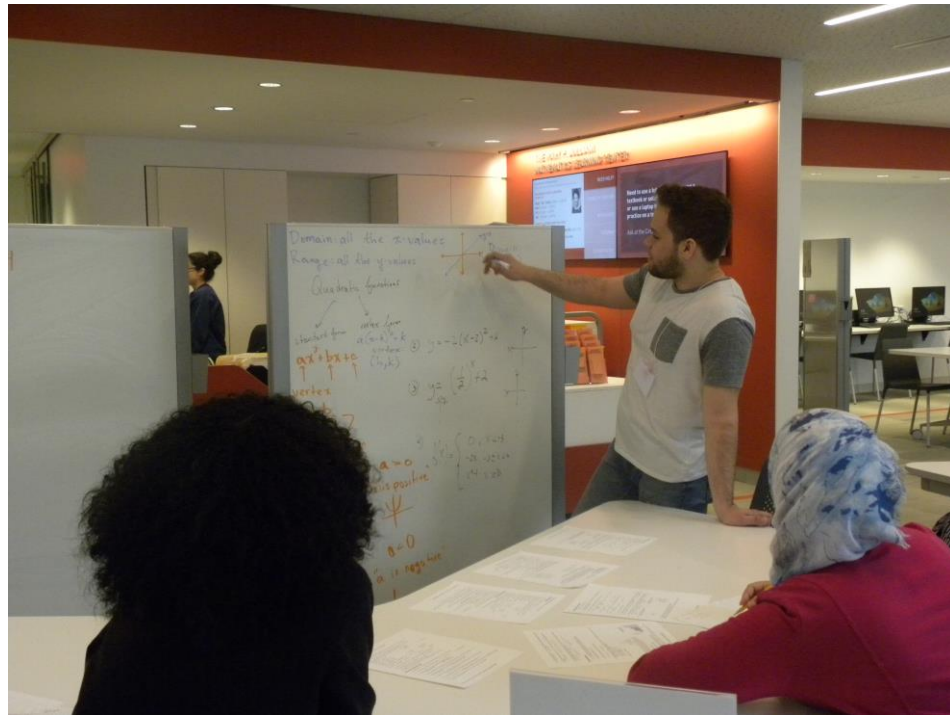


TUTOR

APPLICATION FOR PART-TIME EMPLOYMENT AS A TUTOR



IN THE DOLCIANI MATHEMATICS LEARNING CENTER

Dear Applicant,

As you consider applying for a position in the Dolciani Mathematics Learning Center, there are several questions that I am sure you have about us. This information has been prepared to answer many of these preliminary questions.

Please read through this information carefully and fill out the application form at the end. Email the completed application to dmlc@hunter.cuny.edu or mail it to:

The Mary P. Dolciani Mathematics Learning Center
Hunter College
695 Park Avenue
Silverstein Student Success Center
7th floor Hunter East
New York, New York 10065

The Dolciani Mathematics Learning Center is a multimedia tutorial Center designed primarily for the use of computer and DVD materials to support students in their mathematics and statistics-related work, whether as part of a math/stat course or as applications of the math in other subject areas. We also work with students who need to brush up on certain skills for placement exams, graduate school entrance exams, and licensing exams. In addition to multi-media materials, tutoring is also provided for students needing reviews of algebra, precalculus, calculus, and statistics, as well as content discussed in math/stat courses namely Math 100, 101, 102, 104, 105, 124, 125.50, 126, 150, 154, 155, 156, 160, 250, 255, 260, 311, 312, 331, 351, 352 and Stat 113, 212 and 213 and CSCI 150.

TUTOR RESPONSIBILITIES are twofold. As a tutor, you will either be given a group of students or an individual student. Your first responsibility will be to help the student(s) learn the course material. Working with students requires tremendous patience. When a student asks a question, the most effective way to work is to first determine what the student actually knows by giving them an example and then asking them to work through it giving them suggestions. It may be also necessary to explain the concept in a straightforward manner, do an example demonstrating how that skill works, and lastly, guiding them through two or three examples, not actually telling them what to do, but allowing the students to struggle a bit with the problem, giving hints along the way. Your role is that of a facilitator and not a teacher. The second responsibility of a tutor is that of record keeping. Accurate, neat, up-to-date records are absolutely necessary and vital. Generally, it can be taken care of during the hour in about 5-6 minutes. The importance of the second part of the job should never be minimized.

The **Hiring Process** begins when you turn in your application. After reviewing your application, you will be contacted and an appointment set up for you to take our screening examination. This is required of every employee who is hired. It assures us that you have the qualifications that we need. Once this is done, you will be called for an interview. At the interview, you will be notified as to whether you have been hired or not. If hired, you will then be asked to fill out payroll forms, given any specific information that you need for the job, and scheduled for training. If you are unable to work within our schedule for a particular semester, please feel free to re-apply for the next semester.

Thank you for your interest and time. I look forward to meeting you.

Sincerely,

Mrs. Barbara Barone
Director
The Mary P. Dolciani Mathematics Learning Center

APPLICATION FOR TUTORING POSITION

PLEASE PRINT ALL INFORMATION CLEARLY

NAME: _____

TELEPHONE: _____ E-MAIL: _____

ADDRESS: _____

ARE YOU A STUDENT AT HUNTER? ____ ANOTHER SCHOOL? ____ EMPL ID# (IF HUNTER STUDENT): _____

Please list any college level math/stat/education course(s) taken:

Why do you feel you would be a good tutor? _____

Briefly describe any previous experience: _____

I am comfortable tutoring the following subjects: (Although our tutoring is not necessarily course-specific but subject-specific, the parenthetical course noted will give you an idea of the knowledge we require our tutors to have and are referenced on the last page of this application)

- | | | |
|---|--|---|
| <input type="checkbox"/> Finite Math (MATH 100) | <input type="checkbox"/> College Algebra (MATH 101) | <input type="checkbox"/> QR Math (MATH 102) |
| <input type="checkbox"/> Pre-Calculus (MATH 124, 125.50) | <input type="checkbox"/> Precalculus Workshop (MATH 126) | <input type="checkbox"/> Calculus (MATH 150,155) |
| <input type="checkbox"/> Symbolic Computation (MATH 154) | <input type="checkbox"/> Introduction to Proofs (MATH 156) | <input type="checkbox"/> Matrix Algebra (MATH 160) |
| <input type="checkbox"/> Vector Calculus (MATH 250) | <input type="checkbox"/> Differential Equations (MATH 254) | <input type="checkbox"/> Vector Analysis (MATH 255) |
| <input type="checkbox"/> Linear Algebra (MATH 260) | <input type="checkbox"/> Abstract Algebra (MATH 311/312) | <input type="checkbox"/> MATH 331 (Geometries) |
| <input type="checkbox"/> Analysis (MATH 351/352) | <input type="checkbox"/> Math Education K-6 (MATH 104/105) | <input type="checkbox"/> Math Education (7-12) |
| <input type="checkbox"/> Introductory Statistics (STAT 113) | <input type="checkbox"/> Applied Statistics (STAT 213) | <input type="checkbox"/> Probability (STAT 212) |
| <input type="checkbox"/> Computer Science (CSCI 150) | | |

FACULTY REFERENCE:

NAME: _____

TELEPHONE: _____

APPLICANT'S SIGNATURE: _____ DATE: _____

When applying, please turn in this page only.

Description of Math/Stat Department Courses

MATH 100: **Basic Structures of Mathematics** meets the college's math/science general education requirement in quantitative reasoning. The course curriculum consists of symbolic logic, topics in probability and statistics, matrices and other finite mathematics topics.

MATH 101: **Algebra for College Students** is an introductory course for students who intend to major in a field which requires proficiency in college algebra. The course content includes algebraic and graphical solutions to systems of equations and inequalities; absolute value, polynomial, rational and radical expressions and equations; complex numbers; the function concept; introduction to polynomial, rational, and exponential functions and their graphs.

MATH 102: **Mathematics in Everyday Life** is an introductory course that fulfills the college general education requirement in quantitative reasoning. The topics include: Critical Thinking, Numbers in the Real World, Uses and Abuses of Percentages, Scientific Notation, Personal Finance, Presentation of Statistics in the Media, Mathematics and Politics.

MATH 104/105: **Mathematics for Elementary Education I and II** are content courses in math for prospective elementary school teachers. They cover problem solving, sets, logic, numeration systems and whole numbers, integers, number theory, rational numbers, decimals, computation, probability, statistics, plane and transformational geometry, congruence and similarity.

MATH 124,125.50: **Pre-Calculus** is a course that covers functions and their graphs; polynomials, rational, exponential, logarithmic and trigonometric functions; conic sections; topics in trigonometry; graphical and analytical solutions to systems of equations and inequalities.

MATH 126: **Pre-Calculus Technology Lab** is a course where students are introduced to MATHEMATICA as a tool for exploring qualitative features of functions and solving precalculus problems.

MATH 150: **Calculus with Analytic Geometry I** contains limits, continuity, differentiation and integration of elementary functions and trigonometric functions, applications.

MATH 154: **Introduction to Symbolic Computation** is a laboratory introduction to machine-aided computation with an emphasis on examples related to calculus.

MATH 155: **Calculus with Analytic Geometry II** contains differentiation and integration of transcendental functions, integration techniques, infinite sequences and series, improper integrals, and polar coordinates.

MATH 156: **Introduction to Mathematical Proof Workshop** is a course where students are introduced to the techniques of proof, among them the direct and indirect methods of proof, epsilon-delta arguments and induction.

MATH 160: **Matrix Algebra** is a course containing systems of linear equations, matrices, determinants, introduction to vector spaces and linear transformations, and applications.

MATH 250: **Calculus with Analytic Geometry III** covers elementary vector geometry, dot and cross products, partial derivatives, matrices, determinants, multiple integration and applications.

MATH 255: **Vector Analysis** covers line and surface integrals, Green's Theorem, divergence theorem, Stoke's Theorem, and generalized coordinates.

MATH 260: **Linear Algebra** is a course covering vector spaces, linear transformations, canonical forms, inner product spaces, bilinear forms, applications.

MATH 311/312: **Abstract Algebra I/II** is an introduction to the theory of groups and rings (311) and elements of Galois theory, and advanced topics in ring theory and linear algebra (312).

MATH 331: **Geometries** covers topics in affine and projective geometry and/or topics in differential geometry.

MATH 351/352: **Mathematical Analysis I and II** covers rigorous treatment of foundations of calculus, including topology of real line and higher-dimensional spaces (351) and integration, sequences and series, uniform convergence, differentiation of functions of several variables, inverse and implicit function theorems (352).

STAT 113: **Elementary Probability and Statistics** uses STATCrunch software. It covers discrete probability, descriptive and inferential statistics, and estimation and hypothesis testing for normal and binomial means.

STAT 212: **Discrete Probability** teaches combinatorics, discrete probability, random walks and game theory. Emphasis is on model building.

STAT 213: **Introduction to Applied Statistics** covers sampling, estimation, tests of hypotheses, including one- and two-sample t-tests, two- and three-way tables for nominal and ordinal data, linear regression, analysis of variance through two-way with interaction. Some sections use SPSS statistical software.