

FOOD 2004
SCIENTIFIC COMMUNICATION IN FOOD SCIENCE

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Contact: through cuLearn forum

SYNOPSIS

Principles of effective scientific writing, including critical thinking, appropriate to food science and nutrition. Applicable to laboratory reports, literature reviews, memoranda, position statements, and policy analysis. Pre-requisites: FOOD 1001 and second year standing in Food Science.

COURSE OBJECTIVES

Throughout your degree and as you prepare for the workforce, you will be asked to produce various forms of scientific communications, each with specific aims, formats, and target audiences. The purpose of this course is to provide the foundation for such forms of communication. Through this course, students will learn to:

Learning Outcomes	Assessments
1. Apply principles of basic scientific writing and composition <ol style="list-style-type: none"> a. Use clear and precise word b. Formulate simple technical sentences c. Construct organized and coherent paragraphs d. Apply steps of the writing process to various types of writing 	All assignments
2. Critically evaluate literature for its ethical use <ol style="list-style-type: none"> a. Research and evaluate credibility of information sources b. Select appropriate reference for intended argument c. Apply proper principles of paraphrasing d. Use a reference manager tool 	All assignments
3. Adapt scientific writing to specific formats <ol style="list-style-type: none"> a. Describe and identify essential elements of each format b. Revise and correct excerpts of each format c. Select key issues to highlight/develop as a function of format d. Write scientific documents following specific format 	Lab report Poster Slide deck Briefing note Literature review
4. Adapt scientific content to a non-scientific audience <ol style="list-style-type: none"> a. Extract main ideas/message from scientific document b. Translate main ideas/message for a non-scientific audience c. Tailor communication style to a non-scientific audience 	Elevator pitch Briefing note
5. Reflect on your learning and articulate your knowledge, skills, abilities and competencies	cuPortfolio

SCHEDULE

Synchronous: 2h weekly of lecture - TUE 9:35 – 11:25
2h weekly of assignment work time - THU 9:35 - 11:25
Asynchronous: 4h weekly on your own time

TEXTBOOKS

REQUIRED: Hofmann, Angelika H. *Writing in the Biological Sciences*. Oxford University Press, 2019.

CLASS COMMUNICATION

The following information related to FOOD 2004 will be on the cuLearn course page: announcements, lecture slides, learning activities, assessments and marks. The Perusall platform will be used for pre-class tasks and will require the creation of an account. Please use the 'Ask Your Teaching Team' forum to ask questions. Please also use the 'Ask Your Classmates' forum to connect with your peers and build a learning community in this course.

EXPECTATIONS

There are many different pieces to this course so you need to be organized to succeed. Follow the class schedule at the end of this document and the calendar in cuLearn to help you organize your time. Don't be shy to ask questions. We are in this together.

COMPASSIONATE GRADING

Twenty (20) percent of this course is graded as SAT/UNSAT. From the total of 6 assignments, 2 can be submitted late by up to 48h without penalty. All other assignments are to be submitted on time; failure to do so will result in a 20% late penalty for the first 24hrs post due-date and time, followed by 10% per day until a grade of zero.

TENTATIVE COURSE ASSIGNMENTS AND GRADING

	DESCRIPTION	WEIGHT	DUE DATE
IN-CLASS TASKS	Varied	10 % (SAT/UNSAT)	Throughout
ASSIGNMENTS	Plagiarism Certificate	5 % (SAT/UNSAT)	JAN 28 @ 10PM
	Laboratory Report	25 %	FEB 11 @ 10PM
	Elevator Pitch	5 % (SAT/UNSAT)	FEB 11 @ 10PM
	Presentation	20 %	MAR 11 @ 10PM
	Scoping Review	25 %	APR 01 @ 10PM
	cuPortfolio	10 %	APR 14 @ 10PM

IN-CLASS TASKS –

In-class tasks will be completed in groups (breakout rooms) during synchronous sessions with the help of shared documents. The in-class tasks will encourage you to discuss and apply the material from the lecture notes. The submissions will not be done in cuLearn, but rather simply by completing the shared document during class time. They will be evaluated as SAT/UNSAT.

ASSIGNMENTS –

Plagiarism certification test –

Register for the plagiarism certification test as described in your notes. Take and re-take the certification test until you obtain a passing grade. Submit your certificate (screen shot or pdf) on cuLearn. This will be evaluated as SAT/UNSAT.

Laboratory Report –

From the protocol and raw data set, write the laboratory report described above using a pre-determined original research manuscript format and style. Unique and essential elements for each section of the laboratory report should be included. Complete the provided checklist as you review your work and submit it with your laboratory report.

Elevator Pitch –

Summarize and translate the findings of your lab report for a non-scientific audience. Identify the key messages and tailor your style to the audience. Download and install the Capture app on your phone or tablet (<https://carleton.ca/capture/>). Use Capture to record yourself delivering your elevator pitch. Submit a link of your video on cuLearn. Maximum duration: 2 min. This will be evaluated as SAT/UNSAT.

Presentation Deck –

Use PowerPoint to organize and display the essential elements of your work in a short (10 slides) presentation slide deck for an audience of chemists. Include unique and essential elements for each section of the presentation. Also complete the speaker notes for each slide using the template provided. Complete the checklist as you review your work. Submit two documents: your presentation (.ppt) and your speaker notes with checklist (.doc).

Scoping Review –

Apply the principles of question formulation, searching and screening strategy, summarization, and information organization to write a scoping review for a scientific audience.

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. These outcomes describe what every student should be able to do as a result of completing the program and speak to the specific knowledge, skills, and abilities that students will develop.

- **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.

COURSE SHARING WEBSITES

Classroom teaching and learning activities, including lectures, discussions, presentations, etc., by both instructors and students, are copy protected and remain the intellectual property of their respective author(s). All course materials, including PowerPoint presentations, outlines, and other materials, are also protected by copyright and remain the intellectual property of their respective author(s).

Students registered in the course may take notes and make copies of course materials for their own educational use only. Students are not permitted to reproduce or distribute lecture notes and course materials publicly for commercial or non-commercial purposes without express written consent from the copyright holder(s).

MINIMUM TECHNOLOGY REQUIREMENTS

- Latest version of Google Chrome, Mozilla Firefox, Apple Safari, or Microsoft Edge
- Pop-ups: enabled
- Cookies: enabled (with prompt or without)
- Java: ensure you have an up-to-date version of Java by visiting <http://www.java.com>
- Headphones

GETTING HELP

Technical –

cuLearn support: <https://carleton.ca/culearnsupport/students/>

ITS Helpdesk: its.service.desk@carleton.ca

Academic –

Carleton Student Support: <https://students.carleton.ca/>

Centre for Student Academic Support: <https://carleton.ca/csas/>

Academics Support: <https://students.carleton.ca/academics/>

Wellness -

Student Support Services - Wellness: <https://students.carleton.ca/wellness/>

Resource Finder: <https://carleton.ca/wellness/living-well/resource-finder/>

Coronavirus (COVID-19): <https://newsroom.carleton.ca/coronavirus-covid-19/>

ACADEMIC MISCONDUCT

The consequences of copying, plagiarism and other forms of cheating are substantial. Students are referred to the 2020/2021 Undergraduate Calendar for information on this topic. The Carleton University

Academic Integrity Policy can be found online at <https://carleton.ca/registrar/academic-integrity/>. It is **your responsibility** to know the contents of these policies so it is highly recommended that you read them.

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 -

Please contact your instructor 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: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation -

Please contact your instructor 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: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic Accommodations for Students with Disabilities -

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc

Accommodation for Student Activities -

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor 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. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

Survivors of Sexual Violence -

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and is survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

For more information on academic accommodation, please contact the departmental administrator or visit: students.carleton.ca/course-outline

COURSE OUTLINE

DATE	DAY	MODULE	TOPIC	ASSIGNMENT
JAN 12	TUE	1. Basic scientific writing	LEC: Word choice, sentences	Plagiarism Certificate JAN 28 @ 10PM
JAN 14	THU		Practice exercises	
JAN 19	TUE		LEC: Composition, paraphrasing	
JAN 21	THU		Plagiarism certificate	
JAN 26	TUE	2. Laboratory report	LEC: Scientific communications and tools	Laboratory Report Elevator Pitch FEB 11 @ 10PM
JAN 28	THU		Explanation of laboratory report	
FEB 02	TUE		LEC: Lab report writing	
FEB 04	THU		Work on lab report	
FEB 09	TUE		LEC: Elevator pitch	
FEB 11	THU		Work on lab report, elevator pitch	
FEB 23	TUE	3. Presentations	LEC: Poster, Reading article	Presentation MAR 11 @ 10PM
FEB 25	THU		Work on mock poster	
MAR 02	TUE		LEC: Presentation	
MAR 04	THU		Work on presentation	
MAR 09	TUE		LEC: Presentation	
MAR 11	THU		Work on presentation	
MAR 16	TUE	4. Reviews	LEC: Scoping review process, search	Scoping Review APR 01 @ 10PM
MAR 18	THU		Work on screening, data abstraction	
MAR 23	TUE		LEC: Reading, critiquing literature	
MAR 25	THU		Work on scoping review	
MAR 30	TUE		LEC: Work on scoping review	
APR 01	THU		Work on scoping review	
APR 06	TUE	5. cuPortfolio	LEC: cuPortfolio	CuPortfolio APR 14 @ 10PM
APR 08	THU		Work on cuPortfolio	
APR 13	TUE		Work on cuPortfolio	