

Dynamic Schedule: Visit [Minerva Class Schedule](#)https://horizon.mcgill.ca/pban1/bwckschd.p_disp_dyn_sched for course dates & times.McGill.ca (<https://www.mcgill.ca>) / Overview (/study/2022-2023/) / All Courses (/study/2022-2023/courses/search)

MATH 319 Partial Differential Equations (3 credits)

Offered by: Mathematics and Statistics ([Faculty of Science \(/study/2022-2023/faculties/science/\)](#))

Overview

Mathematics & Statistics (Sci) : First order equations, geometric theory; second order equations, classification; Laplace, wave and heat equations, Sturm-Liouville theory, Fourier series, boundary and initial value problems.

Terms: Winter 2023

Instructors: Bélanger-Rioux, Rosalie (Winter)

- Winter
- Prerequisites: [MATH 223 \(/study/2022-2023/courses/math-223\)](#) or [MATH 236 \(/study/2022-2023/courses/math-236\)](#), [MATH 314 \(/study/2022-2023/courses/math-314\)](#) or equivalent, [MATH 315 \(/study/2022-2023/courses/math-315\)](#)
- Not open to students who have taken or are taking [MATH 475 \(/study/2022-2023/courses/math-475\)](#).

This course may be used as a required or complementary course in the following programs:

[Bachelor of Arts \(B.A.\) - Major Concentration Mathematics \(/https://www.mcgill.ca/study/2022-2023/faculties/arts/undergraduate/programs/bachelor-arts-ba-major-concentration-mathematics\)](#)

[Bachelor of Arts \(B.A.\) - Major Concentration Mathematics \(/https://www.mcgill.ca/study/2022-2023/faculties/basc/undergraduate/programs/bachelor-arts-ba-major-concentration-mathematics\)](#)

[Bachelor of Arts \(B.A.\) - Minor Concentration Mathematics \(/https://www.mcgill.ca/study/2022-2023/faculties/arts/undergraduate/programs/bachelor-arts-ba-minor-concentration-mathematics\)](#)

[Bachelor of Arts \(B.A.\) - Minor Concentration Mathematics \(/https://www.mcgill.ca/study/2022-2023/\)](#)

[2023/faculties/basc/undergraduate/programs/bachelor-arts-ba-minor-concentration-mathematics](https://www.mcgill.ca/study/2022-2023/faculties/basc/undergraduate/programs/bachelor-arts-ba-minor-concentration-mathematics))

[Bachelor of Arts \(B.A.\) -
Supplementary Minor
Concentration in Mathematics
\(https://www.mcgill.ca/study/2022-2023/faculties/arts/undergraduate/programs/bachelor-arts-ba-supplementary-minor-concentration-mathematics\)](https://www.mcgill.ca/study/2022-2023/faculties/arts/undergraduate/programs/bachelor-arts-ba-supplementary-minor-concentration-mathematics)

[Bachelor of Commerce
\(B.Com.\) - Major
Concentration Mathematics for
Management Students
\(https://www.mcgill.ca/study/2022-2023/faculties/desautels/undergraduate/programs/bachelor-commerce-bcom-major-concentration-mathematics-management-students\)](https://www.mcgill.ca/study/2022-2023/faculties/desautels/undergraduate/programs/bachelor-commerce-bcom-major-concentration-mathematics-management-students)

[Bachelor of Education \(B.Ed.\)
- Secondary Mathematics
\(https://www.mcgill.ca/study/2022-2023/faculties/education/undergraduate/programs/bachelor-education-bed-secondary-mathematics\)](https://www.mcgill.ca/study/2022-2023/faculties/education/undergraduate/programs/bachelor-education-bed-secondary-mathematics)

[Bachelor of Engineering
\(B.Eng.\) - Minor Mathematics
\(https://www.mcgill.ca/study/2022-2023/faculties/engineering/undergraduate/programs/bachelor-engineering-beng-minor-mathematics\)](https://www.mcgill.ca/study/2022-2023/faculties/engineering/undergraduate/programs/bachelor-engineering-beng-minor-mathematics)

[Bachelor of Science \(B.Sc.\) -
Honours Atmospheric Science
\(https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-atmospheric-science\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-atmospheric-science)

[Bachelor of Science \(B.Sc.\) -
Honours Atmospheric Science
\(https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-atmospheric-science\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-atmospheric-science)

[Bachelor of Science \(B.Sc.\) -
Honours Biology - Quantitative
Biology
\(https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-quantitative-biology\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-quantitative-biology)

science-bsc-honours-biology-quantitative-biology).

Bachelor of Science (B.Sc.) - Honours Earth System Science
(<https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-earth-system-science>)

Bachelor of Science (B.Sc.) - Honours Planetary Sciences
(<https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-honours-planetary-sciences>)

Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Atmospheric and Oceanic Sciences
(<https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-liberal-program-core-science-component-atmospheric-and-oceanic-sciences>)

Bachelor of Science (B.Sc.) - Liberal Program - Core Science Component Mathematics
(<https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-liberal-program-core-science-component-mathematics>)

Bachelor of Science (B.Sc.) - Major Atmospheric Science
(<https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-atmospheric-science>)

Bachelor of Science (B.Sc.) - Major Biology - Quantitative Biology.
(<https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-biology-quantitative-biology>)

Bachelor of Science (B.Sc.) - Major Biology and Mathematics

[. \(https://www.mcgill.ca/study/2022-](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-biology-and-mathematics)

[2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-biology-and-mathematics\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-biology-and-mathematics)

[Bachelor of Science \(B.Sc.\) - Major Earth System Science](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-earth-system-science)

[. \(https://www.mcgill.ca/study/2022-](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-earth-system-science)

[2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-earth-system-science\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-earth-system-science)

[Bachelor of Science \(B.Sc.\) - Major Mathematics](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-mathematics)

[. \(https://www.mcgill.ca/study/2022-](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-mathematics)

[2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-mathematics\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-mathematics)

[Bachelor of Science \(B.Sc.\) - Major Physics and Geophysics](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-physics-and-geophysics)

[. \(https://www.mcgill.ca/study/2022-](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-physics-and-geophysics)

[2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-physics-and-geophysics\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-physics-and-geophysics)

[Bachelor of Science \(B.Sc.\) - Major Physiology and Mathematics](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-physiology-and-mathematics)

[. \(https://www.mcgill.ca/study/2022-](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-physiology-and-mathematics)

[2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-physiology-and-mathematics\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/bachelor-science-bsc-major-physiology-and-mathematics)

[Diploma \(Dip.\) Meteorology](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/diploma-dip-meteorology)

[. \(https://www.mcgill.ca/study/2022-](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/diploma-dip-meteorology)

[2023/faculties/science/undergraduate/programs/diploma-dip-meteorology\)](https://www.mcgill.ca/study/2022-2023/faculties/science/undergraduate/programs/diploma-dip-meteorology)



Visit *Minerva Class Schedule* for
course dates & times

Class Schedule
(https://horizon.mcgill.ca/pban1/bwckschd.p_disp_dyn_sched)

[. \(https://www.mcgill.ca\)](https://www.mcgill.ca)

