

	<p>School of Arts & Science CHEMISTRY AND GEOSCIENCE DEPARTMENT CHEM 214 Nutrition for Fitness Winter 2013</p>
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COURSE OUTLINE

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

⚡ Please note: the College electronically stores this outline for five (5) years only.
It is **strongly recommended** you keep a copy of this outline with your academic records.
You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	David Stuss, MSc
(b)	Office Hours:	Lansdowne: Mon & Weds 15:30 - 17:20 Interurban: Mon & Weds 9:30 – 10:20 Thurs 10:30 – 11:20 or by appointment
(c)	Location:	Lansdowne: Fisher Building F344D Interurban: Technologies Building TEC232
(d)	Phone:	(250) 370-3506
(e)	Email:	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) **Textbook**
McArdle, Katch & Katch (2013). **Sports and Exercise Nutrition**. 4th Edition. Lippincott Williams & Wilkins, Baltimore MD.
- (b) **General Materials**
Scientific calculator recommended

4. Course Content and Schedule

Credits	3 credits	Number of weeks	14
Workload / week	3 h lecture 2 h lab 6 h study	Pre-requisites	SPEX 210

Lecture Schedule

Section	Day	Time	Location
X01-A/B	Mon, Weds, Thurs	8:30 – 9:20	CC104
X02-A	Mon	10:30 – 11:20	CC104
	Weds	9:30 – 10:20	CC121
	Thurs	10:30 – 11:20	PORTA102

Lecture Topics

Topic Areas	Related Chapters
Introduction to the Science of Nutrition	
Macronutrients, Micronutrients and Water	1-2
Nutrient Digestion, Absorption and Elimination	3
Nutrient Bioenergetics in Exercise and Training	4-6
Nutritional Recommendations for the Physically Active Person	7
Nutrition for Sports Training & Competition	8
Navigating the Nutrition Marketplace	9
Thermoregulation, Fluid Balance, and Rehydration	10
Evaluating Ergogenic Aids	11-12
Body Composition, Weight Control & Health Conditions	13-15

Lab Schedule

Section	Day	Time	Location
X01A/B	Tues	15:30 – 17:20	TEC230
X02A	Thurs	15:30 – 17:20	TEC230

Week	Beginning	Lab	Section
1	Jan 7	Orientation	X01B/X02A
2	Jan 14	Orientation	X01A
3	Jan 21	Lab 1: Carbohydrates	X01B/X02A
4	Jan 28	Lab 1: Carbohydrates	X01A
5	Feb 4	Test 1	X01B/X02A X01A
6	Feb 11	Lab 2: Lipids	X01B/X02A
7	Feb 18	Lab 2: Lipids	X01A
8	Feb 25	Lab 3: Proteins	X01B /X02A
9	Mar 4	Lab 3: Proteins	X01A
10	Mar 11	Test 2	X01B/X02A X01A
11	Mar 18	Lab 4: Hydration	X01B/X02A
12	Mar 25	Lab 4: Hydration	X01A
13	Apr 1	Lab 5: Critical Analysis & Online Resources	X01B/X02A
14	Apr 8	Lab 5: Critical Analysis & Online Resources	X01A

5. Basis of Student Assessment (Weighting)

Assignment	10%
Labs	20%
Tests (2)	30%
Final Exam	40%

- (a) **Assignment:** Students will prepare and analyze both a 7-day dietary journal and a 7-day dietary plan using the tools and knowledge acquired during the course.

- (b) **Labs:** The laboratory mark will be based on participation and reports prepared in-lab. Laboratory materials will be provided in-class and online prior to the laboratory period.
- (c) **Tests:** Two tests covering recent material will be held during lab time on weeks 5 and 10. Online study material will be provided throughout the term.
- (d) **Final Exam:** The final exam is comprehensive. Online study material will be provided.

6. Grading System

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	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

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 E-1.5 at camosun.ca 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, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
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.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.