

PATH827 *Research Project in Pathology*

COURSE OUTLINE 2026

CO-ORDINATORS: Dr. Peter Greer (greerp@queensu.ca)

TA: None

DATE AND TIME: September – March

COURSE DESCRIPTION:

This course is taken by all MSc students or those directly entering into the PhD program. Exceptions may be made with permission of the Graduate Program Committee. The student and supervisor will first establish a supervisory committee consisting of the supervisor and two other faculty members; neither of which needs to hold a primary Pathology appointment. **The course coordinators must be informed of the composition of the supervisory committee by the student by Oct 6th.**

The first part of the course is three essays, each based upon a key research paper (**not a review article**) provided to the student by the supervisor. These research papers should highlight central themes related to the research program of the students' thesis work. Supervisors are requested to provide each of these three papers **at least six weeks prior to the respective essay due date (see below)**. The student will evaluate each research paper, read the related literature and write a concise summary essay for each of these research papers using the **format of a News and Views article in Nature**. Please read several of these in Nature to get a clear idea of the style and format <https://www.nature.com/nature/articles?type=news-and-views>

These essays should consist of a **“catchy” title**, a **1-2 sentence lay summary** that introduces the subject and the discovery, a **concise summary paragraph** that provides some context for the research and more details about the findings, **cites the subject paper**, and points the reader at a **single concise summary figure** in the style of a “graphical abstract” (original or properly attributed if it contains data from the article). This is followed by a **deeper overview of the field to provide more context**; a **description and critical assessment** of the article; and most importantly, a discussion of its **relevance/significance** to the field and likely **future directions**. The essay will be a **maximum of 5 double spaced pages** (Times Roman, 12 font, 2 cm margins all around; not including figures and references). Be sure to properly cite the primary literature and include a list of references in a format which **includes complete titles**.

On the **due dates for these three essays (Oct 20, Dec 1, Jan 12)**, the student will **email an electronic copy of the essay (Word file) and the subject research article (PDF file) to the course coordinator**. The coordinator will email these to each member of the supervisory committee along with an essay evaluation form. Committee members will send their completed evaluations to the coordinator, who will tabulate the marks and send feedback and an average mark back to the student. In addition to carefully considering feedback provided in these evaluations, students are encouraged to discuss that feedback with supervisors, committee members and the course coordinator to assist in refining their writing skills in subsequent assignments. The objective of these essays includes developing skills in scientific writing and critical evaluation of published research papers, as well as beginning to build a bibliography of relevant literature to draw upon in future writing commitments.

The last components of the course are a **written research proposal** and an **oral presentation** of it. The ideas for this proposal will be developed in consultation with the supervisor. Students may solicit verbal feedback from their supervisors on drafts of this proposal, **but supervisors should not directly edit these drafts**. In the case of students intending to graduate with an MSc degree, this proposal should be developed as the foundation of your eventual thesis research. However, for direct entry PhD students, or those who convert to the PhD stream, it is understood that this proposal might be largely an exercise and may or may not closely conform to your eventual PhD thesis research project. **The written research proposal is due March 9th**. It is to be written in the form of a grant proposal and will have a cover page with proposal title, student name and names of

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supervisory committee members; and the following sections: 1) One-page summary/abstract with hypothesis and bullet point aims; 2) Background, concluding with restated hypothesis and list of experimental aims; 3) Description of experimental aims and approaches, including preliminary data and discussion of observed or expected outcomes and potential caveats; and 4) Significance and future perspectives. The **maximum length of this document will be 10 double spaced pages** (Times Roman, 12 font, 2 cm margins all around), including the one-page summary/abstract, but not including cover page, figures or references). **An oral presentation of this proposal to the course coordinator and supervisory committee will take place in mid-March to early April.** The student will give a **20-minute** presentation. The presentation will be followed by a discussion period of ~ one hour. This event will precede the first PATH 830 seminar, providing an opportunity for the student to receive feedback about the presentation from their supervisory committee.

EVALUATION

News & Views Essays 20% for each of three essays	60%
Research Proposal Document	20%
Presentation and Defense	20%

COURSE SCHEDULE

WK	DATE	ASSIGNMENT
1	Sept 8	Overview of course objectives
7	Oct 20	First News & Views Essay
13	Dec 1	Second News & Views Essay
20	Jan 12	Third News & Views Essay
27	Mar 9	Research Proposal
29-31	Mar 15 – April 2	Proposal Presentation & Defense

Agentic AI use is not permitted in this course

Agentic AI tools are applications that can act autonomously on a user’s behalf: completing tasks, accessing systems, and making decisions without continuous human direction. Examples include automated agents that can submit assignments, complete online activities, or interact with course platforms.

The use of agentic AI to complete, submit, or contribute to assessed work is not permitted in this course. This applies regardless of any permissions granted for the use of generative AI tools. When a tool acts on your behalf, the resulting work is not your own; this falls within existing definitions of departures from academic integrity. You must not authorize any third-party tool or application to access Queen’s systems, including onQ, using your institutional credentials. Doing so creates risks that extend beyond your own academic standing.

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Copyright of Course Materials

Unless otherwise stated, the material on the course website is copyrighted and is for the sole use of students registered in PATH 827. The material on the website may be downloaded for a registered student's personal use but shall not be distributed or disseminated to anyone other than students registered in this course.

Academic Integrity

Queen's students, faculty, administrators and staff all have responsibilities for upholding the fundamental values of academic integrity; honesty, trust, fairness, respect, responsibility and courage. These values are central to the building, nurturing, and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities).

Students are responsible for familiarizing themselves with and adhering to the regulations concerning academic integrity. General information on academic integrity is available at Academic Integrity @ Queen's University. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery, use of forged materials, contract cheating, unauthorized use of intellectual property, unauthorized collaboration, failure to abide by academic rules, departure from the core values of academic integrity, and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions appropriate to the severity of the departure that can range from a warning or the loss of grades on an assignment to the failure of a course or to a requirement to withdraw from the university.

Grading Scheme and Grading Method

*All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to **Queen's Official Grade Conversion Scale**:*

Grade	Numerical Course Average (Range)
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

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Accommodations for Disabilities

Queen's University is committed to working with students with disabilities to remove barriers to their academic goals. Queen's Student Accessibility Services (QSAS), students with disabilities, instructors, faculty and staff work together to provide and implement academic accommodations designed to allow students with disabilities equitable access to all course material (including in-class as well as exams). If you are a student currently experiencing barriers to your academics due to disability related reasons, and you would like to understand whether academic accommodations could support the removal of those barriers, please visit the [QSAS website](#) to learn more about academic accommodations. To start the registration process with QSAS, click the *Access Ventus* button found on the [Ventus student portal](#).

Ventus is an online portal that connects students, instructors, QSAS, the Exams Office, and other support services in the process to request, assess, and implement academic accommodations. To learn more about Ventus, visit [A Visual Guide to Ventus for Students](#).

Academic Consideration for Students in Extenuating Circumstances

Academic consideration is a process for the university community to provide a compassionate response to assist students experiencing unforeseen, short-term extenuating circumstances that may impact or impede a student's ability to complete their academics. This may include but is not limited to:

- Short-term physical or mental health issues (e.g., stomach flu, pneumonia, COVID diagnosis, vaccination, etc.)
- Responses to traumatic events (e.g., Death of a loved one, divorce, sexual assault, social injustice, etc.)
- Requirements by law or public health authorities (e.g., court date, isolation due to COVID exposure, etc.)
- Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances. For more information, please see the [Senate Policy on Academic Consideration for Students in Extenuating Circumstances](#).

SGSPA has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances. Visit the [SGSPA website](#) for more information.

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their Professors/Course Coordinators as soon as possible once Consideration has been verified. Any delay in contact may limit the Consideration options available.