

Taskstream/SLO

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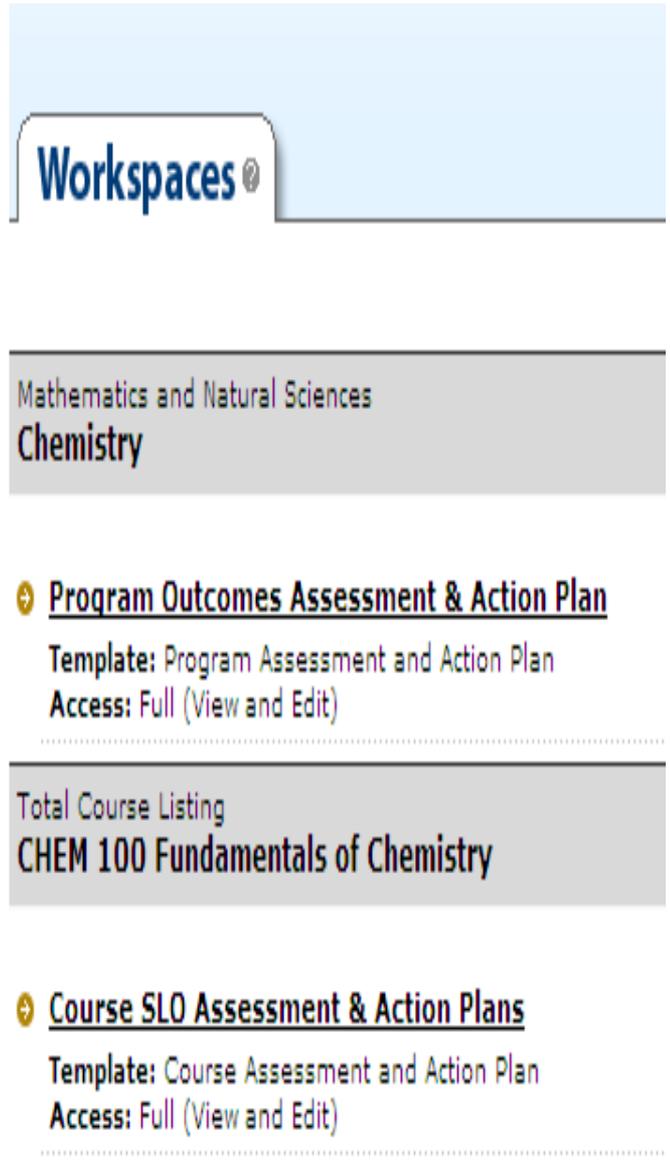
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Workspaces

Two types of workspaces:

1. **Program Outcomes Assessment & Action Plan**
(at the Department Level)
2. **Course SLO Assessment & Action Plans**
(at the Course Level)



The screenshot shows a user interface for 'Workspaces'. At the top, there is a light blue header with the word 'Workspaces' in a blue font. Below this, there are two workspace entries, each in a grey box. The first entry is for 'Mathematics and Natural Sciences' and 'Chemistry'. It has a plus icon and the title 'Program Outcomes Assessment & Action Plan'. Below the title, it says 'Template: Program Assessment and Action Plan' and 'Access: Full (View and Edit)'. The second entry is for 'Total Course Listing' and 'CHEM 100 Fundamentals of Chemistry'. It also has a plus icon and the title 'Course SLO Assessment & Action Plans'. Below the title, it says 'Template: Course Assessment and Action Plan' and 'Access: Full (View and Edit)'. There are horizontal dotted lines separating the two workspace entries.

Workspaces

Mathematics and Natural Sciences
Chemistry

+ **Program Outcomes Assessment & Action Plan**
Template: Program Assessment and Action Plan
Access: Full (View and Edit)

Total Course Listing
CHEM 100 Fundamentals of Chemistry

+ **Course SLO Assessment & Action Plans**
Template: Course Assessment and Action Plan
Access: Full (View and Edit)

Workspaces

Workspaces

Participating Area Name

Search

Clear

Mathematics and Natural Sciences

Chemistry

- Select Report -



Go

Program Outcomes Assessment & Action Plan

Template: Program Assessment and Action Plan

Access: Full (View and Edit)

 [Edit Content](#)

 [Add Comments](#)

 [Submit & Read Reviews](#)

Total Course Listing

CHEM 100 Fundamentals of Chemistry

- Select Report -



Go

Course SLO Assessment & Action Plans

Template: Course Assessment and Action Plan

Access: Full (View and Edit)

 [Edit Content](#)

 [Add Comments](#)

 [Submit & Read Reviews](#)

Total Course Listing

CHEM 100L Fundamentals of Chemistry Laboratory

Workspaces

Two components in each workspace

- Standing Requirements
 - a) Program Mission Statement (at the program level) or Mission Statement (at the course level)
 - b) Program Outcomes (at the program level) or Student Learning Outcome (at the course level)
 - c) Curriculum Map (both at the program and course level)
- Assessment Cycle
 - a) Assessment Plan
 - b) Assessment Findings
 - c) Action Plan
 - d) Status Report

The screenshot shows the San Diego Mesa College website interface. At the top is the college logo. Below it is a navigation bar with links for 'My Home', 'Shared Resources', 'Locator', and 'M'. The main content area is titled 'Chemistry (Workspace: Program Outcomes)'. It features a sidebar with a tree view of content categories: 'General Information', 'Standing Requirements', '2009-2010 Cycle', '2010-2011 Cycle', and '2011-2012 Cycle'. Each category is expanded to show sub-items like 'Program Mission Statement', 'Program Outcomes', 'Curriculum Map', 'Assessment Plan', 'Assessment Findings', 'Action Plan', and 'Status Report'. On the right side, there is an 'Edit Content' button and a list of options for 'A number' including 'To v', 'To ii', 'Onc not', and 'You'. Below the list is a link for 'For more ii'.

Standing Requirements

- a) **Program Mission Statement** (at the program level)
or **Mission Statement** (at the course level)

This is the department mission statement as listed in catalog.

Example:

“The San Diego Mesa College Chemistry Department offers several levels of chemistry courses ranging from introductory level courses for non-science majors to majors level chemistry. The student population in the courses is very diverse as well. For this reason, the mission of the San Diego Mesa College Chemistry Department is three-fold and as follows:

To prepare transfer students for upper division science courses.

To prepare students for jobs or careers in the sciences and health industries.

To provide a basic understanding of scientific principles to prepare students to make informed decisions about issues they will face as responsible citizens.”

Standing Requirements

b) **Program Outcomes** (at the program level) and **Student Learning Outcome** (at the Course Level)

Both program and course can be the same.

This is where you list the department outcomes and map them to:

1. The general Education Outcomes
2. To the Institution Outcomes.

Example:

“Students who complete the Chemistry Program will gain facility with:

Outcome 1: Communication

Students will be able to demonstrate ability to report and/or explain scientific information appropriately.

Map to General Education Outcomes: Language and Rationality 1, Language and Rationality 2, Language and Rationality 3, Natural Sciences 1, Natural Sciences 3,

Map to Institutional Learning Outcomes: Communication:

Outcome 2. Critical Thinking

Students will be able to utilize critical thinking skills and the scientific method to solve problems, analyze and interpret data.

Map to General Education Outcomes: Language and Rationality 3, Language and Rationality 4, Natural Sciences 4,

Map to Institutional Learning Outcomes: Critical Thinking:

Outcomes

(Program or Course level)

[Edit Content](#) |
 [Discussion](#) |
 [Submission & Read Reviews](#) |
 [Publish](#) |
 [Options & Info](#)

Chemistry (Workspace: Program Outcomes Assessment & Action Plan) W

Content

Log

Share

General Information

[-] Standing Requirements

[Program Mission Statement](#)

[Program Outcomes](#)

[Curriculum Map](#)

[-] 2009-2010 Cycle

[Assessment Plan](#)

[Assessment Findings](#)

[Action Plan](#)

[Status Report](#)

[-] 2010-2011 Cycle

[Assessment Plan](#)

[Assessment Findings](#)

[Action Plan](#)

Chemistry SLO's

Students who complete the Chemistry Program will gain facility with:

Outcome

Mapping

Communication

Students will be able to demonstrate ability to report and/or explain scientific information appropriately.

General Education Outcomes: Language and Rationality 1, Language and Rationality 2, Language and Rationality 3, Natural Sciences 1, Natural Sciences 3
Institutional Learning Outcomes: Communication:

Critical Thinking

Students will be able to utilize critical thinking skills and the scientific method to solve problems, analyze and interpret data.

General Education Outcomes: Language and Rationality 3, Language and Rationality 4, Natural Sciences 4,
Institutional Learning Outcomes: Critical Thinking:

Technology Awareness

Students will be able to use modern technology to investigate questions.

General Education Outcomes: Social and Behavioral Sciences...,
Institutional Learning Outcomes: Technological Awareness:

Personal Responsibility

Students will come prepared for class and complete assigned work thoughtfully.

General Education Outcomes: Social and Behavioral Sciences...,
Institutional Learning Outcomes: Personal Actions and Civic Res..., Self-awareness and Interperson...

Environmental Responsibility

Students will be able to explain or describe the impact of chemistry on environment.

General Education Outcomes: Natural Sciences 2, Natural Sciences 3, Social and Behavioral Sciences...,
Institutional Learning Outcomes: Global Awareness, Personal Actions and Civic Res...

Standing Requirements

c) Curriculum Map

- At the department level several maps can be created based on clusters of courses.

Courses can be clustered based on common activities or common topics of instruction.

- At the course level one map is created based on course objectives.

All maps must be aligned to the department SLOs

“For example: Mesa College- Chemistry SLO's”

Program Level List of Curriculum Maps

The screenshot displays a web application interface for viewing curriculum maps. On the left is a navigation tree under the heading "General Information". It includes sections for "Standing Requirements" (with links for Program Mission Statement, Program Outcomes, and Curriculum Map), "2009-2010 Cycle" (with links for Assessment Plan, Assessment Findings, Action Plan, and Status Report), and "2010-2011 Cycle" (with links for Assessment Plan, Assessment Findings, Action Plan, and Status Report). The "Curriculum Map" link is selected. The main content area has tabs for "Content" and "Log". Under "Content", there is a "Curriculum Map" section with a "Directions" link. Below this is a section titled "Active Curriculum Maps" which lists three course sets: "Lab Courses", "Lecture Courses", and "specialty courses". Each set includes an alignment set, creation date, and last modified date. A note at the bottom states: "These courses are for either the chemtech program or non-majors."

General Information

- [-] **Standing Requirements**
 - Program Mission Statement
 - Program Outcomes
 - Curriculum Map**
- [-] **2009-2010 Cycle**
 - Assessment Plan
 - Assessment Findings
 - Action Plan
 - Status Report
- [-] **2010-2011 Cycle**
 - Assessment Plan
 - Assessment Findings
 - Action Plan
 - Status Report

Content | **Log**

Curriculum Map

Directions

Active Curriculum Maps

- Lab Courses**
Alignment Set: Mesa College- Chemistry SLO's (Copy 2) [View Set]
Created: 12/02/2010 7:16:44 pm PST
Last Modified: 12/29/2010 2:59:57 pm PST
- Lecture Courses**
Alignment Set: Mesa College- Chemistry SLO's (Copy 2) [View Set]
Created: 12/02/2010 7:21:41 pm PST
Last Modified: 01/11/2011 12:11:14 pm PST
- specialty courses**
Alignment Set: Mesa College- Chemistry SLO's (Copy 2) [View Set]
Created: 12/13/2010 12:33:28 pm PST
Last Modified: 01/11/2011 12:11:35 pm PST

These courses are for either the chemtech program or non-majors.

Program Level Curriculum Maps

At the chemistry department three maps were created based on clusters of courses.

- **Cluster 1: Lab Courses**

This cluster is **based on the activities** the courses have in common

- **Cluster 2: Lecture Courses**

This cluster is **based on the topics** the courses have in common.

- **Cluster 3: Specialty courses**

This cluster includes **standalone courses**.

Program Level Curriculum Maps

Each Program level Curriculum map consists of a table that has the list of all the courses mapped to the department Outcomes.

You need to create a map for each program level assessment.

For example: The Chemistry department created three maps that correlate to three types of assessments. The lecture courses will be assessed for knowledge, the lab courses will be assessed for skills and the standalone courses will be assessed separately.

Cluster 1: Lab Courses Map (Department/Program Level)

Lab Courses

Courses and Activities Mapped to Mesa College- Chemistry SLO's (Copy 2)

	Chemistry SLO's			
	Communication	Critical Thinking	Technology Awareness	Personal Responsibility
Courses and Learning Activities				
Chem 111L Chemistry in Society Lab	✓	✓	✓	✓
Chem 100L Fundamentals of Chemistry lab	✓	✓	✓	✓
chem 130L Introductory Organic Chemistry Lab	✓	✓	✓	✓
Chem 152L Intro. Chem laboratory	✓	✓	✓	✓
Chem 200L General Chemistry 1 Lab	✓	✓	✓	✓
Chem 201L General Chemistry 2 Lab	✓	✓	✓	✓
Chem 231L Organic Chemistry 1 Lab	✓	✓	✓	✓
Chem 233L Organic chemistry 2 lab	✓	✓	✓	✓
Chem.161 Techniques in Biochemistry Lab	✓	✓	✓	✓

Cluster 2: Lecture Courses Maps (Department/Program Level)

Lecture Courses

Courses and Activities Mapped to Mesa College- Chemistry SLO's (Copy 2)

	Chemistry SLO's			
	Communication	Critical Thinking	Technology Awareness	Personal Responsibility
Courses and Learning Activities				
Chem 111 Chemistry in Society	✓	✓	✓	✓
Chem100 Fundamentals Chemistry	✓	✓	✓	✓
chem 130 introductory organic chemistry	✓	✓	✓	✓
Chem 152 Introductory chemistry	✓	✓	✓	✓
Chem 200 General Chemistry 1	✓	✓	✓	✓
Chem 201 general chemistry 2	✓	✓	✓	✓
chem 231 organic chemistry 1	✓	✓	✓	✓
chem 233 organic chemistry 2	✓	✓	✓	✓

Course Level Curriculum Map

Expand All Collapse All

General Information

- [-] **Standing Requirements**
 - Program Mission Statement
 - Program Outcomes
 - Curriculum Map**
- [-] **2009-2010 Cycle**
 - Assessment Plan
 - Assessment Findings
 - Action Plan
 - Status Report
- [-] **2010-2011 Cycle**
 - Assessment Plan
 - Assessment Findings
 - Action Plan
 - Status Report

Content **Log**

Curriculum Map

Directions

Active Curriculum Maps

- Lab Courses**
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Created: 12/02/2010 7:16:44 pm PST
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- specialty courses**
Alignment Set: Mesa College- Chemistry SLO's (Copy 2) [View Set]
Created: 12/13/2010 12:33:28 pm PST
Last Modified: 01/11/2011 12:11:35 pm PST

These courses are for either the chemtech program or non-majors.

Course Level Curriculum Map

The screenshot displays a course management system interface for 'CHEM 100 Fundamentals of Chemistry'. At the top, there is a navigation bar with buttons for 'Edit Content', 'Discussion', 'Submission & Read Reviews', 'Publish', and 'Options & Info'. Below this, the course title and workspace information are shown: 'CHEM 100 Fundamentals of Chemistry (Workspace: Course SLO Assessment & Action Plans)'. A sidebar on the left contains a tree view with 'Expand All' and 'Collapse All' buttons. The tree view includes 'General Information', 'Standing Requirements' (with sub-items: Mission Statement, Student Learning Outcomes, Curriculum Map), and '2009-2010 Assessment Cycle' (with sub-items: Assessment Plan, Assessment Findings). The 'Curriculum Map' item is selected and highlighted. The main content area has tabs for 'Content' and 'Log'. Under the 'Content' tab, there is a 'Curriculum Map' section with a 'Directions' link. Below this is an 'Active Curriculum Maps' section, which lists 'Chem100 Final' with a search icon. The details for 'Chem100 Final' include: 'Alignment Set: Mesa College- Chemistry SLO's (Copy 1) [View Set]', 'Created: 01/10/2011 8:24:11 am PST', and 'Last Modified: 01/10/2011 6:27:20 pm PST'.

[Edit Content](#) [Discussion](#) [Submission & Read Reviews](#) [Publish](#) [Options & Info](#)

CHEM 100 Fundamentals of Chemistry (Workspace: Course SLO Assessment & Action Plans)

[+ Expand All](#) [- Collapse All](#)

General Information

- Standing Requirements**
 - [Mission Statement](#)
 - [Student Learning Outcomes](#)
 - [Curriculum Map](#)**
- 2009-2010 Assessment Cycle**
 - [Assessment Plan](#)
 - [Assessment Findings](#)

Content **Log**

[Curriculum Map](#)

[Directions](#)

Active Curriculum Maps

- [Chem100 Final](#)
 - Alignment Set: Mesa College- Chemistry SLO's (Copy 1) [\[View Set\]](#)
 - Created: 01/10/2011 8:24:11 am PST
 - Last Modified: 01/10/2011 6:27:20 pm PST

Course Level Map (Lecture Course)

San Diego Mesa College » Total Course Listing

CHEM 100 Fundamentals of Chemistry

Chem100 Final

Courses and Activities Mapped to Mesa College- Chemistry SLO's (Copy 1)

	Chemistry SLO's			
	Communication:	Critical Thinking:	Technology Awareness:	Personal Responsibility:
Courses and Learning Activities				
Measurements Scientific Measurements		✓	✓	✓
Atom/Compounds Models of the Atom and Chemical Bonding	✓	✓	✓	✓
Nomenclature Nomenclature	✓	✓		✓
Structure Structure and Physical Properties	✓	✓	✓	✓
Equations Chemical Equations	✓	✓		✓
Calculations Mole calculations	✓	✓	✓	✓

This Map correlates the Course Topics (first Column) to the Chemistry Department Outcomes (first row)

Course Level Map (Lab Course)

San Diego Mesa College » Total Course Listing

CHEM 152L Introduction to General Chemistry Laboratory

Course Activity Vs. Course Outcome

Courses and Activities Mapped to Mesa College- Chemistry SLO's (Copy 1)

	Chemistry SLO's			
	Communication:	Critical Thinking:	Technology awareness:	Personal responsibility:
Courses and Learning Activities				
Lab Notebook Organization	✓	✓	✓	✓
Lab Notebook Purpose and Theory	✓	✓		✓
Lab Notebook Materials, Safety, and Experimental Procedure	✓	✓	✓	✓
Lab Notebook Data, Observations, and Data Analysis	✓	✓	✓	✓
Lab Notebook Conclusion	✓	✓		✓

This Map correlates the course activities (first Column) to the Chemistry Department Outcomes (first row)

Assessment Cycle

a) Assessment Plan

An assessment plan includes two components:

○ Assessment Outcome:

Select one or more of the main department outcomes such as critical thinking, communication, etc.

○ Assessment Measure:

Describe the assessment as well as the tool used to measure it (Rubric)

It is important to develop an assessment Rubric prior to the assessment

Assessment Cycle

a) Assessment Plan

○ Assessment Measure

Title: (Lab Course: Discussion)
(Lecture Course: Calculations)

Type: (Lab Course: Lab Report)
(Lecture Course: Exam)

Level: Select either course, or program level

Description:

(Lab Course: Description of discussion from rubric)
(Lecture Course: List the 5 Multiple Choice questions)

Target: (Lab Course: 70% students at level 3 on rubric)
(Lecture Course: Average of 70% correct answers)

Program Level Assessment Plan

▼ Mesa College- Chemistry SLO's (Copy 2)

Chemistry SLO's

Critical Thinking

▼ Measure: Lab Courses: Data analysis/Discussion

Program level: Direct - Other

Details/Description of assessment measure: Students will write a lab discussion based on the lab rubric attached.

Target specified in rubrics: Chem 100 L: Level 2 of the rubric

Chem 152 L: Level 3 of the rubric

Chem 200 L: Level 4 of the rubric

Chem 201L, 231L, 233L: Level 5 of the rubric

Implementation Plan (timeline)--define how long assessment will take (semester, or two or three?): Fall 2009 and Spring 2010

Faculty responsible for assessment: All faculty teaching Chem 100L, 152L, 200L, 201L, 231L, and 233L

Supporting Attachments:

 [Lab Assessment Rubric](#) (Microsoft Word)

▼ Measure: Lecture Courses: Calculations

Program level: Direct - Exam

Details/Description of assessment measure: Students will answer 5 multiple choice questions related to calculations based on the attached chart.

Target specified in rubrics: An average of 75 % correct answers at each course level.

Implementation Plan (timeline)--define how long assessment will take (semester, or two or three?): Two semesters: Fall 2009 and Spring 2010

Faculty responsible for assessment: All faculty Teaching Lecture Courses.

Supporting Attachments:

 [Assessment Table for Lecture Courses](#) (Microsoft Word)

Course Level Assessment Plan

Lab Course

Content Log [Check Out](#) [Share](#) [Print](#)

▼ Outcomes and Measures Show Descriptions

▼ Mesa College- Chemistry SLO's (Copy 1)

Chemistry SLO's

Communication:

▼ **Measure:** Lab Report
Course level: Direct - Other

Details/Description of assessment measure: Students will write a discussion for three experiments.

Target specified in rubrics: Students will score a minimum of 3 on the rubric.

Implementation Plan (timeline)--define how long assessment will take (semester, or two or three?): The assessment will be done for three experiments over two semester Fall 09 and Spring 2010

Faculty responsible for assessment: Saloua Saidane and Rob Fremland

Supporting Attachments:

 [Lab Notebook Rubric](#) (Microsoft Word)

Lab Courses Assessment Rubric

Activities Vs. Level to Achieve	Organization Chem SLOs 1-5	Purpose and Theory Chem SLOs 1, 2, 4, 5	Safety and Procedure Chem SLOs 1- 5	Data and Discussions Chem SLOs 1 -4	Conclusion Chem SLOs 1-4
LEVEL 5	Each experiment has the required elements of: title, purpose, theory, procedure, observations, data, calculations, discussion, and conclusion.	The experiment has (a) clearly stated purpose(s). A detailed explanation of the theory behind the experiment is described, including chemical reactions, formulas that will be used in the calculations.	The notebook provides detailed information about the equipment, chemicals, reagents, concentrations, safety and disposal information.	All data, observations, and graphs, are clearly recorded in lab notebook. And all calculations are shown with appropriate equations and units. Has detailed discussion and summary of results.	Conclusions are drawn that correlate to the purpose and show a clear understanding of the experiment.
4	Most experiments are clearly documented, having all the required elements.	The experiment has (a) clearly stated purpose (s). A sufficient summary and explanation of the theory behind the experiment is described, including chemical reactions, formulas that will be used in the calculations.	The notebook provides adequate information about the equipment, chemicals, reagents, concentrations, safety and disposal information.	Most data, observations, and graphs, are clearly recorded in lab notebook. And most calculations are shown with appropriate equations and units. Has adequate discussion and summary of results.	Conclusions are drawn that correlate to the purpose and show an adequate understanding of the experiment.
3	Some experiments are clearly documented, having all the required elements.	The experiment has (a) stated purpose (s) and a tentative explanation of the theory behind the experiment.	The notebook provides sufficient information about the equipment, chemicals, reagents, concentrations, safety and disposal information.	Most data, observations, and graphs, are recorded in lab notebook. And some calculations are provided with appropriate equations and units. Has a discussion.	Conclusions are drawn that correlate to the purpose and show an understanding of the experiment.
2	Few experiments are clearly documented, having all the required elements. One has difficulty finding information in the notebook.	Purpose (s) and theory are insufficiently stated.	The notebook provides insufficient information about the equipment, chemicals, reagents, concentrations, safety and disposal information.	Some data, observations, and graphs, are recorded in lab notebook. And some calculations are provided with appropriate equations and units. Has an incomplete discussion	and conclusions may not correlate to the purpose. Shows inadequate understanding of the experiment.
1	Documentation of experiments is sketchy. Some data and results are not recorded. Information is difficult to find.	Purpose (s) and theory are unclear or irrelevant.	Description of experimental procedure is not cited or safety and disposal information is incomplete.	Few data, observations, and graphs, are recorded in lab notebook or calculations are missing. Discussion is incomplete or missing.	Conclusions are incomplete or missing. Shows poor understanding of the experiment.

Course Level Assessment Plan

Lecture Course

▼ Outcomes and Measures

Show Descriptions

▼ Mesa College- Chemistry SLO's (Copy 2)

Chemistry SLO's

Critical Thinking:

▼ Measure: Mole Calculations

Course level: Direct - Exam

Details/Description of assessment measure: Students will answer 5 multiple questions related to moles (see attached)

Target specified in rubrics: An average of 75% of correct answer

Implementation Plan (timeline)--define how long assessment will take (semester, or two or three?): Fall 2010 and Spring 2011

Faculty responsible for assessment: Saloua Saidane, Rob Fremland, Jerry Albert, Vivien Steiger

Supporting Attachments:

 [Assessment Questions](#) (Microsoft Word)

Course Level Assessment Plan

Lecture Course

- A Lecture course assessment table was created that lists the topics to be assessed (first row) and the description of each topic per course level.
- At each course level, students will be given a 5 multiple choice exam based on the description of the topic assessed.
- Students are expected to have 75% of correct answers for all courses.

Lecture Courses Assessment

Topics Taught	Measurements SLO #1-4	Atom/Molecules SLO #1-4	Nomenclature SLO #1-5	Structure/ Properties SLO #1-5	Chemical Equations SLO #1-5
Chem 100	Use scientific notation and represent measured and calculated quantities to the correct number of significant figures. Use metric and SI units to express measurements and perform unit conversions using dimensional analysis.	Describe the model of the atom including subatomic particles, isotopes and electron configurations for the first 20 elements. Understand and use the periodic table. Compare and contrast different types of bonding. Determine the shapes and polarities of molecular substances.	Name and write chemical formulae for binary covalent compounds, simple ionic compounds and acids.	Explain key concepts and terminology related to the properties and classification of matter. Explain the factors that affect the formation of solutions. Explain concepts related to gases, acids, bases and intermolecular forces.	Classify and write balanced chemical reactions. Explain the concept of equilibrium. Write nuclear reactions.
Chem 152	Using dimensional analysis, solve problems related to measurement, metric conversions, density problems and express the answer to the correct number of significant figures and with correct units.	Describe the model of the atom including subatomic particles, isotopes and electron configurations. Describe the periodic table, including trends. Compare and contrast covalent and ionic bonds and compounds.	Write formulas for ionic compounds, covalent compounds and acids from names and names of compounds from formulas.	Explain key concepts and terminology related to the properties and classification of matter. Explain the factors that affect the formation of solutions. Explain concepts related to gases, acids, bases and intermolecular forces.	Classify and write balanced chemical equations from words and predict products for some reaction types. Describe chemical equilibrium including Le Chatelier's Principle
Chem 200	Perform advanced unit conversion problems using dimensional analysis.	Write sets of quantum numbers, write electron configurations, and draw orbital diagrams for the elements. Explain periodic trends. Compare and contrast the principle theories of ionic and covalent bonding.	Write formulas for ionic compounds, covalent compounds and acids from names and names of compounds from formulas.	Compare and contrast the properties of the liquid and solid state, including phase changes. Use intermolecular forces to explain differences in physical properties. Interpret phase diagrams. Explain and analyze the factors that affect the formation of a solution.	Classify, write and balance chemical equations, including ionic equations. Predict whether an aqueous phase reaction will occur. Balance redox equations.

Assessment Cycle

b) Assessment Findings

Correlate findings to target

c) Action Plan

Explain what actions need to be taken if target is not met

c) Status Report

Assessment Findings

(Program level, Lecture Courses)

▼ **Measure:** Lecture Courses: Calculations Program level; Direct - Exam

Details/Description of assessment measure: Students will answer 5 multiple choice questions related to calculations based on the attached chart.

Target specified in rubrics: An average of 75 % correct answers at each course level.

Implementation Plan (timeline)--define how long assessment will take (semester, or two or three?): Spring 2010

Faculty responsible for assessment: Rob Fremland, Saloua Saidane, Jerry Albert

Supporting Attachments:

 [Assessment Table for Lecture Courses](#) (Microsoft Word)

Findings for Lecture Courses: Calculations

Summary of Findings: The average of correct answers is 77%.

Results: Acceptable Target Achievement: Met

Recommendations : Target met. Repeat assessment for another semester.

Reflections/Notes :

Assessment Findings

(Course Level, Lecture Course)

Chemistry SLO's

Critical Thinking:

▼ Measure: Mole Calculations

Course level; Direct - Exam

Details/Description of assessment measure: Students will answer 5 multiple questions related to moles (see attached)

Target specified in rubrics: An average of 75% of correct answer

Implementation Plan (timeline)--define how long assessment will take (semester, or two or three?): Fall 2010 and Spring 2011

Faculty responsible for assessment: Salous Saidane, Rob Fremland, Jerry Albert, Vivien Steiger

Supporting Attachments:

 [Assessment Questions](#) (Microsoft Word)

Findings for Mole Calculations

Summary of Findings: Total average of correct answers is 77%

Question 2 and 5 had the lowest scores: 60 and 66% respectively. See attachment

It is possible that questions are not written correctly,

or that the concept is misunderstood.

(Section 4 students scored the lowest score because the questions were given at the end of the final exam and the students might have

Results: Acceptable Target Achievement: Met

Recommendations : Repeat assessment during Spring 2011 semester.

Review the questions and give enough time to students for completing the assessment.

Reflections/Notes :

Substantiating Evidence:

 [Assessment Results \(Fall 2010\)](#) (Microsoft Excel)