

ACS Exam Grading

The American Chemical Society General Chemistry exam will be given on Monday, May 22, at 6:00 pm in A236. Please arrive about 10 minutes early so that you have time to fill in some forms and so we can get started right on time. Please bring pencils, erasers, and a nonprogrammable calculator without its case. I will provide the Scantron forms.

No notes, pencil cases, cell phones, smart watches, or other electronic devices are allowed in the testing area! Please turn off your phones, put them in your bag, and put your bag in the office or at the front of the room. You may NOT have your phone in your pocket during the exam.

How will the standardized ACS exam be figured into my course grade?

Your percent score will be based on national percentile ranking. A score at the 50th percentile is, by definition, average. Therefore the percentile score must be scaled to reflect grading on a 100-point scale and be consistent with the grade cutoffs listed in the course syllabus.

The class average in chemistry is usually 75/100. Therefore, a student scoring at the 50th percentile on the ACS exam should receive a grade of approximately 75%. This scaling will be accomplished by the using the following formula:

$$\text{Scaled Score} = \text{ACS percentile} + [(100 - \text{ACS percentile}) (\text{ACS percentile} / 100)]$$

Using the example given above, for a student score at the 50th percentile on the final, we get:

$$50 + [(100 - 50) (50/100)] = 75\%$$

The ACS test will be worth 50 points. Your percentage calculated above (in decimal form) will be multiplied by 50 to determine your overall score on the test.

To see how this works, the following ACS percentile conversions were calculated using the formula given above:

90 percentile => 99 %

80 percentile => 96 %

70 percentile => 91 %

60 percentile => 84 %

50 percentile => 75 %

40 percentile => 64 %

30 percentile => 51 %

20 percentile => 36 %

10 percentile => 19 %