

COURSE OUTLINE

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

Ω 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, M.Sc.		
(b)	Office Hours:	2:30 – 3:30 Monda	y, Wednesday, Friday or by ap	pointment
(C)	Location:	F348D		
(d)	Phone:	(250) 370-3436	Alternative Phone:	
(e)	Email:	stussd@camosun.bo	c.ca	

2. Intended Learning Outcomes

(<u>No</u> changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

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)	Text (<i>Mandatory</i>)	<i>Nutrition for Sport and Exercise</i> , 3 rd Ed. Dunford & Doyle. Cengage Learning, Stamford, CT (2015). (Includes Diet Analysis Plus online resource).
(b)	Scientific Calculator	Available in bookstore

4. Course Content and Schedule

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

Lecture Schedule

Section	Day	Time	Location
X02-A/B	Tuesday, Thursday, Friday	10:30 – 11:20	LACC 124A/B
X01-A	Tuesday	9:30 – 10:20	CBA 211
	Wednesday	1:30 – 2:20	CBA 271
	Thursday	2:00 - 2:50	PISE 329B/330B

Lecture Topics (Approximately one chapter per week)

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

Lab Schedule

Section	Day	Time	Location
X02A/B	Thursday (alternating weeks*)	8:30 – 10:20	TEC 230
X01A	Monday (alternating weeks*)	12:00 – 1:50	TEC 230

*Scheduled lab dates have been adjusted to accommodate holidays & lecture schedule; see below.

Week	Starting	X01A (Monday)	X02A (Thursday)	X02B (Thursday)
1	11-Jan	Orientation /Safety	Orientation /Safety 1: Evaluating Evidence	Orientation /Safety 1: Evaluating Evidence
2	18-Jan	1: Evaluating Evidence	-	-
3	25-Jan	2: Blood Glucose & Glycemic Index	2: Blood Glucose & Glycemic Index	-
4	1-Feb	-	-	2: Blood Glucose & Glycemic Index
5	8-Feb	Family Day (College Closed)	3: Computer Lab - Diet Analysis (Room TBA)	3: Computer Lab - Diet Analysis (Room TBA)
6	15-Feb	3: Computer Lab - Diet Analysis (Room TBA)	Reading Break	Reading Break
7	22-Feb	Midterm Exam (Room TBA)	Midterm Exam (Room TBA)	Midterm Exam (Room TBA)
8	29-Feb	4: Evaluating Food Labels	4: Evaluating Food Labels	-
9	7-Mar	-	-	4: Evaluating Food Labels
10	14-Mar	5: Case Studies / Nutrition Plans	5: Case Studies / Nutrition Plans	-
11	21-Mar	-	-	5: Case Studies / Nutrition Plans
12	28-Mar	Easter Monday (College Closed)	-	-
13	4-Apr	Student Presentations	Student Presentations	Student Presentations
14	11-Apr	-	-	-

5. Basis of Student Assessment (Weighting)

Labs	10%
Nutrition Journal Assignment	20%
Critical Review Assignment / Presentation	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 online prior to the laboratory period.
- (b) **Journal 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
- (c) **Critical Review Assignment:** Students will work in groups to prepare a critical analysis of a dietary supplement / ergogenic aid, with a written summary and a presentation.
- (d) **Exams:** There are 2 exams, a midterm and a final, worth 30% each. The final exam is not cumulative. Online study material will be provided prior to the exams.

6. Grading System

(<u>No</u> changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	А		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		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

Standard Grading System (GPA)

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	In progress: 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 <u>camosun.ca</u>.

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.