BIOL 203
Fundamental Nutrition
Section EC
Winter 2022

This syllabus is subject to change and any changes will be posted in the Announcements section of your eConcordia portal.

Disclaimer: In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

About this Course

This is a course offered by the Department of Biology.
NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit.

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TA Contact Information: available through the course website

Course Description

This course is divided into three parts. The first part – a primer to nutrition – begins with an introduction to the language of nutrition experts (e.g. the dietary reference intakes (DRIs)) and the food groups. The food groups will be reimagined by placing the emphasis on describing the functional role of foods in nature before they become food on our dinner plates. Both the DRIs and food groups will carry over heavily into the remainder of the course. Also covered in part one will be enough basic chemistry to improve culinary talent and anatomy to recognize the importance of essential nutrients in the body.

The second part (Lessons 4-9) covers all major nutrient classes (carbohydrates, lipids, proteins, vitamins, minerals and water), with a focus on why we find them in some foods while not in others (invariably bringing us back to food groups), the role(s) they play in the body to provoke a sense of urgency on why to seek them out, and their basic chemical composition to know how to manipulate them in recipes.

The course will conclude with two issues facing modern-day diets: food safety and sustainability. Though concerns with food safety are as old as time, recent changes to how our food is grown and distributed in addition to changing climates have led to novel foodborne illnesses. A description of pathogens –old and new– and their pathogenicity will be covered in Lesson 10 along with a discussion on perceptions and perspectives of risk. This part will conclude with the topic of food sustainability (Lesson 11). In the coming century, our species will face the gargantuan challenge of feeding more than 10 billion people without ravaging the earth. This challenge imposes on us the duty for developing rational and effective global food policies. Prerequisites for developing such policies are that we fundamentally recognize *what food is* in addition to *what is sustainable*.

The course also includes written and cooking assignments as a form of experiential learning.

Course Learning Outcomes

1. *Identify* and *describe* all essential nutrients (e.g. glucose, omega-3 & 6, vitamin C, etc.).
2. *Apply* the knowledge you acquire to *practice* a healthier and more sustainable diet.
3. *Critique* food and diet related health claims.

… and, *impress* your dinner guests with your near encyclopedic knowledge of food

Course Material

1. BIOL 203 course website which includes the midterms, videos, podcasts, discussion boards and other course material. The course website can be accessed at https://www.econcordia.com/
   Your eConcordia account will be valid until the end of the term for which you are registered.
   Your account will allow you to access the online course material, which includes videos, notes, discussion boards, all graded course components, useful links, readings and many more resources from the course website for the duration of the term.
2. Calogeropoulos C. (2020). What is food? A reframing of human nutrition, 2nd edition McGraw-Hill Ryerson Limited
3. Schiff W. J. (2019). Nutrition for Healthy Living, 5th Edition. McGraw-Hill Education.
4. Connect Platform. Nested within this platform are the following resources.
   - NutritionCalc Plus –a dietary assessment tool that will be used to evaluate the nutritional profile of selected recipes created for the Master Chef activities. These dietary assessments will form the basis of the written assignment in the course.
   - Practice quizzes for lessons 2-10.

The textbooks and Connect platform are available through the course website and are included in the online textbook fee. All midterm questions will come from the course material itself. That is, you will only be questioned on **the online lectures** and **required textbook readings.**

Assessments

Graded Assessments

Written Assignment	20%
Master Chef Assignments X 4	10%
Midterms 1. Lessons 1-5 (15%) 2. Lessons 6-10 (15%)	30%
Final Exam* (cumulative: lessons 1-11)	40%

*The final exam will be delivered through the COLE (Concordia-On-line-Exams) platform. The exam will not be proctored.

Written Assignment:

The written assignment will focus evaluating the nutrient diversity and richness of selected meals using data generated from the NutritionCalc Plus platform.

Master Chef Assignments:

The Master Chef (MC) assignments take an experiential approach to learning about nutrition through cooking healthy and sustainable meals that highlight a specific class of nutrients.

In addition to cooking and posting your meals on the course website, students will also be required to vote on their peers. After the voting period ends, a leaderboard will rank students according to the number of votes they received. The voting period will be open for 7-days ONLY after deadline to post. Students are REQUIRED to vote for at least 3 of their peers. Failure to vote will affect your grade for the activity.

Midterms:

Midterms will consist of fifty multiple choice questions and three short answer questions. **There will be no accepted reason for missing a midterm**.

The Midterm 1 will be open on February 09 at 1:00 am and closed at 11:59pm.

The Midterm 2 will be open on March 30 at 1:00 am and closed at 11:59pm.

Once activated, you must complete the midterm. You cannot click on the link and log out of the website without completing the midterm. If you do so, you will not be able to reactivate the exam and will receive a grade of zero.

Do not refresh your Internet browser or log out of the website at anytime during the exam.

A timer will begin to count down. Once activated, you will have to complete the exam in the allotted time given.

Grades:

In order to view your grades throughout the semester, click on the My Grades link in your eConcordia portal.

It is your responsibility to ensure your work has been received (to be verified as outlined in your assignment instructions) and to contact your TA via e-mail for clarification if you have any questions concerning your grades.

Your final letter grade for the course will be posted in your MyConcordia Portal at the end of the term.

Mark Breakdowns

Letter Grade	**Percentage (%)**	**Letter Grade**	**Percentage (%)**
A+	90 to 100	C	64 to 66.9
A	85 to 89.9	C-	60 to 63.9
A-	80 to 84.9	D+	57 to 59.9
B+	77 to 79.9	D	54 to 56.9
B	74 to 76.9	D-	50 to 53.9
B-	70 to 73.9	F	Less than 50.9
C+	67 to 69.9		

Important Information

Topic	Link
Academic Integrity	Academic Integrity
Educational Technology Guidelines	Concordia Educational Technology Guidelines for Faculty and Students (the "Guidelines")
Access Centre for Students with Disabilities	ACSD
Concordia Library Citation & Style Guides	How to cite...
Course Communication Tools	Communication
eConcordia Policies	Policies
Final Exams Information	Final Exams
Helpdesk/Support	FAQ
Refunds	Refunds
Technical Requirements	Technical Requirements
Tips for Studying Online	Studying Tips
Tips on how to reach online learning goals (learning modules)	How to Succeed @ eConcordia

Texidium

Texidium is an eReader platform that puts your eTexts at your fingertips on any device, anywhere, and at any time.

Available online and for all popular platforms (iOS, Android, Windows, and Mac OS), Texidium is designed with the student learning experience in mind and sets a new standard for accessibility and convenience.

Texidium Support Hours:

- Monday to Friday, 6:00 am to 6:00 pm EST. This includes email, phone or chat support.
- Evening and night support is available via email only, from 6:00 pm to midnight.
- The communication channels for End-Users is available at https://texidium.com/contact/.
- Over the weekend, email support is from 8;00 am to midnight; however, it is a reduced team so response times may be a bit slower and prioritized by level of urgency.

BIOL 203 - Fundamental Nutrition
Agenda
Winter 2022

All deadlines indicated are on the due date listed by 11:59 p.m. unless otherwise indicated.

Week 1: January 6 - January 9	
	Lesson 1: Introduction to Fundamental Nutrition
January 06	**Classes begin, winter term**
January 06	**Discussion Board opens at 2 PM.**
Week 2: January 10 - January 16	
	Lesson 2: Nutrient Standards and Guidelines
Week 3: January 17 - January 23	
	Lesson 3: Basic Chemistry and Organ Systems
January 19	**Deadline to add winter-term courses**
January 19	**Deadline for withdrawal with tuition refund (DNE) from winter-term courses**
Week 4: January 24 - January 30	
	Lesson 4: Carbohydrates
Week 5: January 31 - February 6	
	Lesson 5: Lipids
February 02	**DUE: Master Chef Assignment #1: Carbohydrates Buffet**
February 03	*Zoom Meeting: Review Midterm 1* *Time: 10:00-11:00am* *Zoom link: Meeting ID: 845 3609 6712* *Passcode: 243307*
Week 6: February 7 - February 13	
February 09	**Midterm #1 (15%)**

Week 7: February 14 - February 20	
	Lesson 6: Proteins
February 16	**DUE: Master Chef Assignment #2: Ode to Ω**
Week 8: February 21 - February 27	
	Lesson 7: Vitamins
Mid-Term Break: February 28 - March 6	
February 28	**Start of mid-term break**
March 04	**President's Holiday - University closed**
March 06	**End of mid-term break**
Week 9: March 7 - March 13	
	Lesson 8: Minerals
Week 10: March 14 - March 20	
	Lesson 9: Water and Energy
March 16	**DUE: Master Chef Assignment #3: Cooking for Nutrient Density**
March 18	**Last day to register with the Access Centre for Students with Disabilities and receive exam accommodations for the final examination period.**
March 18	**DUE: Written assignment #1 (20%)**
Week 11: March 21 - March 27	
	Lesson 10: Food Safety
March 24	*Zoom Meeting: Review Midterm 2* *Time: 10:00-11:00am* *Zoom link: Meeting ID: 845 3609 6712* *Passcode: 243307*
Week 12: March 28 - April 3	
	Lesson 11: Food Sustainability
March 30	**Midterm #2 (25%)**
April 01	**DUE: Master Chef Assignment #4: A healthy & sustainable meal**
Week 13: April 4 - April 10	

April 06	**Last day for instructor-scheduled tests or examinations**
Week 14: April 11 - April 18	
April 13	**Last day of classes**
April 15	**University closed**
April 16	**University closed**
April 17	**University closed**
April 18	**Deadline for academic withdrawal (DISC) from winter-term courses**
Examinations Period: April 19 - May 1	
	Final Exam date and time is posted on your Student Hub