

PreACT and ACT Test Scores Associated with AP Exam Success

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Many schools, districts, and states administer the PreACT® and/or the ACT® test to measure readiness for college and careers. A recent study suggests that these test scores can also be used to help identify students who are academically prepared and may benefit from some of the more rigorous courses offered in high schools across the nation, including Advanced Placement (AP) courses.¹ The purpose of this brief is to highlight the PreACT and ACT AP-ready scores found in the study. The most common use cases would be using:

- PreACT 8/9 tests administered in grades 8 or 9 to measure readiness for AP courses taken in grades 9 or 10
- PreACT tests taken in grade 10 to measure readiness for AP courses taken in grade 11
- ACT tests taken in grades 10 or 11 to measure readiness for AP courses taken in grades 11 or 12

The study found that PreACT and ACT test scores are positively related to AP exam scores and are good predictors of success. The recommended linkages to AP exam success—defined two ways by either receiving a score of 3 or higher on the AP exam or receiving a 4 or higher on the AP exam—were developed in relation to content-relevant scores for most courses (as shown in Table 1). More specifically, the sum of the English and Reading scores (denoted E+R) and the English Language Arts (ELA) score (average of the English, reading, and writing scores—not available for the PreACT test) were used for ELA-related AP courses, and the STEM score (average of the math and science scores) was used for STEM-related courses.

For each course and outcome, two AP-ready scores are provided—one for fall and one for spring testing depending on when students take the ACT assessment (PreACT 8/9, PreACT, or ACT test). For example, the first row of results within the table indicates that students who tested in the fall and achieved a PreACT or ACT E+R score of 42 or higher are likely academically ready to succeed in AP English Language and Composition in the subsequent year as they have a 50% or greater chance of earning a 3 or higher on the corresponding AP exam. Those with a PreACT or ACT E+R score of 54 or higher

¹Radunzel, J., & Allen, J. (2020). *Predicting success on Advanced Placement exams using ACT Aspire, PreACT, and ACT test scores*. Iowa City, IA: ACT. <https://www.act.org/content/dam/act/unsecured/documents/R1835-predicting-success-AP.pdf>. Data for the study was available for 49,220 students from 318 high schools who had taken at least one AP exam in May of 2015 through May of 2019 and had previously taken ACT Aspire®, PreACT, or the ACT test.



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have a 50% or greater chance of earning a 4 or higher score. The AP-ready scores derived from spring testing are slightly higher at 45 (for 3 or higher) and 56 (for 4 or higher) to account for the reduced time between taking the ACT assessment and the AP exam.

For a holistic view of student readiness, we recommend using PreACT or ACT scores in combination with other measures (e.g., high school coursework taken, high school grades, motivation, interest) to assess readiness for AP courses.

Table 1. PreACT/ACT Scores Associated with a 50% Chance of Success on AP Exams

| AP course | PreACT/ ACT score | 3 or higher | | 4 or higher | |
|------------------------------------|----------------------|-------------|--------|-------------|--------|
| | | Fall | Spring | Fall | Spring |
| ELA-related | | | | | |
| English Language and Composition | E+R | 42 | 45 | 54 | 56 |
| | ELA | 20 | 21 | 25 | 26 |
| English Literature and Composition | E+R | 49 | 51 | 61 | 62 |
| | ELA | 23 | 24 | 28 | 28 |
| European History | E+R | 45 | 49 | 57 | 60 |
| | ELA | 21 | 23 | 26 | 28 |
| Human Geography | E+R | 41 | 41 | 52 | 52 |
| | ELA | 19 | 19 | 24 | 24 |
| Psychology | E+R | 39 | 42 | 46 | 49 |
| | ELA | 19 | 20 | 22 | 23 |
| US Govt and Politics | E+R | 47 | 50 | 59 | 61 |
| | ELA | 22 | 23 | 27 | 28 |
| US History | E+R | 44 | 47 | 55 | 57 |
| | ELA | 21 | 22 | 25 | 26 |
| World History | E+R | 39 | 43 | 51 | 55 |
| | ELA | 19 | 20 | 24 | 25 |
| STEM-related | | | | | |
| Biology | STEM | 22 | 23 | 26 | 27 |
| Calculus AB* | STEM | 25 | 25 | 28 | 28 |
| Chemistry | STEM | 24 | 25 | 28 | 29 |
| Computer Science A | STEM | 24 | 24 | 28 | 28 |
| Environmental Science | STEM | 23 | 24 | 25 | 26 |
| Macroeconomics | STEM | 24 | 26 | 27 | 28 |
| Microeconomics | STEM | 23 | 25 | 25 | 28 |
| Physics 1** | STEM | 27 | 27 | 30 | 30 |
| Physics C: E and M | STEM | 26 | 28 | 28 | 30 |
| Physics C: Mechanics | STEM | 25 | 25 | 28 | 28 |
| Statistics | STEM | 23 | 24 | 27 | 28 |

Table 1. PreACT/ACT Scores Associated with a 50% Chance of Success on AP Exams—continued

| AP course | PreACT/ ACT score | 3 or higher | | 4 or higher | |
|--------------------------------|----------------------|-------------|--------|-------------|--------|
| | | Fall | Spring | Fall | Spring |
| Other | | | | | |
| Art History | Comp. | 22 | 22 | 28 | 28 |
| Music Theory | Comp. | 21 | 22 | 25 | 27 |
| PSAT/SAT-derived | | | | | |
| Comparative Govt. and Politics | Comp. | 22 | 22 | 25 | 25 |
| Computer Science Principles | Comp. | 18 | 18 | 25 | 25 |

Note. E+R = English + Reading score. Comp. = Composite score. ELA scores are only available for the ACT test.

*Cut scores are not reported for AP Calculus BC. As recommended by College Board as part of AP Potential, students who meet the AP Calculus AB cut scores and perform well in courses leading up to Calculus may consider taking AP Calculus BC.

**Cut scores are not reported for AP Physics 2. As recommended by College Board as part of AP Potential, students who meet the AP Physics 1 cut scores and perform well in prerequisite courses for AP Physics 2 may consider taking AP Physics 2.

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