

# C.1 Template: Contextualized Learning Activities (CLAs)<sup>1</sup>

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](http://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.

Contact Information

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<sup>1</sup> Revised June 2011

Board	Waterloo Catholic District School Board
Development date	July 4-7/11
Contact person	Stephen Kenney (and Wilson Abreu)
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SHSM sector	Sports
Course code and course title	SBI 3C - College Biology
Name of CLA	Sports Nutrition
Brief description of CLA	Students will gain an understanding of sports nutrition through theory, lab work and a practical learning activity.
Key Search Terms (Do not use SHSM, CLA, Course Code or Sector)	Nutrition, Biology, Athletics , Athletic Performance
Duration	8-10 hours
Overall expectations	<p>SBI3C</p> <p>B2 Investigate the structures and functions of cells, and the factors that influence cellular activity, using appropriate laboratory equipment and techniques.</p> <p>B3 Demonstrate an understanding of the basic processes of cellular biology.</p>
Specific expectations	<p>SBI3C</p> <p>B2.5 Conduct biological tests to identify biochemical compounds found in various food samples and compare the biochemical compounds found in each food to those found in the others.</p> <p>B3.1 Describe the structures and functions of important biochemical compounds, including carbohydrates, proteins, enzymes, and lipids.</p>

<p>Catholic graduate expectations (if applicable)</p>	<p><b>CGE2a</b> -listens actively and critically to understand and learn in light of gospel values;  <b>CGE2b</b> -reads, understands and uses written materials effectively;  <b>CGE2c</b> -presents information and ideas clearly and honestly and with sensitivity to others;  <b>CGE2d</b> -writes and speaks fluently one or both of Canada’s official languages;  <b>CGE3c</b> -thinks reflectively and creatively to evaluate situations and solve problems;  <b>CGE4e</b> -sets appropriate goals and priorities in school, work and personal life;  <b>CGE4f</b> -applies effective communication, decision-making, problem-solving, time and resource management skills;  <b>CGE4g</b> -examines and reflects on one’s personal values, abilities and aspirations influencing life’s choices and opportunities;  <b>CGE4h</b> -participates in leisure and fitness activities for a balanced and healthy lifestyle.  <b>CGE5a</b> -works effectively as an interdependent team member;</p>
<p>Essential Skills and work habits</p>	<p>[Check off the Essential Skills and work habits that are addressed in this CLA.]</p> <p style="text-align: center;"><b>Essential Skills</b></p> <p><input checked="" type="checkbox"/> Reading Text  <input checked="" type="checkbox"/> Writing  <input checked="" type="checkbox"/> Document Use  <input checked="" type="checkbox"/> Computer Use  <input type="checkbox"/> Oral Communication  Numeracy  <input type="checkbox"/> Money Math  <input type="checkbox"/> Scheduling or Budgeting and Accounting  <input checked="" type="checkbox"/> Measurement and Calculation  <input checked="" type="checkbox"/> Data Analysis  <input checked="" type="checkbox"/> Numerical Estimation</p> <p>Thinking Skills  <input checked="" type="checkbox"/> Job Task Planning and Organizing  <input type="checkbox"/> Decision Making  <input checked="" type="checkbox"/> Problem Solving  <input checked="" type="checkbox"/> Finding Information</p> <p style="text-align: center;"><b>Work Habits</b></p> <p><input type="checkbox"/> Working Safely  <input type="checkbox"/> Teamwork  <input checked="" type="checkbox"/> Reliability  <input checked="" type="checkbox"/> Organization  <input checked="" type="checkbox"/> Working Independently  <input checked="" type="checkbox"/> Initiative  <input checked="" type="checkbox"/> Self-advocacy  <input checked="" type="checkbox"/> Customer Service  <input checked="" type="checkbox"/> Entrepreneurship</p>

## 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.]

### The teacher should:

- make sure that they are familiar with Powerpoint presentations for slideshows and the jeopardy game.
- make sure that they have access to a lab and lab equipment/materials as listed In the lab handout
- book computer lab access for the food/activity analysis assignment
- review school policies on computer/internet use and plaguarism
- preview the internet sites used for the food/activity analysis assignment
- book guest speakers and business site visitations (early In the semester)
- be sensitive to the gender, ethno-cultural and possible religious diversity in the class
- consider accommodations for exceptional and ESL/ELD students
- be sensitive to issues that may occur related to food such as body image issues, anorexia, bulemia, etc.
- review proper safety techniques related to the lab
- review proper lab writing and assignment format requirements
- consider if the Word notes are to be used (depending on class ability/timing issues), how they would be used. They can be photocopied, put on overhead, or have blanks left for students to fill In.
- consider making an exemplar of the food/activity analysis assignment (or keep a copy of an outstanding one after the activity for next time).
- relate the activities to sports nutrition where possible
- consider **if you have multiple SHSM students** taking your course that this CLA also can be used to support **Hospitality and Tourism** (using the alternate Hospitality Food/Activity Assignment), **Landscape and Horticulture** (using the Vegetarian/Vegan diet option in the Food/Activity Assignment), and **Health and Wellness** (using the diabetic or senior diet option in the Food/Activity Assignment).

### Context

[Describe the workplace context for the CLA.]

Nutrition relates to many workplaces such as an athlete/sports support facility, a daycare or seniors home for meal planning, a homemaker raising children, a hospital/health community support system for food issues, a hospital/health food services preparation facility, a nutrition store for health foods or supplements, a restaurant, and a lab assistant.

### Strategies

[In point form, describe the sequence of instructional and assessment strategies that will support the intended learning. Attach all student handouts and worksheets.]

1. Pre-diagnostic - play the jeopardy game on Powerpoint to assess prior knowledge of nutrition and generate Interest in the topic
2. Terminology - Using the introductory Powerpoint presentation go over the basic terms and concepts of nutrition. The Word notes may also be used as a supplement depending on the abilities of the students.
3. Lab - Testing for the Presence of Macromolecules - review safety concerns for the lab, then demonstrate the techniques needed. Allow students to perform the lab in groups (student or teacher selected depending on the students involved) and review the write-up required. The write-up can be quickly evaluated next day using the results from the food samples.
4. Sports Nutrition - Using the Sports Nutrition Powerpoint, introduce an example of specific needs In terms of nutrition and activity. This prepares students for the food/activity assignment in 6)
5. **Invite guest speaker(s) and/or participate in class business visit(s) to help see "real world" connections and help guide student interests to DI experience with their assignment in 6)**
6. Food and Activities Journal Assignment - Hand out the assignment and review orally what is required. The athlete example from the Powerpoint can be used as an example.
7. Post-Diagnosis - play the jeopardy game again to assess knowledge gained In the topic.
8. Give back and take up the lab and assignment that are the summative evaluations.

### 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]
<b>1. Play nutrition jeopardy</b>	<b>Assessment as learning and Assessment for Learning</b>
2. Nutrient Note taking	Assessment for learning
3. Nutrients Lab	Assessment of learning
4. Guest speaker(s)/business visit(s)	Assessment as learning
<b>5. Food/Activity Assignment</b>	Assessment of Learning

**Assessment tools**

[List all tools used and **embed** checklists, rubrics, correction keys, etc.]

**Differentiation**

**Differentiation will be based on:**

Readiness                       Learner Profile                       Interest

**Differentiation will take place through:**

Content                       Process                       Product                       Learning Environment

## Additional Notes/Comments/Explanations

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

-Please consider selecting from a variety of guest speakers and business visits based on student interests. These need to be booked in the first month of the semester to make sure this can happen. Things may work out later but you are taking your chances!

-Many of the resources can be placed on classnet as a supplement or for students who are missing.

-While a projector can help you demonstrate techniques for the food/activity assignment you will need Individual computer access. This likely will not have a high success rate if given as a homework assignment without at least some computer time invested at school to get things started.

**-The Business and Education Partnership (BEP) is a free resource that we can use for speakers and school related field trips. Please consider at least one of these resources to bring the “real world” experience to your class. Speakers can be booked at [www.bus-edpartnership.org](http://www.bus-edpartnership.org) and at the site you can find the recommended speakers/business field trips. The field trips require a form to be filled out/approved and the contact for our Board is Judy Carley. Advanced notice is required for both activities so please look into booking near the beginning of the semester to assure success!**

-consider if you have **multiple SHSM students taking your course** that this CLA also can be used to support **Hospitality and Tourism** (using the alternate Hospitality Food/Activity Assignment), **Landscape and Horticulture** (using the Vegetarian/Vegan diet option in the Food/Activity Assignment), and **Health and Wellness** (using the diabetic or senior diet option in the Food/Activity Assignment).

## Resources

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

### Authentic workplace materials

[e.g., blueprints, workplace manuals, specification sheets, spreadsheets]

-lab instructions handout

-spreadsheets for nutrient and Calorie calculations

### Human resources

guest speaker(s)

business host

### Print resources

Word document of Nutrition notes  
Powerpoints for General Nutrition and Sports Nutrition notes

### Video resources

### Software

-jeopardy Powerpoint on Nutrition

### Websites

[www.brianmac.co.uk/nutrit.htm](http://www.brianmac.co.uk/nutrit.htm) (for food/activity assignment)  
[www.brianmac.co.uk/food.htm](http://www.brianmac.co.uk/food.htm) (for food/activity assignment)  
<http://my.uen.org/5104> (for General Nutrition powerpoint)  
[http://www.hc-sc.gc.ca/fn-an/alt\\_formats/hpfb-dgpsa/pdf/nutrition/nvscf-vnqau\\_e.pdf](http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/nutrition/nvscf-vnqau_e.pdf) (for food/activity assignment)  
[www.brianmac.co.uk/energyexp.htm](http://www.brianmac.co.uk/energyexp.htm) (for food/activity assignment)  
[www.scandpg.org](http://www.scandpg.org) (for Sports Nutrition powerpoint)

### Other resources

**Nelson Biology 11 College Preparation**, Di Giuseppe, *et. al.*, Nelson Thomson Publ. 2003 (www.nelson.com)

### Accommodations

[List instructional, environmental, and assessment accommodations.]

[What adjustments must be made to the instructional and assessment strategies to accommodate different learning needs?]

- provide outlines for student note taking
- provide notes on-line (classnet) for missing students or students needing scribing
- additional time to complete/hand in materials is possible
- provide one-on-one support for lab and assignment procedures

## List of Attachments

[Attach all related materials e.g., student worksheets, tests, rubrics]

### Listed In order of intended use:

1: Jeopardy game Powerpoint

[http://www.nafwa.org/lma/directory/Nutrition\\_and\\_Food\\_Games/Nutrition\\_Jeopardy/Nutrition\\_Jeopardy.php](http://www.nafwa.org/lma/directory/Nutrition_and_Food_Games/Nutrition_Jeopardy/Nutrition_Jeopardy.php) (provides free resources for educators)

2: General Nutrition Powerpoint

[http://www.nafwa.org/lma/directory/Nutrition\\_Support/Powerpoint\\_Presentations/Powerpoint\\_Presentations.php](http://www.nafwa.org/lma/directory/Nutrition_Support/Powerpoint_Presentations/Powerpoint_Presentations.php) (provides free resources for educators)

3: Nutrient Notes (Word)

4: Nutrition Lab (Word)

5: Nutrition Lab Teacher Copy (Word)

6: Sports Nutrition Powerpoint

<http://www.scandpg.org/contact-us/?emailSent=1> (American Dietetic Association free powerpoint- see URL below)

7: Food/Activity Assignment (Word)

8: Hospitality SHSM Food/Activity Alternate Assignment (Word)

9: Spreadsheets for Calorie calculations for food/activities (Excel)

[www.brianmac.co.uk/nutrit.htm](http://www.brianmac.co.uk/nutrit.htm) -Daily Calorie Calculator (see permission to use below)

[www.brianmac.co.uk/energy.htm](http://www.brianmac.co.uk/energy.htm) -Energy Expenditure Calculator (see permission to use below)

### Email with Permission to Use the above Attachment 9 spreadsheets:

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From: Brian Mackenzie [brian@brianmac.demon.co.uk]

Sent: Thursday, July 07, 2011 10:47 AM

To: Wilson Abreu

Subject: RE: Question

Hi

For educational purposes you are more than welcome to use the worksheet.

Brian

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Brian Mackenzie - (United Kingdom)

UK Athletics Level 4 Performance Coach (UKA4) & Coach Tutor/Assessor

E-mail - brian@brianmac.demon.co.uk

Web Site - <http://www.brianmac.co.uk> (Sports Coach)

This electronic message contains information from "Sports Coach", which may be confidential, proprietary, privileged or otherwise protected from disclosure. The information is intended to be used solely by the recipient(s) named above. If you are not an intended recipient, be aware that any review, disclosure, copying, distribution or use of this transmission or its contents is prohibited. If you have received this transmission in error, please delete this message and notify us immediately at brian@brianmac.demon.co.uk

Viruses: Although we have taken steps to ensure that this e-mail and attachments are free from any virus, we advise that in keeping with good computing practice the recipient should ensure they are actually virus free.

-----Original Message-----

From: Wilson Abreu [<mailto:Wilson.Abreu@wcdsb.ca>]

Sent: 07 July 2011 15:41

To: brian@brianmac.demon.co.uk

Subject: Question

Hello,

I am a teacher in Canada who would like to use the Excel worksheets you have created concerning calorie intake and calorie extended for the Ministry of Education.

Do you give me permission to use it in my classroom to teach students about sport Nutrition?

Thank you

### Email with attachment to use the attachment 6 sports nutrition powerpoint:

1. [www.slideworld.com/.../Sports-Nutrition-for-Beginners-Basic-Eatin...](http://www.slideworld.com/.../Sports-Nutrition-for-Beginners-Basic-Eatin...) - **CachedSports**, cardiovascular, and wellness nutritionists Practice Group of the American Dietetic Association [www.scandpg.org](http://www.scandpg.org) ...  
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