



**CAMOSUN COLLEGE**  
**School of Arts & Science**  
**Department of Chemistry & Geoscience**

**CHEM-214-X01A/B**  
**Nutrition for Fitness**  
**Winter 2020**

## **COURSE OUTLINE**

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The course description is online @ <http://camosun.ca/learn/calendar/current/web/chem.html>

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

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### **1. Instructor Information**

<b>(a) Instructor</b>	David Stuss, M.Sc.
<b>(b) Office hours</b>	Tuesday & Wednesday 2:30 - 4:30 or by appointment
<b>(c) Location</b>	F350A (Lansdowne)
<b>(d) Phone</b>	(250) 370-3438 <b>Alternative:</b> _____
<b>(e) E-mail</b>	stussd@camosun.bc.ca

### **2. Intended Learning Outcomes**

Upon completion of this course the student will be able to:

1. Explain the fundamental roles and importance of dietary proteins, lipids (fats and oils), carbohydrates, vitamins, minerals and water, and the need for balanced intakes for optimal wellness.
2. Relate various recommended daily intakes of proteins, lipids, carbohydrates, vitamins, and minerals to appropriate dietary and, possibly, supplement sources with regard to exercise type and intensity, optimal recovery, and optimal wellness.
3. Describe the importance of appropriate hydration before, during, and after exercise, and explain the general importance of water consumption and electrolyte balance to optimal wellness.
4. Relate muscle function and energy expenditure to biochemical fuel sources required by the body during various types and durations of exercise.
5. Relate the basic functioning of the gastrointestinal tract, the liver and the kidneys to the uptake and subsequent utilization or elimination of nutrients or their metabolic products before, during and after exercise.
6. Outline the effectiveness or potential efficacy, and/or the potential concerns, of current nutritional supplements.
7. Describe important considerations when comparing various diets recommended for general wellness, or diets designed for people interested in achieving greater wellness through exercise targeting weight loss, or the general effects of aging.
8. Describe the rationale of diets designed for the management of diabetes, food intolerance, osteoporosis, poor cardiovascular health, or hypokinetic diseases as they relate to the preventive and/or rehabilitative effects of exercise.
9. Obtain refereed scientific and medical reports on-line or in print form for the purpose of accessing new information on diets and nutritional supplements related to exercise and wellness.

### 3. Required Materials

(a)	e-Text (Mandatory)	<i>Nutrition for Sport and Exercise</i> , 4 <sup>th</sup> Ed. Dunford & Doyle. Cengage Learning, Stamford, CT (2018). (Includes Diet Analysis Plus & MindTap online resources).
(b)	Scientific Calculator	Available in bookstore

The course will use an online edition of the textbook. Instructions for access codes will be provided in class.

### 4. Course Content and Schedule

<b>Credits</b>	3 credits	<b>Number of weeks</b>	14
<b>Workload / week</b>	3 h lecture 2 h lab (alt. wks) 6 h study	<b>Pre-requisites</b>	SPEX 210

#### Lecture & Lab Schedule

Activity	Day	Time	Location
Lecture	Monday	11:00 – 12:20	PISE 329A
	Tuesday	8:30 – 9:50	PISE 329A
Lab	Monday	12:30 – 2:20	TEC 230

\*Labs will be held on alternating weeks for each section; see below

#### Lecture Topics (Approximately one chapter per week)

Topic Areas	Related Chapters	Topic Areas	Related Chapters
Introduction: The Science of Nutrition	1	Fats	6
Vitamins	8	Water & Electrolytes	7
Minerals	9	Dietary Planning	10
Defining & Measuring Energy	2	Weight & Body Composition	11
Energy Systems and Exercise	3	Disordered Eating & Exercise Patterns in Athletes	12
Carbohydrates	4	Diet, Exercise, Chronic Disease and Lifelong Health	13
Proteins	5	Special Topics	N/A

#### Lab Schedule\*

		X01A	X01B
<b>Activity</b>	<i>Orientation</i>	06-Jan	06-Jan
Lab 1	Evaluating Evidence	13-Jan	20-Jan
Lab 2	Evaluating Supplements	27-Jan	03-Feb
Lab 3	Evaluating Food Labels: Energy Content	10-Feb	02-Mar
-	<b>Midterm Exam</b>	<b>24-Feb</b>	<b>24-Feb</b>
Lab 4	Effect of Whey Protein on Blood Glucose	09-Mar	16-Mar
Lab 5	Case Studies / Nutrition Planning	23-Mar	30-Mar
-	<i>Review</i>	06-Apr	06-Apr

\*Scheduled lab dates have been adjusted to accommodate BAET practical exam schedule. Students with scheduling conflicts due to placements or athletic competitions should confirm with the instructor to arrange attendance of an alternative lab period.

## 5. Basis of Student Assessment (Weighting)

Labs	10%
Nutrition Journal Assignment	20%
Quizzes	10%
Midterm Exam	30%
Final Exam	30%

- (a) **Labs:** The laboratory mark will be based on participation and lab assignments. Laboratory materials will be provided in-class and in D2L online prior to the laboratory period.
- (b) **Journal Assignment:** Students will prepare and analyze a 3-day dietary journal using the tools and knowledge acquired during the course.
- (c) **Quizzes:** Online quizzes & activities will given to test assigned textbook readings.
- (d) **Exams:** There are 2 exams, a midterm and a final, worth 30% each. The final exam is not cumulative. Online study guides will be provided prior to the exams.

## 6. Grading System

- Standard Grading System (GPA)
- Competency Based Grading System

## 7. Recommended Materials to Assist Students to Succeed Throughout the Course

Lecture slides and supplementary materials will be posted online using D2L.

## 8. College Supports, Services and Policies



### Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

### College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

### College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

A. GRADING SYSTEMS <http://camosun.ca/about/policies/index.html>

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at <http://camosun.ca/about/policies/index.html> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.