

Information for Instructors

ChemVantage.org

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Managing Authentication

The default mechanism for identifying users is OpenID. Anyone having an account with AOL, Yahoo, MyOpenID or Google (including Google Apps) can login from <http://www.chemvantage.org> by clicking on the appropriate icon.

If you are the instructor of a General Chemistry class and you establish your ChemVantage account through OpenID, you may request instructor status by sending email to admin@chemvantage.org from your institutional email address (e.g., from a .edu domain). Your students who use OpenID will have to join your group in order to view class assignments and deadlines and for their scores to be visible to you in the group scores tables.

Group Management

As an instructor, you will have a 'Groups' link that appears on the top navigation bar in ChemVantage. All of your group management functions are behind this link.

Create A Group In Your Time Zone

If you don't already have a group, create a new one and give it a name that your students will recognize to join it. You should select the proper time zone for your group because all assignment deadlines are at midnight (11:59:59 PM) on the date indicated. You may change the name of the group at any time.

Create Assignments

Click the 'Edit' link under 'Deadlines' for your group. Here you will see a list of ChemVantage topics for General Chemistry. Most of these bear a similarity to chapter titles in popular GenChem textbooks. To assign a quiz or homework set, simply enter a deadline for a given topic in the appropriate box in the 'Quiz' or 'Homework' column and click the Update button. The number of questions available appears next to each deadline. You may change deadlines at any time

Select Question Items

Click the 'Select' or 'Assign' link next to the number of questions to customize the questions used for your class assignments.

For quizzes, each quiz will consist of 10 questions selected at random from a bank of N quizzes. Students can retake quizzes as often as desired to achieve a better score prior to your deadline. Experience shows that the optimal value of N is 40-60 questions.

For homework assignments, the selected questions will appear as 'Assigned' questions, with the balance appearing as 'Optional' questions. Each question is worth 1 point, and only the scores for 'Assigned' questions appear in your scores tables.

Group Scores

From the 'Groups' page, click 'Quiz', 'Homework', or 'Exam' to view your students' scores on these assignments. Exam scores consist of student practice exams where the results have been disaggregated by topic. If you change an assignment deadline or the group time zone, then all affected scores will be recalculated automatically. This can take a few minutes for classes of 300 students or more.

At any time, you may use the link on the Group Scores page to save a local copy of your scores as a Comma Separated Values (CSV) file. You can then open this file in Microsoft Excel to keep as a backup copy of your grades (recommended!) or to import into your LMS for computing final grades at the end of the term. Most learning management systems do not have the ability to pull scores from 3rd-party content providers like ChemVantage directly into the LMS grade book. As standards improve, we will be adding this capability in the future.

If you activate the ChemVantage Rescue Service (see below) then red dots may appear beside some students' quiz or homework scores. This indicates that the student either missed an assignment or scored low enough to trigger a concern. The red dots also appear on students' individual scores pages. If a student returns to the assignment after the deadline and completes it satisfactorily, then the red dot will automatically disappear (but will leave the group score unchanged). This is designed to be a psychological incentive for students to complete their assignments even if they miss a deadline.

Assign a Teaching Assistant

From the 'Groups' page, click the 'Add/Drop' link under 'Enrollments'. In the User Search box, enter the last name of your teaching assistant. This will produce a list of all ChemVantage users having that name. You may simply click the button to add the right person as a TA for your group. You may also use this tool to invite users to join your group (i.e., if they have established ChemVantage accounts but have forgotten to join your group). This will place a reminder on the user's home page to join your group.

Authentication With Basic LTI

If you are using a course management system for your class, an alternate authentication mechanism is to have the administrator of your LMS create a Basic LTI link in your course. This will allow you and your students to login to the LMS and simply click the link to be

authenticated in ChemVantage. To create a Basic LTI link, your LMS admin should send a request to admin@chemvantage.org for



- A Basic LTI launch URL for ChemVantage
- An OAuth consumer key that identifies your LMS
- A shared secret that allows ChemVantage to trust your LMS to authenticate users

To function properly, ChemVantage requires that your LMS be conformant with the IMS Global Solutions Basic LTI specification v1.0 (most LMS platforms do this). If provided, ChemVantage will utilize the following information:

- user_id (opaque user identifier such as a long alphanumeric string)
- context_id (opaque identifier for a course section)
- context_title (user-readable title of the course, e.g. CHEM 101)
- lis_person_name_given (user's first name)
- lis_person_name_family (user's last name)
- lis_person_contact_email_primary (user's preferred email address)
- roles (comma separated list) The only role specifically recognized by ChemVantage is Instructor; all others are assumed to be Learner.

Any of your students who establish ChemVantage accounts through OpenID can still join your group by clicking on the 'Find My Group' box on the ChemVantage home page.

ChemVantage Rescue Service

On the Groups → Edit page, you will find a link near the top to 'Show Rescue Service Options'. This is an optional free service for notifying individual students and teaching assistants in your group when someone misses an assignment deadline or scores poorly on an assignment. Use the form elements on this page to configure this service to meet the needs of your group or class. You may customize the message sent to students to conform with any class policy on partial credit, and you may set the threshold number of points below which notifications are sent. This threshold is also used as the criterion for showing red dots on the scores pages. The default value is 5 points (50% score on a typical 10-point assignment). However, some assignments may have a maximum score of only 7 points, in which case you should select a lower threshold. A single threshold value applies to all quiz and homework assignments.

Basic and Premium ChemVantage Accounts

Most students in ChemVantage have the free basic account, which has all of the functionality to complete assignments. In order to cover some of the direct costs of offering ChemVantage as a free service, we also offer a premium level of service that includes several convenience features such as sending a text message notification on the morning of each assignment deadline. A complete list of convenience features is available on the 'About Us' page at <http://www.chemvantage.org/About>

Questions and Comments

Please direct any further inquiries to Chuck Wight at admin@chemvantage.org.