Yukon University School of Science COMM 204 Introduction to Scientific and Technical Communication Term: Winter 2025 Number of Credits: 3

Course Outline

INSTRUCTOR: Brittany Main OFFICE LOCATION: YRC Climate Change Research CONTACT DETAILS: TBA OFFICE HOURS: please email **COURSE DATES:** Jan. 6 – April 11, 2025 **TIME(S):** Mon. and Wed. 4:00 – 5:30 pm **CLASSROOM:** A2202

COURSE DESCRIPTION

This course covers the principles of scientific and technical communication. Students will learn how to read and write a scientific paper; how to conduct literature searches; how to prepare a scientific talk; how to prepare a research poster; and other applications of various styles of professional reporting in natural resource conservation and management. In addition, the ethical issues related to scientific communication and scientific integrity will be discussed.

COURSE REQUIREMENTS

Successful completion of ENGL 100 or equivalent is strongly recommended.

EQUIVALENCY OR TRANSFERABILITY

Receiving institutions determine course transferability. Find further information at: https://www.yukonu.ca/admissions/transfer-credit

Successful completion of COMM 204 fills the requirement or ALES 204 in the B.Sc. ENCS Program, Northern Systems Major.

LEARNING OUTCOMES

Upon successful completion of the course, students will be able to:

- Use appropriate scientific style to write papers, technical reports, research posters, briefing notes, proposals, and other forms of professional communication in natural resource conservation and management;
- Communicate scientific research and concepts to audiences ranging from experts to the general public;
- Understand the concept of peer-reviewed scientific literature, obtain journal articles using electronic databases, and compile a literature review.

COURSE FORMAT

The course will be delivered as one 1.5-hour lecture and one 1.5-hour practical activity in the computer lab per week, depending on the material to be covered.

In-class assignments will be worked on during lab time with instructor support, but may require time outside of class to complete. Students should expect to spend approximately 2 – 4 hours outside of class time working on assignments.

Delivery format

The course is in-person. Some lectures may be presented in online, asynchronous format, allowing students to prepare for the in-person lab activities. Asynchronous online activities based in Moodle will occasionally be included as part of the course material.

EVALUATION

| In-class Assignments (8 total) | 40% |
|-----------------------------------|------|
| Annotated Bibliography Assignment | 10% |
| Introduction Assignment | 10% |
| Research Poster Assignment | 20% |
| Final Exam | 20% |
| Total | 100% |

Assignments

Students will complete a variety of in-class exercises and major assignments designed to synthesize key course concepts. The assignments and writing exercises will focus on practicing and refining skills discussed during lectures. Three major assignments include:

1. An annotated bibliography on a topic in ecology, geology, environmental sciences, natural resources conservation and management, or mineral resources;

- 2. A written introduction to a research proposal.
- 3. A research poster.

Most exercises may be completed during class time in the lab; however, the annotated bibliography, the written introduction, and the research poster will be completed mostly outside of class time. There will also be some assigned reading of scientific journal articles in preparation for in-class discussion.

Students must adhere to the citation style used by the Council of Science Editors (CSE) in all written assignments (https://www.yukonu.ca/student-life/learning-matters/learning-commons/help-and-guides).

Unless otherwise specified, assignments and exercises must be submitted electronically via the class site on Moodle.

Exams

There will be one exam worth 20% of the total course grade. Details of exam content will be discussed in class prior to the exam date.

Due Dates and Late Assignments

In-class exercises are due at the end of the class, and will be accepted until the end of that week (Friday, 2 days after the corresponding lab period, by 11:59 YST) without penalty. Late in-class exercises will lose 5% of their

mark per day that they are late and WILL NOT be accepted after the next lab period (i.e., the following Wednesday).

Out-of-class assignments are due (unless otherwise specified) by 11:59 pm YST on the date that they are due. Late assignments will lose 5% of their mark per day that they are late.

Please refer to the course schedule, available on the Moodle course page, for specific due dates.

COURSE WITHDRAWAL INFORMATION

Refer to the YukonU website for important dates.

TEXTBOOKS & LEARNING MATERIALS

There is no required textbook for this course. Learning materials, resources, and readings will be posted on the course page in Moodle.

ACADEMIC INTEGRITY

Students are expected to contribute toward a positive and supportive environment and are required to conduct themselves in a responsible manner. Academic misconduct includes all forms of academic dishonesty such as cheating, plagiarism, fabrication, fraud, deceit, using the work of others without their permission, aiding other students in committing academic offences, misrepresenting academic assignments prepared by others as one's own, or any other forms of academic dishonesty including falsification of any information on any Yukon University document.

Please refer to Academic Regulations & Procedures for further details about academic standing and student rights and responsibilities.

Note that generative artificial intelligence tools such as Chat GPT can be useful in the same way as a web search or Wikipedia. They can be a starting point but cannot be used to do the work for you. Simply copying the output from an AI source such as Chat GPT and submitting it as your own work will be considered plagiarism the same as if you copied directly from a book, webpage, or classmate. Furthermore, appropriate referencing is expected in submitted work. If generative AI is used as part of your writing workflow, this must be indicated either as a footnote or citation. Generative AI cannot be used as a reference source. Chat GPT and similar tools are not actual sources of information and should not be referenced as such, much as you would not reference the results of a web search. References should be to the published scientific literature, or, when appropriate, the popular scientific media.

ACADEMIC ACCOMMODATION

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon University Academic Regulations (available on the Yukon University website). It is the student's responsibility to seek these accommodations by contacting the Learning Assistance Centre (LAC): LearningAssistanceCentre@yukonu.ca.

COURSE OUTLINE

| Week | Topic(s) |
|----------------------------|---|
| 1 (Jan. 6 th) | Introduction to Scientific Literature |
| 2 | Critical Reading of Scientific Papers |
| 3 | Citations and Bibliography |
| 4 | Components of a scientific paper: Introduction |
| 5 | Writing Style: tone, word choice, and punctuation |
| 6 | Writing Style: paragraphs and sentences |
| Reading Week, Feb. 17 – 21 | |
| 7 | Components of a scientific paper: Methods and Materials - |
| | Figures, charts, and tables |
| 8 | Components of a scientific paper: Results and Discussion |
| 9 | Technical Reports and other science writing |
| 10 | Presenting the Results: writing style, revising and editing |
| 11 | Posters, how to present them, how to create an effective poster |
| 12 | Posters, cont. Presenting results orally and visually |
| 13 | Review |
| Final Exam | Final Exam Apr. 23, 1:00 – 4:00 pm |

NB: A detailed schedule can be found on the course Moodle page.