



# Course SLO Assessment Report - 4-Column

El Camino College

El Camino: Course SLOs (NSC) - Chemistry

Course SLOs 1 and ctu.unitid = 765	Assessment Methods & Standard and Target for Success / Tasks	Results	Action & Follow-Up
<p>ECC: CHEM 1A - General Chemistry I - SLO #3 Lab Safety - Students will adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 11/08/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p><b>Assessment Method Description:</b> Students will be assessed for the number of times they must be reminded to wear their goggles in a laboratory period. Whenever a student must be reprimanded for failing to comply with the goggle policy, the instructor will make a notation. The instructor will report the number of notations made in the lab period. This assessment will happen towards the beginning of the semester, and again near the end of the semester.</p> <p><b>Assessment Method:</b> Multiple Assessments</p> <p><b>Standard and Target for Success:</b> It is expected that no more than 5% of students will have their goggles off during the early semester goggle-compliance check, and no more than 2% of students will have their goggles off during the late semester goggle-compliance check.</p>	<p>02/09/2015 - In the Fall semester of 2012, 135 students participated in the first goggle-compliance check. Of those students, 11 warnings were given for students to put on their goggles. This represents 8.1% of the students. This value is above the 5% target that the Chemistry Department set for the early semester goggle-compliance check.</p> <p>One instructor mentioned that his students had only done one experiment before the lab in which they were assessed. Despite this, they were largely compliant.</p> <p>Towards the end of the semester, 125 students participated in the late goggle-compliance check. Of those students, 7 warnings were given for students to put on their goggles. This represents 5.6% of the students. This value is above the 2% target that the Chemistry Department set for the late semester goggle-compliance check.</p> <p>This improved rate of compliance is attributed to several factors. First, there is attrition of the poorer students (who generally have more difficulty following rules). Second, the students have heard instructors give more repetition of the goggle rules later in the semester. One instructor remarked that his evening students were very good about wearing their goggles, and he only had to remind them a few times during the semester. Another instructor mentioned that 3 students had to be reminded to put up their long hair. He thought that it might be useful if the department also monitored 'hair compliance' in the future.</p> <p><b>Standard Met? :</b> No</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b> Amy Grant</p> <p><b>Faculty Contributing to Assessment:</b> Shibao, Turner, Stewart</p>	<p>02/09/2016 - The Chemistry Department intends to hold a Brown Bag Meeting to discuss ways of improving our rates of student goggle compliance. We hope this meeting will yield creative ideas for all chemistry faculty to implement. We will also maintain close contact with faculty to assess if goggle compliance has improved.</p> <p><b>Action Category:</b> Teaching Strategies</p>
<p>ECC: CHEM 1B - General Chemistry II - SLO #3 Lab Safety - Students will adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper</p>	<p><b>Assessment Method Description:</b> Students will be assessed for the number of times they must be reminded to wear their goggles in a laboratory period. Whenever a student must be</p>	<p>02/09/2015 - In the Fall semester of 2012, 73 students participated in the first goggle-compliance check. Of those students, 5 warnings were given for students to put on their goggles. This represents 6.8% of the</p>	<p>02/09/2016 - The Chemistry Department intends to hold a Brown Bag Meeting to discuss ways of</p>

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<p>procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 11/08/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p>reprimanded for failing to comply with the goggle policy, the instructor will make a notation. The instructor will report the number of notations made in the lab period. This assessment will happen towards the beginning of the semester, and again near the end of the semester.</p> <p><b>Assessment Method:</b> Multiple Assessments</p> <p><b>Standard and Target for Success:</b> It is expected that no more than 5% of students will have their goggles off during the early semester goggle-compliance check, and no more than 2% of students will have their goggles off during the late semester goggle-compliance check.</p>	<p>students. This value is above the 5% target that the Chemistry Department set for the early semester goggle-compliance check.</p> <p>One instructor remarked that in one of his sections, zero warnings had to be given out, while in the other section, 4 students (and unusually high number for his sections) had to be given out.</p> <p>Towards the end of the semester, 60 students participated in the late goggle-compliance check. Of those students, 4 warnings were given for students to put on their goggles. This represents 6.7% of the students. This value is above the 2% target that the Chemistry Department set for the late semester goggle-compliance check.</p> <p>The late-semester value is virtually identical to the early semester value, indicating that goggle compliance did not improve over the course of the semester.</p> <p><b>Standard Met? :</b> No</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b> Amy Grant</p> <p><b>Faculty Contributing to Assessment:</b> Abbani, Altermatt</p>	<p>improving our rates of student goggle compliance. We hope this meeting will yield creative ideas for all chemistry faculty to implement. We will also maintain close contact with faculty to assess if goggle compliance has improved.</p> <p><b>Action Category:</b> Teaching Strategies</p>
<p>ECC: CHEM 20 - Fundamentals of Chemistry - SLO #3 Safety Protocol - Students will adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 07/01/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p><b>Assessment Method Description:</b> Students will be assessed for the number of times they must be reminded to wear their goggles in a laboratory period. Whenever a student must be reprimanded for failing to comply with the goggle policy, the instructor will make a notation. The instructor will report the number of notations made in the lab period. This assessment will happen towards the beginning of the semester, and again near the end of the semester.</p> <p><b>Assessment Method:</b> Multiple Assessments</p> <p><b>Standard and Target for Success:</b> It is expected that no more than 15% of students will have their goggles off during the early semester goggle-compliance check, and no more than 5% of students will have their goggles off during the late semester goggle-compliance check.</p>	<p>02/09/2015 - In the Fall semester of 2012, 141 students participated in the first goggle-compliance check. Of those students, 24 warnings were given for students to put on their goggles. This represents 17.0% of the students. This value is above the 15% target that the Chemistry Department set for the early semester goggle-compliance check.</p> <p>One instructor reports that she strongly emphasizes goggle compliance at the very first class meeting. Another instructor warns students that they will lose safety points on their reports if they have their goggles off past a first warning.</p> <p>Towards the end of the semester, 92 students participated in the late goggle-compliance check. Of those students, 6 warnings were given for students to put on their goggles. This represents 6.5% of the students. This value is slightly above the 5% target that the Chemistry Department set for the late semester goggle-compliance check.</p>	<p>02/09/2016 - The Chemistry Department intends to hold a Brown Bag Meeting to discuss ways of improving our rates of student goggle compliance. We hope this meeting will yield creative ideas for all chemistry faculty to implement. We will also maintain close contact with faculty to assess if goggle compliance has improved.</p> <p><b>Action Category:</b> Teaching Strategies</p>

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		<p>This improved rate of compliance is attributed to several factors. First, there is attrition of the poorer students (who generally have more difficulty following rules). Second, the students have heard instructors give more repetition of the goggle rules later in the semester. One instructor noted that only two incalcitrant students were not wearing goggles when they were supposed to, and the remaining students in her class followed the rules appropriately.</p> <p><b>Standard Met? :</b> No</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b> Amy Grant</p> <p><b>Faculty Contributing to Assessment:</b> Moretti, Latifzadeh, Sachdev, Tontcheva, Jimenez</p>	
<p>ECC: CHEM 21A - Survey of General and Organic Chemistry - SLO #3 Safety Protocol - Students will adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 07/01/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p><b>Assessment Method Description:</b> Students will be assessed for the number of times they must be reminded to wear their goggles in a laboratory period. Whenever a student must be reprimanded for failing to comply with the goggle policy, the instructor will make a notation. The instructor will report the number of notations made in the lab period. This assessment will happen towards the beginning of the semester, and again near the end of the semester.</p> <p><b>Assessment Method:</b> Multiple Assessments</p> <p><b>Standard and Target for Success:</b> It is expected that no more than 5% of students will have their goggles off during the early semester goggle-compliance check, and no more than 2% of students will have their goggles off during the late semester goggle-compliance check.</p>	<p>02/09/2015 - In the Fall semester of 2012, 115 students participated in the first goggle-compliance check. Of those students, 9 warnings were given for students to put on their goggles. This represents 7.8% of the students. This value is above the 5% target that the Chemistry Department set for the early semester goggle-compliance check.</p> <p>One instructor mentioned that she strongly enforces the goggle policy during the first labs, and her students get used to wearing goggles. Another instructor told students that she had to write down the names of any students who violated the goggle safety rules and report their names. She also said that failure to follow safety rules could affect their overall grades. That instructor had to give zero goggle warnings in the first check.</p> <p>Towards the end of the semester, 88 students participated in the late goggle-compliance check. Of those students, 3 warnings were given for students to put on their goggles. This represents 3.4% of the students. This value is slightly above the 2% target that the Chemistry Department set for the late semester goggle-compliance check.</p> <p>This improved rate of compliance is attributed to several factors. First, there is attrition of the poorer students (who generally have more difficulty following rules). Second, the students have heard instructors give more repetition of the goggle rules later in the semester. One instructor always reminds students that they are working with dangerous chemicals, and this warning</p>	<p>02/09/2016 - The Chemistry Department intends to hold a Brown Bag Meeting to discuss ways of improving our rates of student goggle compliance. We hope this meeting will yield creative ideas for all chemistry faculty to implement. We will also maintain close contact with faculty to assess if goggle compliance has improved.</p> <p><b>Action Category:</b> Teaching Strategies</p>

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		<p>appears to motivate students to put their goggles on right away. Two other instructors felt that the comfort of the goggles (or lack of comfort) affects compliance. Students who wear their goggles too tightly or who use the old-fashioned goggles that fog up, tend to have poorer compliance than students who wear department-recommended VisorGogs adjusted correctly.</p> <p><b>Standard Met? :</b> No</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b> Amy Grant</p> <p><b>Faculty Contributing to Assessment:</b> Tajiboy, Speckman, Neurauter, Motokane</p>	
<p>ECC: CHEM 21B - Survey of Organic and Biochemistry - SLO #3 Safety Protocol - Students will adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 07/01/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p><b>Assessment Method Description:</b> Students will be assessed for the number of times they must be reminded to wear their goggles in a laboratory period. Whenever a student must be reprimanded for failing to comply with the goggle policy, the instructor will make a notation. The instructor will report the number of notations made in the lab period. This assessment will happen towards the beginning of the semester, and again near the end of the semester.</p> <p><b>Assessment Method:</b> Multiple Assessments</p> <p><b>Standard and Target for Success:</b> It is expected that no more than 5% of students will have their goggles off during the early semester goggle-compliance check, and no more than 2% of students will have their goggles off during the late semester goggle-compliance check.</p>	<p>02/09/2016 - In the Fall semester of 2012, 31 students participated in the first goggle-compliance check. Of those students, 2 warnings were given for students to put on their goggles. This represents 6.5% of the students. This value is above the 5% target that the Chemistry Department set for the early semester goggle-compliance check.</p> <p>The Chem 21B instructor reported that a single student had to be warned twice about putting on his goggles, but the class overall was very conscientious about laboratory safety.</p> <p>Towards the end of the semester, 19 students participated in the late goggle-compliance check. Of those students, 0 warnings were given for students to put on their goggles. This represents 0% of the students. This value is well below the 2% target that the Chemistry Department set for the late semester goggle-compliance check.</p> <p>This improved rate of compliance is attributed to several factors. First, there is attrition of the poorer students (who generally have more difficulty following rules). Second, the students have heard instructors give more repetition of the goggle rules later in the semester. The Chem 21B instructor noted that all the students remaining in the class were mindful of goggle safety.</p> <p><b>Standard Met? :</b> No</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b></p>	<p>02/09/2015 - The Chemistry Department intends to hold a Brown Bag Meeting to discuss ways of improving our rates of student goggle compliance. We hope this meeting will yield creative ideas for all chemistry faculty to implement. We will also maintain close contact with faculty to assess if goggle compliance has improved.</p> <p><b>Action Category:</b> Teaching Strategies</p>

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		Amy Grant <b>Faculty Contributing to Assessment:</b> Tontcheva	
<p>ECC: CHEM 4 - Beginning Chemistry - SLO #3            Lab Safety - Students will adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.</p> <p><b>Course SLO Assessment Cycle:</b>            2014-15 (Fall 2014)</p> <p><b>Input Date:</b>            02/09/2015</p> <p><b>Course SLO Status:</b>            Active</p>	<p><b>Assessment Method Description:</b>            Students will be assessed for the number of times they must be reminded to wear their goggles in a laboratory period. Whenever a student must be reprimanded for failing to comply with the goggle policy, the instructor will make a notation. The instructor will report the number of notations made in the lab period. This assessment will happen towards the beginning of the semester, and again near the end of the semester.</p> <p><b>Assessment Method:</b>            Multiple Assessments</p> <p><b>Standard and Target for Success:</b>            It is expected that no more than 10% of students will have their goggles off during the early semester goggle-compliance check, and no more than 3% of students will have their goggles off during the late semester goggle-compliance check.</p>	<p>02/09/2015 - In the Fall semester of 2012, 212 students participated in the first goggle-compliance check. Of those students, 31 warnings were given for students to put on their goggles. This represents 14.6% of the students. This value is above the 10% target that the Chemistry Department set for the early semester goggle-compliance check.</p> <p>One instructor, who has very strong goggle compliance, reported that she told students, "If my goggles are on, yours are, too." She then calls out students by name if they are not compliant. Another instructor stresses the importance of wearing goggles, and threatens to take off points for students who do not wear goggles.</p> <p>Towards the end of the semester, 165 students participated in the late goggle-compliance check. Of those students, 6 warnings were given for students to put on their goggles. This represents 3.6% of the students. This value is slightly above the 3% target that the Chemistry Department set for the late semester goggle-compliance check.</p> <p>This improved rate of compliance is attributed to several factors. First, there is attrition of the poorer students (who generally have more difficulty following rules). Second, the students have heard instructors give more repetition of the goggle rules later in the semester. One instructor of fifty students had to give zero goggle warnings—she mentioned that she goes beyond the required safety rules, and that this emphasis helped students recognize the importance of goggle compliance. Another instructor always announces when he puts on his own goggles, which encourages students to put on theirs as they follow his example. He also calls out students by name when they are not compliant.</p> <p><b>Standard Met? :</b>            No</p> <p><b>Semester and Year Assessment Conducted:</b>            2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b>            Amy Grant</p> <p><b>Faculty Contributing to Assessment:</b>            Potter, Drew, Nguyen, Arasasingham, Balakin, Jimenez</p>	<p>02/09/2016 - The Chemistry Department intends to hold a Brown Bag Meeting to discuss ways of improving our rates of student goggle compliance. We hope this meeting will yield creative ideas for all chemistry faculty to implement. We will also maintain close contact with faculty to assess if goggle compliance has improved.</p> <p><b>Action Category:</b>            Teaching Strategies</p>

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<p>ECC: CHEM 7A - Organic Chemistry I - SLO #3 Lab Safety - Students will adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p> <p><b>Input Date:</b> 11/08/2013</p> <p><b>Course SLO Status:</b> Active</p>	<p><b>Assessment Method Description:</b> Students will be assessed for the number of times they must be reminded to wear their goggles in a laboratory period. Whenever a student must be reprimanded for failing to comply with the goggle policy, the instructor will make a notation. The instructor will report the number of notations made in the lab period. This assessment will happen towards the beginning of the semester, and again near the end of the semester.</p> <p><b>Assessment Method:</b> Multiple Assessments</p> <p><b>Standard and Target for Success:</b> It is expected that no more than 0% of students will have their goggles off during the early semester goggle-compliance check, and no more than 0% of students will have their goggles off during the late semester goggle-compliance check.</p>	<p>02/09/2015 - In the Fall semester of 2012, 45 students participated in the first goggle-compliance check. Of those students, 1 warning was given for students to put on their goggles. This represents 2.2% of the students. This value is above the 0% target that the Chemistry Department set for the early semester goggle-compliance check.</p> <p>The Chem 7A instructor noted that, by the time students have taken Chem 7A, they tend to be more mature and mindful about laboratory safety. Also, they have been exposed to the safety talks/videos/rules by more instructors. It is rare to have a big problem with goggle compliance by the time students take Chem 7A.</p> <p>Towards the end of the semester, 35 students participated in the late goggle-compliance check. Of those students, 0 warnings were given for students to put on their goggles. This represents 0% of the students. This value is equal to the 0% target that the Chemistry Department set for the late semester goggle-compliance check.</p> <p>This improved rate of compliance is attributed to several factors. First, there is attrition of the poorer students (who generally have more difficulty following rules). Second, the students have heard instructors give more repetition of the goggle rules later in the semester. The Chem 7A instructor was delighted to note that her students were completely goggle-compliant during the lab period assessed.</p> <p><b>Standard Met? :</b> No</p> <p><b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014)</p> <p><b>Faculty Assessment Leader:</b> Amy Grant</p> <p><b>Faculty Contributing to Assessment:</b> Grant</p>	<p>02/09/2016 - The Chemistry Department intends to hold a Brown Bag Meeting to discuss ways of improving our rates of student goggle compliance. We hope this meeting will yield creative ideas for all chemistry faculty to implement. We will also maintain close contact with faculty to assess if goggle compliance has improved.</p> <p><b>Action Category:</b> Teaching Strategies</p>
<p>ECC: CHEM 7B - Organic Chemistry II - SLO #3 Lab Safety - Students will adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.</p> <p><b>Course SLO Assessment Cycle:</b> 2014-15 (Fall 2014)</p>	<p><b>Assessment Method Description:</b> Students will be assessed for the number of times they must be reminded to wear their goggles in a laboratory period. Whenever a student must be reprimanded for failing to comply with the goggle policy, the instructor will make a notation. The instructor will report the number of notations made in the lab period. This assessment will happen towards the beginning of the semester, and again near the end of the</p>	<p>02/09/2015 - In the Fall semester of 2012, 35 students participated in the first goggle-compliance check. Of those students, 1 warning was given for students to put on their goggles. This represents 3.4% of the students. This value is above the 0% target that the Chemistry Department set for the early semester goggle-compliance check.</p> <p>The Chem 7B instructor remarked that, by the time students take second-semester organic chemistry, they</p>	<p>02/09/2016 - The Chemistry Department intends to hold a Brown Bag Meeting to discuss ways of improving our rates of student goggle compliance. We hope this meeting will yield creative ideas for all chemistry faculty to implement. We will also maintain close contact with faculty to assess if goggle compliance has</p>

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<b>Input Date:</b> 11/08/2013  <b>Course SLO Status:</b> Active	semester. <b>Assessment Method:</b> Multiple Assessments <b>Standard and Target for Success:</b> It is expected that no more than 0% of students will have their goggles off during the early semester goggle-compliance check, and no more than 0% of students will have their goggles off during the late semester goggle-compliance check.	tend to be conscientious about wearing goggles.  Towards the end of the semester, 24 students participated in the late goggle-compliance check. Of those students, 0 warnings were given for students to put on their goggles. This represents 0% of the students. This value is equal to the 0% target that the Chemistry Department set for the late semester goggle-compliance check.  This improved rate of compliance is attributed to several factors. First, there is attrition of the poorer students (who generally have more difficulty following rules). Second, the students have heard instructors give more repetition of the goggle rules later in the semester. <b>Standard Met? :</b> No <b>Semester and Year Assessment Conducted:</b> 2014-15 (Fall 2014) <b>Faculty Assessment Leader:</b> Amy Grant <b>Faculty Contributing to Assessment:</b> Doucette	improved.  <b>Action Category:</b> Teaching Strategies