Term Address:
290 Massachusetts Ave.
Cambridge, MA 02139

Joy C. Perkinson

857-544-6800
joyp@mit.edu

Permanent Address:
3680 SE Glenwood St.
Portland, OR 97202

Objective To teach high school or middle school science or math.

Education

Massachusetts Institute of Technology Cambridge, MA
Candidate for B.S. in Materials Science and Engineering, June 2009.

Coursework includes Chemistry, Biology, Physics I (Mechanics), Physics II (Electromagnetism), Polymer Physics, Calculus, Multivariable Calculus, Structure and Interpretation of Computer Programs, Organic and Biomaterials Chemistry, Materials Laboratory, Mechanical Behavior of Materials, Materials Processing, and Undergraduate Thesis. GPA: 4.8/5.0.

Experience

High School Geometry Course *June-August 2004.* Portland, OR

Helped three middle school students learn high school geometry over the course of a summer in order to test out of the subject. Taught fundamental concepts and theorems. Wrote and assigned practice problems. Wrote, administered, and graded comprehensive exams.

High School Math Tutoring *Fall 2005, March 2006-February 2007.* Portland, OR and Cambridge, MA

Tutored high school students in geometry, algebra, trigonometry, and precalculus. Helped them understand the concepts and work on homework problems. Improved their overall understanding and grades in the classes they were taking.

English Class Teaching *September 2003–June 2005.* Portland, OR

Led numerous class sections of English elective courses. Took turns with other students preparing classes and leading discussions on course material. Encouraged class participation and developed strategies to keep discussion going.

Undergraduate Researcher, Ross Group, MIT *June 2006–present.* Cambridge, MA

Fabricated and researched thin polymer films in a clean room to investigate nanoscale patterning, fabricated nanomagnet arrays and multilayer rings for use as magnetic data storage devices, and researched thin magnetic films for applications in magnetic data storage. Worked independently in lab, and collaborated with local and overseas research groups. Wrote technical memos and research articles. Co-authored a paper in the Journal of Applied Physics.

Skills

Knowledge of chemistry, physics, biology, calculus, trigonometry, geometry, algebra, geology, astronomy, and computer programming. Experience with differential equations, modeling of physical and environmental systems, and programming in MATLAB, Mathematica, Java, and Scheme.

Lab: Extensive experience with general laboratory equipment such as balances, microscopes, bunsen burners, hot plates, glassware, spring scales, breadboards, and graphing calculators. Extensive experience with general laboratory procedures such as pH testing, distillation, paper chromatography, electroplating, calorimetry, gel electrophoresis, soldering, laboratory safety, chemical waste disposal, and keeping a detailed lab notebook. Extensive experience with materials science processing techniques, such as microscopy, magnetometry, surface coating, magnetoresistance measurements, and mechanical strength testing.

Leadership

Captain of High School Science Teams *September 2003–June 2005.*

Led the FIRST Robotics, Science Bowl, and Oceanography Bowl teams at Catlin Gabel High School. Formed the Science and Oceanography Bowl teams and led study sessions.

President of MIT Assassins' Guild *May 2008–present.*

Managed the five-person governing council of MIT's live-action roleplaying society, a club with over a hundred active members. Negotiated group safety regulations with MIT administrators and campus police.