

C.1 Template: Contextualized Learning Activities (CLAs)¹

For the “other required credits” in the bundle of credits, students in an SHSM program must complete learning activities that are contextualized to the knowledge and skills relevant to the economic sector of the SHSM. CLAs, a minimum of six hours and a maximum of ten hours in length, address curriculum expectations in these courses in the context of the sector.

This template must be used to develop a CLA that will be submitted to the ministry. CLAs are posted on the Ontario Educational Resource Bank (OERB) website at <http://resources.elearningontario.ca> as well as on the SHSM e-Community website, a password-protected site for educators, at <http://community.elearningontario.ca>

**Prior to writing a CLA all teachers should have familiarized themselves with the
CLA How-to Write Guide**

In order for a CLA to be posted, it is important to:

- submit all material in a **single** Microsoft Word file (not as a PDF) **please note, no attachments will be accepted (exception: PowerPoint presentations that accompany a CLA)**
- observe all copyright regulations (see *Access Copyright – The Canadian Copyright Licensing Agency* at www.accesscopyright.ca).
- Complete **all** sections of the template including:
 - 4 Key Search Words – these should allow others to search and locate this CLA from an electronic database. You do not need to include the course code and the SHSM sector as key words, as those will be default key words.

e.g. Key Search Words

geometry, manufacturing,
conversions, calculations

- Differentiated Instruction portion of the template
- When saving the CLA, please use the following document naming format:

Sector-Course Code–Title (max 250 characters for entire title)

Ex. H&T–SCH3U–Mole Cookie Lab.doc

Note to CLA Developers: For your convenience, instructions (enclosed in square brackets) have been provided throughout this template. Remove these instructions when you complete the template.

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Development date	July 8, 2011
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SHSM sector	Hospitality and Tourism
Course code and course title	SVN 3EI - Environmental Science, Grade 11, Workplace Preparation
Name of CLA	Ratatouille Kitchen Safety
Brief description of CLA	Students will obtain knowledge regarding physical and chemical hazards present in a kitchen workplace and use this knowledge to develop a menu that incorporates .
Key Search Terms (Do not use SHSM, CLA, Course Code or Sector)	[Max.4 – do not use SHSM, CLA, the course code or the sector of the CLA as these are default search terms]
Duration	7.5 hours (six class periods)
Overall expectations	Assess workplace situations with respect to safety and environmental issues, and propose a course of action to address unsafe working conditions; Investigate a variety of safe and environmentally responsible workplace practices; Demonstrate an understanding of general workplace safety procedures and environmentally responsible practices.

<p>Specific expectations</p>	<p>Analyse unsafe working conditions that can affect young workers in various workplace situations (e.g., using information from the Live Safe! Work Smart! website; using information obtained during a co-op placement or through experiential learning), and propose a course of action that would help to improve one such situation [AI, C]</p> <p>Analyse, on the basis of research, and report on the environmental impact of unsafe handling, storage, and disposal of hazardous and non-hazardous workplace materials associated with a particular job [IP, PR, AI, C]</p> <p>Use appropriate terminology related to safety and environmental responsibility in the workplace, including, but not limited to: Möbius loop, Material Safety Data Sheet (MSDS), Hazardous Household Product Symbols (HHPS), hazardous material, and personal protective equipment (PPE) [C]</p> <p>Demonstrate proper use of a variety of safety techniques and procedures after completing a recognized safety training program (e.g., a "virtual WHMIS" program such as Passport to Safety) [PR]</p> <p>Compare some of the features, uses, and environmental implications of Hazardous Household Product Symbols and WHMIS hazard symbols</p> <p>Identify and describe common types of biological, physical, and chemical hazards in the workplace (e.g., hazards posed by bacteria, noise, work at dangerous heights, use of chemicals and other hazardous materials) and associated accident-prevention methods (e.g., sterilization, soundproofing, use of five-point safety harnesses, use of safe storage cabinets, safe disposal of chemicals)</p> <p>Explain how the use of personal protective equipment (e.g., aluminized gloves, a welding shield, ear plugs, a self-contained breathing apparatus, an air-purifying mask) minimizes exposure to hazardous materials that can enter the body through ingestion, inhalation,</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>[Consider the following as part of your planning: What do we want students to learn?</p> <ul style="list-style-type: none"> • What specific/key learning goals for students are related to these expectations? • Are these specific/key learning goals arranged in a way that will allow students to achieve the desired learning incrementally?] </div>
<p>Catholic graduate expectations (if applicable)</p>	<p>The graduate is expected to be:</p> <p>A Reflective and Creative Thinker who -thinks reflectively and creatively to evaluate situations and solve problems;</p> <p>A Self-Directed, Responsible, Life Long Learner who -applies effective communication, decision-making, problem-solving, time and resource management skills;</p> <p>A Responsible Citizen who -respects the environment and uses resources wisely;</p>

Essential Skills and work habits

[Check off the Essential Skills and work habits that are addressed in this CLA.]

Essential Skills

- Document Use
- Computer Use
- Numeracy
 - Measurement and Calculation
 - Data Analysis
- Thinking Skills
 - Job Task Planning and Organizing
 - Decision Making
 - Problem Solving
 - Finding Information

Work Habits

- Working Safely
- Teamwork
- Reliability
- Organization

Instructional/Assessment Strategies

Teacher's notes

[Provide suggestions that will assist the teacher in delivering the CLA. For example, remind teachers to make sure that handouts, such as authentic workplace materials/documents used by the sector, are available for the CLA.]

Teacher's Notes:

This set of activities has been designed for Grade 11 Environmental Science Workplace students who are currently enrolled in the Hospitality & Tourism Specialist High Skills Major program, although the activities also fully follow the expectations within the SVN 3EI curriculum and can therefore be used with the full class. The "Ratatouille" video shown on Days 1 and 2 are intended to provide a captivating introduction to the Kitchen Workplace Safety theme. On Days 3 and 4, students will cover the workplace safety background information needed to complete the summative activity scheduled for Days 5 and 6.

A number of different assessment methods are prescribed for assessing the activities contained within this CLA (please see **Assessment Tools**. Certain activities such as the "Ratatouille Physical Hazards Worksheet" are conducive to oral class correction, while other activities such as the "WHMIS Safety Labels Activity" or the "MSDS Sheets Worksheet" would benefit from either peer, self, or teacher assessment. The Ratatouille Recipe Summative Assignment must be submitted to the teacher for evaluation.

Day to Day Preparation:

Teachers will require a regular classroom with a bright link for days 1, 2, and 3.

Teachers need to book a Computer Lab for days 4, 5, and 6. The computer lab on day 4 will also need to have a bright link.

Day 1:

- Have the Ratatouille video ready to go.

Day 2:

- Photocopy the "Find the Physical Hazards in These Images" question sheet for the students.
- Have the "Physical and Chemical Formative[1].docx" ready to display on the bright link

Day 3:

- Have WHMIS Symbols power point and You tube "How to Read Material Safety Data Sheets" set to go on the bright link
- Photocopy the WHMIS Safety Labels activity, the You tube "How to Read Material Safety Data Sheets" worksheet, MSDS Sheets for "Quantum Disinfectant" and "Multipurpose Degreaser", the MSDS Sheet Analysis worksheet for the students, and peer assessment checklists for the WHMIS Safety Labels activity

Day 4:

- Have the "Prevent-It Power Point" featuring You Tube video clips from from www.prevent-it.ca ready to go on the bright link
- Photocopy the Scavenger Hunt Quiz, the Classic Crème Brulee handout, the Crème Brulee Standardized Recipe Exemplar, the Standardized Recipe Teaching Form, the Standardized Recipes (blank form) and the Summative Standardized Recipe Assignment handout

Day 5:

- Photocopy Ratatouille Recipe Assignment rubrics "Summative Standardized Recipe Rubric" for the peer and self assessment

Context

[Describe the workplace context for the CLA.]

This learning unit is contextualized specifically for students in a food service environment by emphasizing the benefits workplace safety in preventing physical injury and contamination as well as preventing dangerous exposure to hazardous chemicals. Students then produce a recipe that outlines personal and food safety watch points that pertain to WHMIS and “Live Safe! Work Smart” guidelines.

Strategies

Day 1, 2

- Introductory discussion (see "Introductory Discussion Questions - Workplace Safety) on workplace safety in relation to Environmental Science (see what they know)
- students view the movie "Ratatouille"
- students examine the "Physical and Chemical Explanation" Handout in order to become familiar with physical and chemical hazards
- students examine the "Physical and Chemical Formative" - Kitchen Hazard Images handout and use it to complete the "Find the Physical Hazards In These Images" worksheet

Day 3

- overview of WHMIS safety symbols
 - power point to show WHMIS symbols and basic description (Hazardous Symbols Power Point)
 - students complete Activity - analysing WHMIS Safety Labels on workplace products - "Hazardous Symbols Worksheet" - students examine containers for hazardous chemicals with WHMIS labels and symbols on them in carousel format
 - students complete peer assessment for this using "Checklist for WHMIS Symbols Activity"
- overview of MSDS sheets
 - students view You tube power point "How to Read Material Safety Data Sheets" to introduce MSDS sheets to outline their function with accompanying worksheet (How to Read a Material Safety Data Sheet - Question Sheet)
 - students examine MSDS sheets for "Quantum Disinfectant" and "Multi-purpose Degreaser" and complete the "MSDS Sheet Analysis" worksheet based on these two sheets

Day 4

- students examine the Work Smart Ontario website and use this to complete the "Scavenger Hunt Quiz" handout
- students view the "Prevent-It" Power Point featuring YouTube videos from www.prevent-it.ca
 - debrief safety hazards and procedures pertaining to these hazards as indicated within the power point - analysis in groups after each video - students can share their ideas within a chart paper reflection
- overview exemplar for Summative Activity - Ratatouille Recipe Assignment (Classic Crème Brulee handout, the Crème Brulee Standardized Recipe Exemplar)

Day 5, 6

- students examine the "Summative Standardized Recipe Assignment" handout and the "Standardized Recipe Teaching Form" in order to clarify the expectations for completing the Ratatouille Recipe Summative Assignment.
- students complete the "Standardized Recipes "(blank form)" for Ratatouille Recipe Summative Assignment to indicate the following
 - Recipe Yield
 - Procedure
 - Tools and Equipment
 - Personal Safety Watch Points
 - Food Safety Watch Points
- students carry out a self and peer assessment of their Ratatouille Recipe Summative Assignment by making use of the Summative Standardized Recipe Rubric and then make appropriate changes and corrections to the assignment prior to submitting it to the teacher.

[How will the learning be designed?

- Do the instructional and assessment strategies support the achievement of the learning goals?
- Are the assessment strategies linked to each of the instructional strategies in a planned, purposeful, and systematic way?
- Do the assessment and instructional strategies provide feedback and ongoing monitoring of students' throughout the CLA?
- How will teachers differentiate instruction and assessment to meet the learning needs of students?]

[What adjustments must be made to the instructional and assessment strategies for those students who are not progressing?]

Assessment and Evaluation of Student Achievement

[List all assessment and evaluation strategies and tasks and attach handouts, tests, assignments, exercises, etc.]

[As you plan, keep the following important considerations in mind:

How will we know students are learning?	How will we know students have learned?
• How will students demonstrate progress towards the desired learning?	• How will students demonstrate achievement of the desired learning?
• What criteria will be used to determine whether students are learning?	• What criteria will be used to determine that students have learned?
• What assessment strategies/tools will best gather evidence during learning?	• What assessment strategies/tools will best gather evidence that students have learned?
• Will the assessment tasks provide opportunities for students to demonstrate the full range of their learning in a variety of ways?]	

Strategies/Tasks [Add rows as required.]	Purpose [Assessment for, as, and of learning]
1. Introductory discussion of Workplace Safety.	Assessment for learning
2. Class correction of Ratatouille Physical Hazards Worksheet	Assessment as learning
3. Peer assessment of WHMIS Safety labels activity with a checklist	Assessment of learning
4. Teacher assessment of MSDS Sheets worksheet with a checklist	Assessment of learning

5. Class discussion of group analysis of "prevent-it.ca" You tube videos	Assessment for learning
6. Teacher check ins with oral feedback for Ratatouille Recipe Assignment	Assessment as learning
7. Peer and self assessment of Ratatouille Recipe assignment with the assignment rubric.	Assessment as learning
8. Teacher assessment of Ratatouille Recipe Summative assignment with a rubric	Summative - Assessment of learning.

Assessment tools

- WHMIS Safety Labels Activity - Peer Assessment Checklist
- MSDS Sheets Worksheet - Teacher Assessment Checklist
- Ratatouille Recipe Assignment - Teacher Summative Evaluation Rubric (also to be used for peer and self assessment)

Differentiation and the Summative Standardized Recipe Assignment handout

Differentiation will be based on:

Learner Profile

Differentiation will take place through:

Content Process Product

Additional Notes/Comments/Explanations

[Provide additional suggestions for teachers that will help them deliver the CLA.]

This CLA is best delivered after viewing the Ratatouille DVD and having dialogue with a Hospitality and Tourism Teacher.

Resources other than the ones offered in this CLA may be your Regional Food Safety Association, Hostelry Association, WSIB, or Health and Safety Organizations.

The theme for this CLA is Chemical and Physical Hazards of which many of your students may have had experiences; draw from them for inquiry as to the level of their understanding.

This CLA may be adapted to future movie content that is similar to the CLA itself and should not be seen as linked souly to the Ratatouille DVD.

The content of this document will be best received where there is access to computers.

Resources

[List all the resources needed to support the implementation of the CLA.]

Authentic workplace materials

WSIB

WHMIS

Ontario Ministry of Labour Website

Human resources

Print resources

Video resources

Ratatouille DVD - Disney/ Copyright ©2007 Pixar/Disney

Prevent it.ca/ U-Tube video Kitchen hazard, workplace hazard

Software

Websites

prevent-it.ca

<http://www.hi-tm.com/1908/SECTION-1-D-1908.pdf> Physical and Chemical images

http://www.livesafeworksmart.net/english/grade%209-12/pdf/new_WSO_gd7-8_hunt_teachers.pdf

Scavenger Hunt

<http://www.ehs.utoronto.ca/resources/whimis/whimis10.htm> (symbols and text)

<http://www.youtube.com/watch?v=ZPoFtEBjWI&feature=feedf>

http://www.ecolabmsds.ca/MSDS1/INST_ALPHA_STP/QC%2053%20MULTI-PURPOSE%20DEGREASER.910289-EUK.PDF

http://www.ecolabmsds.ca/MSDS1/INST_ALPHA_STP/QUATERNARY%20DISINFECTANT%20CLEANER.913336-EUK.PDF

Other resources

Products from the lab/school surrounding may be used in context to the MSDS activity.

Accommodations

In cases of students encountering difficulty or In cases where it is prescribed within a student's IEP, consideration may be given to permitting the student extra time to complete some of the tasks/assignments contained within this CLA, particularly the MSDS Analysis assignment and the Ratatouille Summative assignment. Assignments can potentially be reduced in length, for example, by having the student complete an analysis for one of the MSDS sheets as opposed to both of them. Most of the contained documents can be used with assistive technology such as Kurzweil if It is prescribed within the student's IEP. Many of the activities within this CLA involve individual hands on work for the student, which provides the opportunity for the teacher to make frequent check Ins with the student to monitor their progress.

List of Attachments

- Introductory Discussion Questions - Workplace Safety
- Physical and Chemical Formative - Kitchen Hazard Images
- Find the Physical Hazards in These Images
- Find the Physical Hazards in These Images - Answer Key (teacher)
- Physical and Chemical Explanation Handout
- <https://webmail.wcdsb.ca/owa/redir.aspx?C=9ef52b6340a1407297717b121c0c2b44&URL=http%3a%2f%2fwww.hitm.com%2f1908%2fSECTION-1-D-1908.pdf>
- Hazardous Symbols Power Point
- Hazardous Symbols Worksheet
- Checklist for WHMIS Symbols Activity
- You Tube - MSDS Sheets (power point) - <http://www.youtube.com/watch?v=ZPoFtEBjWI&feature=feedf>
- How to Read a Material Safety Data Sheet - Question Sheet
- How to Read a Material Safety Data Sheet - Answer Sheet (teacher only)
- MSDS Sheet Analysis
- MSDS Sheet Analysis - Answers (teacher only)
- Quantum Disinfectant MSDS
- https://webmail.wcdsb.ca/owa/redir.aspx?C=9ef52b6340a1407297717b121c0c2b44&URL=http%3a%2f%2fwww.ecolabmsds.ca%2fMSDS1%2fINST_ALPHA_STP%2fQUATERNARY%2520DISINFECTANT%2520CLEANER.913336-EUK.PDF
- Multi-purpose Degreaser MSDS
- https://webmail.wcdsb.ca/owa/redir.aspx?C=9ef52b6340a1407297717b121c0c2b44&URL=http%3a%2f%2fwww.ecolabmsds.ca%2fMSDS1%2fINST_ALPHA_STP%2fQC%252053%2520MULTI-PURPOSE%2520DEGREASER.910289-EUK.PDF
- Assessment - MSDS Analysis Worksheet
- Scavenger Hunt Quiz handout
- https://webmail.wcdsb.ca/owa/redir.aspx?C=9ef52b6340a1407297717b121c0c2b44&URL=http%3a%2f%2fwww.livesafeworksmart.net%2fenglish%2fgrade%25209-12%2fpdf%2fnew_WSO_gd7-8_hunt_teachers.pdf
- Prevent-It Power Point
- Classic Crème Brulee handout
- Crème Brulee Standardized Recipe Exemplar
- Standardized Recipe Teaching Form
- Standardized Recipes (blank form)
- Summative Standardized Recipe Assignment handout
- Summative Standardized Recipe Rubric
- CLA Picture

Attachments:

