

## Chemistry Assessment Tool

Beginning in the Fall Semester, 2018, the Department of Chemistry is pre-assessing students registering for CHE101 and CHE107 to help identify and direct early intervention for known concept gaps that hinder students' success in these courses. In our tracking over the past several years, we noted that while 2/3 of the students in general chemistry are centered at 80% earned on exams, 1/3 of our students are centered at only 40%. 40% performance in General Chemistry will not satisfy requirements for many programs at UB. As such, we would like to identify at-risk students requiring supplemental instruction. Thus the Department of Chemistry has created CHE110, a one credit hour complementary Discussion to provide students with additional help in solving problems in General Chemistry. The Assessment (hereafter termed *UB Success in Chemistry*) will be one factor in recommending students to take CHE110. Other factors will include math scores of SAT or ACT, previous chemistry courses taken and length of time since taking a chemistry course.

*UB Success in Chemistry* for CHE101 or CHE107 for Fall, 2018, will be offered **July 29 – August 4** on-line as a Primer tailored to the University at Buffalo's first semester chemistry curriculum. The Primer covers pervasive skills and concepts for the first third of CHE101 or CHE107, providing a good measure of whether a student will start well in General Chemistry. For some students who are ready for college chemistry, the primer serves as a reminder of needed concepts and skills. For students who need more, there are video tutorials to help recall and use concepts in the assessment problems. We will be looking for students that, despite spending time with the tutorials, are not proficient in skills and concepts needed for success in CHE101 and CHE107. These students will be candidates for CHE110.

***There is no charge for this Assessment!*** In late July all students registered for CHE101 or CHE107 will receive an email message to their UBIT email with instructions for access to the website. The Assessment will only take 1-3 hours per our pilot data, but will be available for the whole week to assist students with access and completion. From August 8-10, each student will receive an email with a recommendation regarding whether she/he should register for CHE110.

Academic integrity is an important component of the educational process. For *UB Success in Chemistry*, having someone help a student is completely counter to the purpose of the assessment. If a student needs the additional help of CHE110, masking that through academic dishonesty does nothing except hurt the student.