

Call for Research Assistants

POSITION: Opening Gateways Research Assistants

About us

Have you ever wanted more, FREE, high quality resources to help you learn outside of class? There's a new initiative on campus – Opening Gateways – to create such materials, called open educational resources (OERs), and we would like you to be part of our team. Guided by research about just how it is that students learn mathematics, we are developing OERs such as supplementary videos, real-world applications, and instant feedback enabling WeBWork assignments for gateway mathematics courses. The materials we create will be freely available to everyone to help support students both at City Tech and all over the world.

So— come be part of the education revolution: open digital access to the highest quality learning materials for everyone! As part of our development team you will gain valuable experience integrating creative thinking and teamwork with applying technical skills to solve real-world problems. If you enjoy putting in work where it matters, paying careful attention to the details, and are comfortable working independently and as part of a team, you are what we're looking for.

Internship Option

If your major has an internship requirement, it may be possible for you to fulfill that requirement through your participation in the Opening Gateways Research Assistants program (indicate your interest on the application form).

Duties and Qualifications

We seek to build a team of research assistants with a variety of different, but complementary, skills. The positions (OG Research Assistants 1-4) are described on the next page. If you wish to apply for more than one position, you need only complete a single application. The following requirements apply to all positions:

- Minimum of 30 credits completed (Upper Sophomore)
- Good academic standing (3.0 GPA or higher)
- One or more faculty references from relevant disciplines

Program Details

The OG Research Assistants program for Spring 2016 will run from February 1 through May 15. Research Assistants must be available 7 hours per week, compensated at a rate of \$15/hour. *Note that the OG Research Assistants program will continue through Spring 2020. Following the initial (Spring 2016) semester, appointments will be by academic year (Fall and Spring). Continued participation may be available for outstanding participants.*

Deadline: Monday, November 30, 2015

Please complete the application form online: <http://tinyurl.com/OGResearchAssistants>

If you have questions, don't hesitate to contact the Opening Gateways OER team, Professor Andrew Parker (kparker@citytech.cuny.edu) and Professor Sheila Miller (smiller@citytech.cuny.edu).

OG Research Assistant 1: Coding Specialist

<i>Qualifications</i>	<i>Duties</i>
<ul style="list-style-type: none"> • B or better in MAT 1375 Precalculus • B or better in CST 2403 C++ Programming I (or equivalent programming experience in C++ or other major programming language) • Work sample: a sample program (source code, clearly commented) • <i>Preferred:</i> Familiarity with the Perl programming language 	<ul style="list-style-type: none"> • Interpreting and revising existing code for online homework problems (in the online homework system WeBWork) • Coding hints and solutions for existing problems • Coding new online homework problems • Working closely with Math Content Specialists to ensure that hints, solutions and problems are implemented correctly in the WeBWork system

OG Research Assistant 2: Math Content Specialist A

<i>Qualifications</i>	<i>Duties</i>
<ul style="list-style-type: none"> • B or better in MAT 1375 Precalculus • B or better MEDU 2010 Technology in Mathematics Education • <i>Preferred:</i> Peer Leader training • <i>Preferred:</i> B or better in MAT 1475 Calculus I or MAT 1575 Calculus II • We are looking for a candidate who can create clear step-by-step solutions to MAT 1275 College Algebra and Trigonometry exercises • Work sample: a lesson plan or project 	<ul style="list-style-type: none"> • Checking validity of online homework problems • Creating useful hints and thorough solutions for existing online homework problems • Drafting new homework problems to be coded • Working closely with Coding Specialist to ensure that hints, solutions, and homework problems are implemented correctly in the WeBWork system

OG Research Assistant 3: Math Content Specialist B

<i>Qualifications</i>	<i>Duties</i>
<ul style="list-style-type: none"> • B or better in MAT1475 • Excellent research skills (use of library and online resources, organized and diligent about attribution) • Knowledge of and interest in applications of mathematics to other STEM fields • <i>Preferred:</i> B or better in MAT 1575 Calculus II • Work sample: a lesson plan or project 	<ul style="list-style-type: none"> • Researching relevant applications of MAT 1275 content in other STEM fields • Development of projects using STEM applications of MAT 1275 content • Working closely with Video Production Specialist on creation of supplementary materials

OG Research Assistant 4: Video Production Specialist

<i>Qualifications</i>	<i>Duties</i>
<ul style="list-style-type: none"> • B or better in all of the following courses: <ul style="list-style-type: none"> - COMD 2320 Film & Video Production - COMD 3521 Motion Graphics I - COMD 3620 Broadcast Design I • Work sample: a sample video • <i>Preferred:</i> ENT 3290 Digital Video Camera 	<ul style="list-style-type: none"> • Filming instructional content • Editing instructional and project video • Working closely with Math Content Specialist B on the creation of supplementary video materials