

**Department of Mathematics**  
**APPLICATION FOR TEACHING ASSISTANTSHIP**  
**SEPTEMBER 2008 TO APRIL 2009**

**Please read carefully and retain this page.**

*Qualifications:                      Excellent background in mathematics;  
   Excellent communication skills  
   in English, both written and oral form.*

A transcript **is not** needed from:

- Graduate students in the Department of Mathematics,
- All Undergraduate applicants in the Department of Mathematics,
- Applicants who have worked for the Department of Mathematics in the past.

***All other applicants must submit a transcript/academic record/statement of results. Original document is not necessary. A copy will do.***

Decisions will be announced in August.

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igelfeld@math.utoronto.ca  
Department of Mathematics  
40 St. George St., 6th floor

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| <b>Application Deadline:    Friday, June 27, 2008</b> |
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This posting is in accordance with the CUPE 3902, Unit 1 Collective Agreement.

## DEPARTMENT OF MATHEMATICS TEACHING ASSISTANTSHIPS 2008-2009

All positions and hours listed below are tentative.

The Department of Mathematics reserves the right to change/cancel announced positions.

**LEGEND:** *F* Courses = Sep-Dec    *Y* Courses = Sep-Apr    *S* Courses = Jan-Apr

**DUTIES may include all of or any combination of the following:  
marking, scheduled tutorial, office hours, Math Aid Centre, test  
supervision.**

### FACULTY OF ARTS AND SCIENCE, ST. GEORGE CAMPUS

| COURSE          | COURSE TITLE                        | HOURS | # of<br>Assignments | COURSE         | COURSE TITLE                    | HOURS | # of<br>Assignments |
|-----------------|-------------------------------------|-------|---------------------|----------------|---------------------------------|-------|---------------------|
| APM236F         | Applied Linear Prog.                | 80    | 1                   | MAT257Y        | Analysis II                     | 170   | 1                   |
| APM236S         | Applied Linear Prog.                | 50    | 1                   | MAT267F        | Advanced ODEs I                 | 60    | 1                   |
| APM346F         | Differential Equations              | 70    | 2                   | MAT301F        | Groups and Symmetries           | 60    | 2                   |
| APM351Y         | Diff. Equ. of Math Physics          | 80    | 1                   | MAT301S        | Groups and Symmetries           | 85    | 1                   |
| APM421F/MAT1723 | Mathematical Foundations of Quantum | 50    | 1                   | MAT309F        | Intro Math Logic                | 75    | 1                   |
| APM461S/MAT1302 | Combinatorial Methods               | 55    | 1                   | MAT315S        | Intro Number Theory             | 55    | 2                   |
| APM462S         | Nonlinear Optimization              | 65    | 1                   | MAT327F        | Intro Topology                  | 90    | 1                   |
| APM466S/MAT1856 | Math Theory of Finance              | 100   | 1                   | MAT334F        | Complex Variables               | 80    | 1                   |
| JMB170Y         | Bio Models and Math                 | 160   | 1                   | MAT334S        | Complex Variables               | 85    | 2                   |
| JUM105F         | Mathematical Personalities          | 20    | 1                   | MAT335S        | Chaos Fractals Dynamics         | 70    | 1                   |
| MAT123S         | Calc Lin Alg for Com (A)            | 55    | 1                   | MAT337S        | Intro Real Analysis             | 100   | 1                   |
| MAT125S         | Calculus Sci (A)                    | 55    | 1                   | MAT344F        | Intro Combinatorics             | 120   | 1                   |
| MAT133Y         | Calc Lin Alg for Com                | 110   | 15                  | MAT347Y        | Groups Rings and Fields         | 100   | 1                   |
| MAT135Y         | Calculus Sci I                      | 110   | 30                  | MAT354F        | Complex Analysis                | 80    | 1                   |
| MAT136Y         | Calculus and its Foundations        | 80    | 1                   | MAT357S        | Real Analysis I                 | 95    | 1                   |
| MAT137Y         | Calculus I                          | 200   | 6                   | MAT363S        | Diff Geometry I                 | 90    | 1                   |
| MAT157Y         | Analysis I                          | 200   | 2                   | MAT401S        | Polyn Equ and Fields            | 65    | 1                   |
| MAT223F         | Linear Algebra I                    | 55    | 10                  | MAT402S        | Classical Geometries            | 90    | 1                   |
| MAT223S         | Linear Algebra I                    | 55    | 8                   | MAT409F/MAT140 | Intro to Model Theory & Set The | 35    | 1                   |
| MAT224F         | Linear Algebra II                   | 55    | 3                   | MAT454S/1001S  | Complex Analysis II             | 80    | 1                   |
| MAT224S         | Linear Algebra II                   | 55    | 5                   | MAT454S/1001S  | Complex Analysis II             | 34    | 1 (tutorial)        |
| MAT235Y         | Calculus Sci II                     | 70    | 9                   | MAT457Y/1000Y  | Real Analysis II                | 100   | 2                   |
| MAT237Y         | Vector Calculus                     | 60    | 11                  | MAT457Y/1000Y  | Real Analysis II                | 60    | 1 (tutorial)        |
| MAT240F         | Algebra I                           | 95    | 2                   | MAT1100Y       | Grad. Algebra                   | 90    | 1                   |
| MAT244F         | Intro ODEs                          | 80    | 2                   | MAT1100Y       | Grad. Algebra                   | 60    | 1 (tutorial)        |
| MAT244S         | Intro ODEs                          | 95    | 2                   | MAT1120F       | Lie Algebras                    | 45    | 1                   |
| MAT246F         | Conc in Abstract Math               | 50    | 2                   | MAT1300Y       | Topology                        | 125   | 1                   |
| MAT246S         | Conc in Abstract Math               | 90    | 2                   | MAT1300Y       | Topology                        | 60    | 1 (tutorial)        |
| MAT247S         | Algebra II                          | 60    | 2                   |                |                                 |       |                     |

Course descriptions can be found at: [http://www.artsandscience.utoronto.ca/ofr/calendar/crs\\_mat.htm](http://www.artsandscience.utoronto.ca/ofr/calendar/crs_mat.htm)

<http://www.math.toronto.edu/graduate/courses/descriptions.html>

**DEPARTMENT OF MATHEMATICS TEACHING ASSISTANTSHIPS 2008-2009**

**MATH AID CENTRES, ST. GEORGE CAMPUS**

|  | <b>HOURS</b> | <b># of Assignments</b> |
|--|--------------|-------------------------|
| <b>ST. MICHAEL'S COLLEGE MATH AID CENTRE</b> |              |                         |
| F TERM                                       | 31           | 4                       |
| S TERM                                       | 30           | 4                       |
| <b>UNIVERSITY COLLEGE MATH AID CENTRE</b>    |              |                         |
| F TERM                                       | 26           | 4                       |
| S TERM                                       | 25           | 4                       |
| <b>VICTORIA COLLEGE MATH AID CENTRE</b>      |              |                         |
| F TERM                                       | 30           | 4                       |
| S TERM                                       | 31           | 4                       |
| <b>NEW COLLEGE MATH AID CENTRE</b>           |              |                         |
| F TERM                                       | 20           | 3                       |
| S TERM                                       | 20           | 3                       |
| <b>TRINITY COLLEGE MATH AID CENTRE</b>       |              |                         |
| F TERM                                       | 50           | 2                       |
| S TERM                                       | 50           | 2                       |

**FACULTY OF APPLIED SCIENCE AND ENGINEERING,  
ST. GEORGE CAMPUS**

For description of the courses listed below refer to the Faculty of Applied Science and Engineering website.

| <b>COURSE</b> | <b>COURSE TITLE</b>            | <b>HOURS</b> | <b># of Assignments</b> |
|---------------|--------------------------------|--------------|-------------------------|
| APM384F       | Partial Differential Equations | TBA          | TBA                     |
| MAT185S       | Linear Algebra                 | TBA          | TBA                     |
| MAT186F       | Calculus I                     | TBA          | TBA                     |
| MAT186S       | Calculus I                     | TBA          | TBA                     |
| MAT187S       | Calculus II                    | TBA          | TBA                     |
| MAT188F       | Linear Algebra                 | TBA          | TBA                     |
| MAT188S       | Linear Algebra                 | TBA          | TBA                     |
| MAT190F       | Matrix and Vector Algebra      | TBA          | TBA                     |
| MAT194F       | Calculus I                     | TBA          | TBA                     |
| MAT195S       | Calculus II                    | TBA          | TBA                     |
| MAT196F       | Calculus A                     | TBA          | TBA                     |
| MAT197S       | Calculus B                     | TBA          | TBA                     |
| MAT292F       | Calculus III                   | TBA          | TBA                     |
| MAT294F       | Calculus & Diff Equ            | TBA          | TBA                     |
| MAT389F       | Complex Analysis               | TBA          | TBA                     |

Course descriptions can be found at:

<http://www.undergrad.engineering.utoronto.ca/Assets/Calendar0809/chapter+8.pdf>

DEPARTMENT OF MATHEMATICS TEACHING ASSISTANTSHIPS 2008-2009

UNIVERSITY OF TORONTO AT MISSISSAUGA

| COURSE    | COURSE TITLE                   | HOURS | # of Assignments |
|-----------|--------------------------------|-------|------------------|
| MAT102H5F | Mathematical Proofs            | TBA   | TBA              |
| MAT102H5S | Mathematical Proofs            | TBA   | TBA              |
| MAT133Y   | Calculus & Linear Algebra      | TBA   | TBA              |
| MAT134Y   | Calculus for Life Sciences     | TBA   | TBA              |
| MAT135Y   | Calculus                       | TBA   | TBA              |
| MAT137Y   | Calculus                       | TBA   | TBA              |
| MAT202H5S | Mathematical Abstraction       | TBA   | TBA              |
| MAT223H5F | Linear Algebra I               | TBA   | TBA              |
| MAT223H5S | Linear Algebra I               | TBA   | TBA              |
| MAT212H5S | Differential Eqns. & Modeling  | TBA   | TBA              |
| MAT224H5S | Linear Algebra II              | TBA   | TBA              |
| MAT242H5F | Differential Equations I       | TBA   | TBA              |
| MAT252H5S | Differential Equations II      | TBA   | TBA              |
| MAT232H5F | Calculus of Several Variables  | TBA   | TBA              |
| MAT301H5F | Groups and Symmetries          | TBA   | TBA              |
| MAT302H5S | Finite Fields and Applications | TBA   | TBA              |
| MAT309H5S | Mathematical Logic             | TBA   | TBA              |
| MAT311H5F | Partial Differential Equations | TBA   | TBA              |
| MAT334H5F | Complex Variables              | TBA   | TBA              |
| MAT344H5F | Introduction to Combinatorics  | TBA   | TBA              |
| MAT315H5S | Number Theory                  | TBA   | TBA              |
| MAT332H5S | Nonlinear Dynamics & Chaos     | TBA   | TBA              |
| MAT368H5S | Vector Calculus                | TBA   | TBA              |
| MAT378H5S | Foundations of Analysis        | TBA   | TBA              |

Course descriptions can be found at:  
<http://www.utm.utoronto.ca/regcal/WEBLISTCOURSES27.html>

UNIVERSITY OF TORONTO AT SCARBOROUGH

| COURSE    | COURSE TITLE                        | HOURS | # of Assignments |
|-----------|-------------------------------------|-------|------------------|
| MATA01H3F | Preparation for Calculus            | TBA   | TBA              |
| MATA30H3F | Calculus I                          | TBA   | TBA              |
| MATA30H3S | Calculus I                          | TBA   | TBA              |
| MATA32H3F | Calculus Management I               | TBA   | TBA              |
| MATA32H3S | Calculus Management I               | TBA   | TBA              |
| MATA33H3S | Calculus Management II              | TBA   | TBA              |
| MATA35H3S | Calculus II for Biological Sciences | TBA   | TBA              |
| MATA36H3S | Calculus II for Physical Sciences   | TBA   | TBA              |
| MATA37H3S | Calculus II for Math Sciences       | TBA   | TBA              |

**Note:** There may be some additional grader positions in MATB44H3F, MATC01H3F, MATC02H3S, MATC15H3S, MATC16H3F, MATC25H3F, MATC34H3F, MATC35H3F, MATC37H3F, MATC44H3S, MATC46H3S. Hours and number of assignments are unknown at this time, but if you are interested you should indicate it on your application form; you will then be considered for these if the positions arise.

Course descriptions can be found at:  
<http://www.utsc.utoronto.ca/courses/calendar/Mathematics.html>

DEPARTMENT OF MATHEMATICS - APPLICATION FOR TEACHING ASSISTANTSHIP

FOR SEPTEMBER 2008 TO APRIL 2009

APPLICATION DEADLINE: FRIDAY, JUNE 27, 2008

Surname: \_\_\_\_\_

First name: \_\_\_\_\_

U of T student #: \_\_\_\_\_

E-mail: \_\_\_\_\_

Telephone #: \_\_\_\_\_

Home address: \_\_\_\_\_

\_\_\_\_\_

In September 2008 your status will be (choose one only):

PH D: \_\_\_\_\_ Start date: \_\_\_\_\_

M SC: \_\_\_\_\_ Start date: \_\_\_\_\_

Dept of Study: \_\_\_\_\_

Your office phone #: \_\_\_\_\_

FOR OFFICE USE ONLY

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Below, list your preferences. In the column under "Choice" rank your preference as to campus of assignment. These will be met if possible.

| Choice | Campus     | Course Preferences (see following 3 pages) |
|--------|------------|--|
|        | St. George |  |
|        | UTM        |  |
|        | UTSC       |  |

**FOR UNDERGRAD APPLICANTS ONLY:**

Program/dept.: \_\_\_\_\_

Campus where are you registered (circle one): StG UTM UTSC

Most advanced math course(s) completed: \_\_\_\_\_

COMPLETE AND RETURN ONLY THIS FORM TO DIANA LEONARDO'S mailbox in room BA6290A