate placement.

Spring 2024 Cohort
(n=32 with official placement scores)

- 50% took 2 assessments; 28% took 3; 19% took 4; 3% took 5.
- 19% gained 2 class levels; 34% gained 1 class level.
- 38% tested into the same level after multiple assessments.

Spring 2025:

12%

gained 3 class levels with considerable time in prep modules.

48%

gained 1 class level by taking multiple assessments.



The personalized learning paths in ALEKS PPL enable students to refresh their skills and advance to higher-level courses without requiring a full semester of review."

Analysis of recent test scores show that ALEKS PPL positively impacts students by lowering tuition costs and reducing time to graduation through accurate placement.

STEM faculty at WCTC emphasize the importance of student persistence through the math sequence, even when students are initially placed into courses before Calculus, such as Intermediate Algebra, College Algebra, and Trigonometry. Data shows that students who engage with ALEKS PPL, utilize the Prep & Learning Modules, and take multiple assessments are more likely to succeed in higher-level math courses. For example, a student who placed into College Algebra or Trigonometry initially but spent significant time in prep modules successfully advanced through Calculus 1 and then excelled in Calculus 2. One student started at Intermediate Algebra and, after progressing through ALEKS PPL, is now successfully completing high-level Calculus courses. Another student initially placed into Trigonometry but used ALEKS PPL to prepare for Calculus and has since successfully completed Calculus 2. These cases highlight the strong correlation between ALEKS PPL engagement and long-term STEM success.

Students who fully engage with ALEKS PPL are more likely to place higher, persist in their program, and avoid unnecessary coursework."

What's Next?

Looking forward, WCTC plans to expand ALEKS PPL's role as the college continues developing new math courses and partnerships with four-year institutions. The introduction of Associate of Arts and Associate of Science Liberal Arts transfer degrees has created a need for consistent and effective placement tools. ALEKS PPL is expected to play a critical role in ensuring students are placed in the most suitable math courses based on their skills and academic goals.

The Math Department at WCTC remains committed to advocating for greater use of ALEKS PPL to maintain curriculum quality and student success.

Student	Initial score (not proctored)	Subsequent proctored scores (final course placement)	Time in Prep module	Date	Summary Note
A	84 (Calc 1)	63 (Trig)	3 hours	Fall 2023	Currently successful in Calc 2
B	33 (Int. Algebra)	31, 42,49 (College Algebra)	14 hours	Fall 2023	Prep work advanced from Intermediate to College Algebra; currently successful in Calc 2
C	93 (Calc 1)	68, 65, 69, 67 (Trig)	16 hours	Fall 2023	Current Calc 2 student, repeated consistent placement prevented risk of being underprepared for Calc 1
D	36 (Int. Algebra)	38, 36, 39 (Int. Algebra)	12 hours	Spring 2023	Successfully advanced through course sequence from Intermediate; currently high level Calc 2 student
E	71 (Calc 1)	55,79 (Calc 1)	22 hours	Spring 2022	Prep module allowed for accurate placement into Calc 1; successfully completed Calc 2
F	56 (College Algebra)	57, 58, 63 (Trig)	16 hours	Fall 2022	Prep time advanced student from College Algebra to Trig. successfully completed Calc 1, 2, and 3
G	62 (Trig)	53, 71 (Calc)	30 hours	Spring 2023	Prep time advanced student into Calc 1; successfully completed Calc 2
H	66 (Trig)	81 (Calc)	4 hours	Spring 2023	Minimal prep time was to place into Calc 1; successfully completed Calc 2