



PHARMACY COLLEGE ADMISSION TEST

PCAT Score Interpretation Reference Guide

The PCAT is a norm-referenced standardized test intended to measure content knowledge and cognitive abilities that pharmacy schools consider to be essential for success in their programs. Detailed information about the PCAT is available in documents on the PCAT website: PCAT Basics, Interpreting PCAT Scores, and PCAT Reliability and Validity. A printed 2016 edition of the PCAT Technical Manual is also available to qualified professionals. For any questions or comments related to the PCAT, please contact PCAT Customer Relations: Scoring.Services@Pearson.com.

PCAT Scores Reported on the Official Transcript

- The PCAT scaled scores are standardized scores that represent equal units on a continuous scale, ranging from 200–600, with a designated mean and standard deviation (originally established in 2004 as 400 and 25, respectively). These scaled scores are derived from candidates' raw scores, the number of items answered correctly for a given subtest.
- PCAT percentile ranks range from 1–99 and represent the percent of candidates who received a scaled score lower than a given score in the current norm group—the 64,652 candidates taking the PCAT for the first time from July 2011 through January 2015. Composite percentile ranks earned prior to July 2016 are based on recalculated scales scores that include only the current multiple-choice subtests: Biological Processes, Chemical Processes, Critical Reading, and Quantitative Reasoning.
- PCAT candidates earn a single Writing score reported on a scale of 1.0–6.0. The Writing score represents an average of two assigned scores reported to one decimal place (e.g., $3 + 4 = 3.5$). A mean score is also reported that represents the average of all Writing scores earned by candidates taking the PCAT during the 12 months prior to a given national test administration window.

Understanding Scaled Scores and Percentile Ranks

- The number of items answered correctly on a given test form subtest (a raw score) corresponds to a unique scaled score that in turn corresponds to a percentile rank. Since each PCAT multiple-choice subtest includes 40 items that are used to determine candidates' scores, and there are 401 possible scaled score points (200–600), a change of one raw score point necessarily results in a change of more than one scaled score point.
- A scaled score is assumed to indicate the ability needed to answer a given number of scored items correctly for a given subtest, and the corresponding percentile rank indicates how a given subtest scaled score relates to all candidates from the current normative sample.
- Table 1 shows some average raw-score-to-scaled-score-to-percentile-rank correspondences for all test form subtests administered during the 2011–15 PCAT normative sample period (except for Verbal Ability, which is no longer part of the PCAT). This table illustrates how selected one-point differences in raw score have resulted in corresponding differences in scaled score points and percentile ranks. Each row in Table 1 shows how a one-point raw score difference corresponds to a given average difference in scaled score and percentile rank during the normative sample period. For example, for Biological Processes, an increase from a raw score of 23 to 24 (shown as 23–24 in the table) corresponds to an average 3-point scaled score increase and a 5-point increase in percentile rank. Please note that the correspondences shown in Table 1 are averages that illustrate patterns observed across multiple test forms administered over several years, rather than exact score correspondences for a specific test administration.

Table 1 Average PCAT Subtest Scaled Score (SS) and Percentile Rank (PR) Point Increases for Selected Raw Score (RS) Increases for the 2011–15 PCAT Normative Sample (lower RS 1–22 not shown)

RS Increase	Biological Processes		Chemical Processes		Critical Reading		Quantitative Reasoning	
	SS Point Increase	PR Point Increase	SS Point Increase	PR Point Increase	SS Point Increase	PR Point Increase	SS Point Increase	PR Point Increase
23–24	3	5	3	5	3	5	2	4
24–25	3	6	4	7	4	8	3	5
25–26	3	5	3	4	3	6	4	6
26–27	3	6	3	4	4	7	3	4
27–28	3	6	4	5	4	8	3	3
28–29	3	6	4	4	3	5	3	3
29–30	4	5	4	3	4	6	4	3
30–31	3	5	4	3	5	7	4	2
31–32	4	5	4	2	4	4	4	2
32–33	5	5	5	2	5	4	5	2
33–34	5	3	6	2	6	3	5	1
34–35	5	3	6	1	6	1	6	1
35–36	7	2	8	1	8	1	6	0
36–37	8	2	9	0	9	0	9	0
37–38	11	0	12	0	13	0	11	0
38–39	18	0	21	0	21	0	19	0
39–40	18	0	21	0	21	0	19	0

- Table 1 shows that for test forms administered during the normative sample period, one-point raw score increases near the upper end (33–34 to 39–40) results in greater scaled score increases than in the 23–24 to 32–33 range, where corresponding scaled scores differences are less.

- Table 1 also shows that for Biological Processes RS point increases in the 23–24 to 32–33 range, SS increases result in greater increases in PR than for higher RS points, where the opposite is seen. The reason for this is that the large size of the normative sample used to determine the PRs resulted in the data forming a classically shaped bell curve characteristic of a normal distribution, as shown in Figure 1 for the PCAT Composite scores.

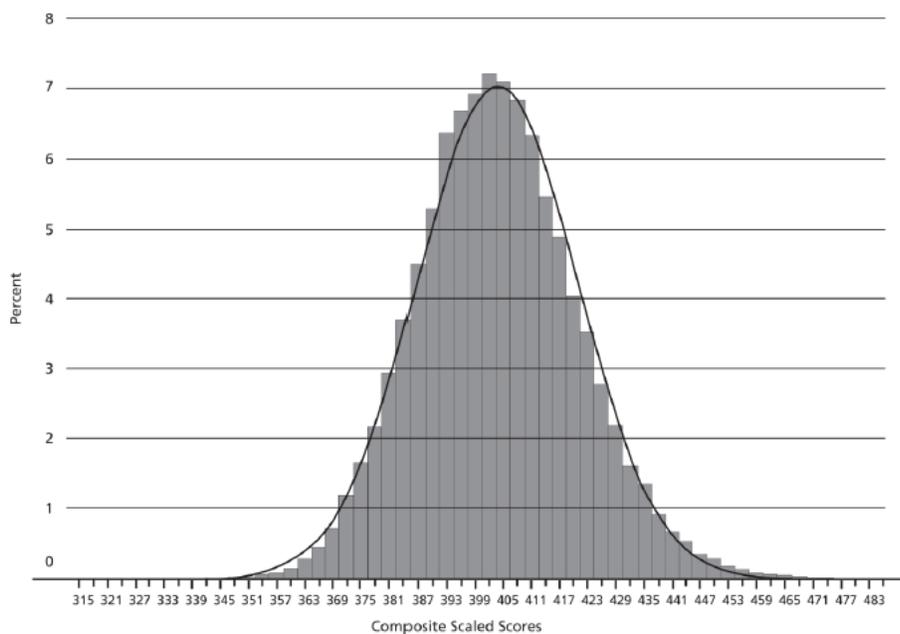


Figure 1 Distribution of Candidates Earning Composite Scaled Score Points for the 2011–15 Normative Sample

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