# Contract Instructor Opportunities Summer 2026 Carleton University, School of Mathematics and Statistics

As stated in Article 16 of the CUPE 4600 Unit 2 Collective Agreement, applications are invited from members of the CUPE 4600 Unit 2 bargaining unit and other interested persons to teach the following Mathematics and Statistics courses during the Summer 2026 Term.

All the listed positions are subject to budget approval.

Classes are scheduled for in-person, however the University may require that all or part of these courses be delivered remotely, including online.

SUMMER 2026 courses		Early/Late/Full	Maximum Enrolment	Anticipated TA support Y/N
MATH	1005	Late	150	Υ
MATH	1007	Full	150	Υ
MATH	1104/1107	Full	150	Υ
MATH	2004/2008	Early	200	Υ
MATH	2007	Full	100	Υ
MATH	2107	Full	100	Υ
MATH	2108/3101	Full	50	N
MATH	3107	Full	100	Υ
MATH	3705	Late	100	Υ
STAT	2602	Full	100	Υ

<sup>\*</sup>Please note that anticipated TA support is based on anticipated enrolment and may change based on actual enrolment in a course.

One section only of each course is available.

#### **Required Qualifications:**

Candidates should hold at least an MSc in Mathematics, Statistics, or related field, and demonstrate teaching competence in a relevant area, preferably at the university level.

Course descriptions for the current posting are appended below.

#### **Application Procedures and Deadlines:**

Deadline to apply is January 16, 2025. Applications indicating a list of courses for which you wish to be considered, must be submitted <u>using the pdf form attached</u>, and emailed along with your CV and previous courses taught (if a returning instructor) to <u>mathstat@carleton.ca</u>

<u>A note to all applicants:</u> As per Articles 16.3 and 16.4 in the CUPE 4600 Unit 2 Collective Agreement, the posted vacancies listed above are first offered to applicants meeting the incumbency criteria. The current Collective Agreement can be found on the Carleton University Human Resources website <a href="https://carleton.ca/hr/labour-relations/academic-staff-agreements/">https://carleton.ca/hr/labour-relations/academic-staff-agreements/</a> and on the CUPE 4600 Unit 2 website <a href="https://www.cupe4600.ca/unit-2">https://www.cupe4600.ca/unit-2</a> where a link to the most recent seniority list is located.

#### **SUMMER 2026 CONTRACT INSTRUCTOR ADVERTISED COURSES**

#### MATH 1005 [0.5 credit] Differential Equations and Infinite Series for Engineering or Physics

First-order differential equations. Second-order linear equations with constant coefficients, undetermined coefficients, variation of parameters. Sequences and series, convergence tests, estimation of sums. Power series, Taylor series, remainders. Fourier series.

#### MATH 1007 [0.5 credit]

#### **Elementary Calculus I**

Limits. Differentiation of the elementary functions, including trigonometric functions. Rules of differentiation. Applications of differentiation: max-min problems, curve sketching, approximations. Introduction to integration: definite and indefinite integrals, areas under curves, fundamental theorem of calculus.

#### MATH 1104/1107 [0.5 credit]

#### Linear Algebra for Engineering or Science / Linear Algebra I

Systems of linear equations. Matrix algebra. Determinants. Invertible matrix theorem. Cramer's rule. Vector space R^n; subspaces, bases. Eigenvalues, diagonalization. Linear transformations, kernel, range. Complex numbers (including De Moivre's theorem and n-th roots). Inner product spaces and orthogonality. Applications.

#### MATH 2004/2008 [0.5 credit]

#### Multivariable Calculus for Engineering or Physics / Intermediate Calculus

Curves and surfaces. Polar, cylindrical and spherical coordinates. Partial derivatives, chain rule, gradients, extrema and Lagrange multipliers. Exact differentials. Multiple integrals over rectangular and general regions. Integrals over surfaces. Line integrals. Vector differential operators. Green's Theorem, Stokes' theorem, Divergence Theorem. Applications.

#### MATH 2007 [0.5 credit] Elementary Calculus II

Techniques of integration, improper integrals. Polar coordinates, parametric equations. Indeterminate forms, sequences and series, Taylor's formula and series.

#### MATH 2107 [0.5 credit] Linear Algebra II

Finite-dimensional vector spaces (over R and C), subspaces, linear independence and bases. Linear transformations and matrices. Inner product spaces (over R and C); Orthonormal bases. Eigenvalues and diagonalization. Bilinear and quadratic forms; principal axis theorem.

MATH 2108/3101 [0.5 credit] Abstract Algebra I / Algebraic Structures with Computer Applications
Sets and relations, number theory, group theory, ring theory, cardinal numbers, fields, lattices, and Boolean algebras; with applications of interest to students in Computer Science.

#### MATH 3107 [0.5 credit]

#### **Linear Algebra III**

Similarity and unitary triangularization of matrices. Direct methods of solving a system of linear equations. Iterative techniques. Bounds for eigenvalues. Power method and deflation techniques of approximation. Emphasis is primarily on computational aspects.

#### MATH 3705 [0.5 credit] Mathematical Methods I

Laplace transforms, series solutions of ordinary differential equations, the Frobenius method. Fourier series and Fourier transforms, solutions of partial differential equations of mathematical physics, boundary value problems, applications.

#### STAT 2602 [0.5 credit] Statistical Models for Business Analytics and Finance

Analysis of variance, multiple regression (including polynomial regression), logistic and Poisson regression, probit models, time series (including decomposition into components, exponential smoothing, model diagnostics and ARIMA models), Monte Carlo simulation.

## **Contract Instructor Application Form**

Office of the **Provost and Vice-President (Academic)** 

Before completing this form, please consult the collective agreement between Carleton University and the CUPE 4600 Unit 2. Should there be any discrepancies between the collective agreement and this form, the collective agreement is considered the final authority. The Office of the Provost and Vice-President (Academic) has compiled useful Contract Instructor Hiring Facts & FAQs which can be found on the Provost's website at www.carleton.ca/provost. For any questions about completing this form, please contact your dean's office.

Note: Please note that only one application shall be submitted per academic unit.

The personal information requested on this form is collected in accordance with Sections 38(2) and 41(1) of the Freedom of Information and Protection of Privacy Act (FIPPA), R.S.O. 1990, c.F.31 as amended. The information provided will not be used for any purposes other than those stated upon this form unless the applicant provides express written consent. Should you have any questions concerning your personal information, please contact the Executive Assistant, OPVAC, FIPPA Representative, (613)520-3884. Carleton University is fully compliant with FIPPA and endeavours at all times to treat your personal information in accordance with this law.

ame:		Employee/St	udent num	ber:		
elephone:	E-mail:  (must include a complete list of all courses taught at Carleton University with CUPE 4600 Unit 2)					
tizenship/Visa Status:						
pplicant Type Please select one.						
CUPE 4600 Unit 2 Member	Graduate Stu	Graduate Student		☐Visiting Schola	Visiting Scholar	
Carleton Employee	☐ Doctoral Stud	octoral Student				
External Applicant	Postdoctoral	ostdoctoral Fellow				
Ourse Application Please submit only one	e application for each academi	c unit.				
.cademic Unit:	,,	Faculty:				
lease list in rank order the courses that you ear.	are applying to teach. If yo	-	course or an e	equivalent previously	y, indicate the t	
Course # Course Title		Prefered Time	Term	Credit Value	Term/Year	
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### Contract Instructor Application Form

Office of the **Provost and Vice-President (Academic)** 

The applicant shall complete Sections A - D.

**Section A**: The applicant shall identify their name, student or employee number (if applicable), citizenship/visa status, telephone, and email address. The applicant's curriculum vitae **must** be attached to this form and **must** include a full list of all courses that he/she has previously taught within the CUPE 4600 Unit 2 bargaining unit at Carleton University.

**Section B**: The applicant shall indicate their applicant type.

**Section C:** The applicant shall list, in rank order, the courses that they are applying to teach. If the applicant has taught any of the courses or an equivalent previously, he/she shall indicate the term and year(s) in which he/she taught the course.

**Section D:** The applicant shall sign and date the form to confirm that the information is correct and forward it to the Chair/Director of the academic unit.

For Administrative Use Only- Chairs/Directors May Complete Sections E-G.

**Section E:** Please indicate if the position was a posted competition.

**Section F:** Please indicate the replacement type of the position.

**Section G:** Please confirm the incumbency and seniority rights of the incumbent according to Article 16.4 of the Collective Agreement.

OR ADMINISTRATIVE USE ONLY - This section may be used to calculate the applicant's incumbency and seniority rights
Advertised Competition: Replacement for:
Yes No Leave Approved by Employer N/A Other
Incumbency and Seniority Rights
Determine Seniority  1. Whichever is later, how many full credit equivalents has the applicant taught since September 1, 1994 OR how many full credit equivalents has the applicant taught since a break of 24 months or more?
Determine Incumbency
2. Which courses, or equivalents, has the applicant taught within last 60 months?
3. Indicate which courses, if any, the applicant has received a teaching evaluation with a score of less than 4.0 on the overall summative question, within the last four years. (See Article 18: Student Teaching Evaluations)
Additional Comments:

