**FOOD 1001**
**INTRODUCTION TO FOOD SCIENCE**

**Instructor**: Serine Ramlawi
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## CONTACT

Office hours will be by **appointment only**. Please email me at any time to schedule a meeting via Teams or Zoom. I can be reached by email at any time. If you did not receive a response within 24 business hours, please resend your email.

## COURSE DESCRIPTION

This course overviews the major topics in Food Science field including food industry, production, processing, product development, packaging, chemistry, analysis, microbiology, risk assessment, policy making and regulation.

## COURSE OBJECTIVES

| **Learning Outcomes** |
|---|
| 1. Describe the composition of food and explain its biological, chemical and physical relationship to food quality and safety |
| 2. Explain principles, practices, and recent advancements in food production, processing, and preservation |
| 3. Analyze theoretical concepts presented in lectures by applying analytical and creative thinking skills in analysis of food related issues, problems, and situations |
| 4. Solve cases involving the processing and preservation of food products by applying chemical, biological, and engineering principles |
| 5. Reflect on your learning and articulate your knowledge, skills, abilities, and competencies |

## SCHEDULE

Lectures will be predominantly asynchronous. Classes that will be presented synchronously will be recorded and uploaded to CuLearn. All live classes will be based on student questions as a tutorial class prior to tests.

## CLASS COMMUNICATION

CuLearn will be the primary method of electronic communication with students outside of class. It will be used to post lecture slides, and grades. Students should visit the CuLearn page for this course on a weekly basis.

## EVALUATIONS

| | |
|---|---|
| Lecture summaries | 30% |
| Test 1 | 25% |
| Test 2 | 25% |
| Test 3 | 10% |
| CuPortfolio | 10% |

## COURSE OUTLINE

| WEEK | TOPICS | DAY/DATE | DESCRIPTION |
|---|---|---|---|
| 1 | Introduction | **JAN 12** (Tue) | Live – Course outline / syllabus |
| | | **JAN 14** (Thu) | Asynchronous – Watch lecture |
| 2 | Food Categories | **JAN 19 – JAN 21** | Asynchronous – Watch lecture and complete lecture summary |
| 3 | Food Chemistry I | **JAN 26 – JAN 28** | Asynchronous – Watch lecture and complete lecture summary |
| 4 | Food Chemistry II | **FEB 2 – FEB 4** | Asynchronous – Watch lecture and complete lecture summary |
| 5 | TEST | **FEB 9** (Tue) | Live – Review "tutorial" |
| | | **FEB 11** (Thu) | Complete online test |
| **READING WEEK** | | | |
| 6 | Food Processing | **FEB 23 – FEB 25** | Asynchronous – Watch lecture and complete lecture summary |
| 7 | Food Microbiology | **MAR 2 – MAR 4** | Asynchronous – Watch lecture and complete lecture summary |
| 8 | Food Safety and Toxicology | **MAR 9 – MAR 11** | Asynchronous – Watch lecture and complete lecture summary |
| 9 | TEST | **MAR 16** (Tue) | Live – Review "tutorial" and CuPortfolio |
| | | **MAR 18** (Thu) | Complete online test |
| 10 | Sensory Evaluation | **MAR 23 – MAR 25** | Asynchronous – Watch lecture and complete lecture summary |
| 11 | Food Engineering and Biotechnology | **MAR 30 – APR 1** | Asynchronous – Watch lecture and complete lecture summary |
| 12 | TEST | **APR 6** (Tue) | Live – Review "tutorial" |
| | | **APR 8** (Thu) | Complete online test |
| 13 | Extra help | **APR 13** | Last class |

| ASSIGNMENT | TOPIC | DUE DATE |
|---|---|---|
| Lecture summary 1 | Food Categories | **JAN 26 @ 4 :05 pm** |
| Lecture summary 2 | Food Chemistry I | **FEB 2 @ 4:05 pm** |
| Lecture summary 3 | Food Chemistry II | **FEB 9 @ 4:05 pm** |
| Lecture summary 4 | Food Processing | **MAR 2 @ 4:05 pm** |
| Lecture summary 5 | Food Microbiology | **MAR 9 @ 4:05 pm** |
| Lecture summary 6 | Food Safety and Toxicology | **MAR 16 @ 4:05 pm** |
| Lecture summary 7 | Sensory Evaluation | **MAR 30 @ 4:05 pm** |
| Lecture summary 8 | Food Engineering and Biotechnology | **APR 6 @ 4:05 pm** |
| CuPortfolio | CuPortfolio | **TBD** |

## EVALUATIONS

**Lecture summaries:** The purpose of this assignment is to keep you up to date with lectures and course material, as well as help you prepare for tests. You will be required to complete **six** of **eight** of the lecture summaries. Late penalties will be applied if any of the six assignments are late. The body of the summaries consist of:

- 1.5-2 pages
- 12-point font
- 1.5 spacing
- Normal margins
- Paragraph or point form
- Use full sentences and proper grammar

**Test:** The purpose of the test is to assess your understanding of the course material. Tests will not be cumulative. All tests will be completed online through CuLearn. Each test can be taken from 12:01 AM EST to 11:59 PM EST on the test day (please see course outline for dates of tests). You will have a specific amount of time to complete each test. Information will be given prior to test.

**cuPortfolio:** The purpose of this assignment is to challenge you to become more aware of your own learning and development as a Food Science student. As such, the reflection prompts are directly connected to the Food Science program-level learning outcomes. In this evaluation, you will be asked to reflect on your learning experiences in FOOD 1001 and begin to consider your academic, professional, and intellectual development throughout the Food Science program.

- **Why reflect?** Reflection requires you to think critically about your learning. It is not enough to simply achieve the learning outcomes for the program – the true value of your education lies in your ability to *recognize*, *articulate*, and *synthesize* what you have learned so that you can *apply* your learning post-graduation.
- **What is an artifact?** You will also be asked to select pieces of evidence (artifacts) that demonstrate your developing competency in specific program learning outcomes and describe why these pieces best represent your knowledge, skills, abilities, and/or learning.
- **But I'm a non-major. Why do I have to do this?** Many of the skills you will develop and experiences you will have in this course are transferrable to other courses and areas of study. If you are a non-major taking this course, this assignment will be an opportunity for you to purposefully consider what it is you will take from this course and how you might apply what you have learned in future studies.

## PLAGIARISM AND CHEATING

It is an instructional offense to use or pass off as one's own an idea or product which is the work of another without expressly giving credit to that other. It is also an instructional offense to copy the work of a fellow student. If students do plagiarize or cheat, the Dean's Office will be notified and appropriate action will be taken.

## ACADEMIC ACCOMODATIONS

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

### Pregnancy obligation –

Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website
http://www.carleton.ca/equity/accommodation/student_guide.htm

**Religious obligation –**

Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website
http://www.carleton.ca/equity/accommodation/student_guide.htm

**Students with disabilities requiring academic accommodations -**

Students must register with the Paul Menton Centre for Students with Disabilities (PMC) for a formal evaluation of disability-related needs. Documented disabilities could include but are not limited to mobility/physical impairments, specific Learning Disabilities (LD), psychiatric/psychological disabilities, sensory disabilities, Attention Deficit Hyperactivity Disorder (ADHD), and chronic medical conditions. Registered PMC students are required to contact the PMC, 613-520-6608, every term to ensure that I receive your Letter of Accommodation, no later than two weeks before the first assignment is due or the first in-class test/midterm requiring accommodations.