

**Job Description**

**Teaching Fellow for Explore Engineering Innovation - Online**

**Course Description:**

EEI is a pre-college program offered by the Johns Hopkins Whiting School of Engineering and is designed to give students a significant understanding of engineering, allowing them to make informed college and career decisions.

Explore Engineering Innovation is based on an introductory engineering course taught to undeclared freshmen engineering students at JHU. EEI covers a range of fundamental engineering topics including materials science, computer science, civil, mechanical, and chemical engineering. The course includes lectures but focuses on hands-on lab experiments and group data analysis. Graded coursework includes lab reports, homework assignments, a group presentation, and a design project. Students have the opportunity to earn three credits from Johns Hopkins University. Ultimately, the goal of the course is to expose students to engineering principles, allow them to apply the math and science they learn in high school to solving real world problems, and to help students develop critical thinking skills.

**Teaching Fellow Description:**

We are looking for Teaching Fellows who understand, appreciate, and can apply an instructional style that emphasizes the process of problem-solving rather than memorizing material. The object is to engage students by getting them to think and participate rather than being lectured to. Each EEI class has a broad range of 16-24 students with diverse backgrounds and Instructors must be prepared to accommodate a multitude of learning styles. Finally, the Teaching Fellow must be able to engage, encourage and excite the students.

Qualified candidates will have a Master’s or Bachelor’s degree in a science, technology, engineering or math discipline, 3+ years of experience as a high school teacher in a STEM discipline, excellent classroom management skills, and knowledge of Algebra II and Trigonometry. Candidates with degrees in engineering are especially encouraged to apply. It should be noted that each EEI class is taught by a team comprised of a Teaching Fellow and an Instructor who is a PhD-level engineer with college teaching experience. The Instructor is the lead teacher when it comes to delivering course content.

**Explore Engineering Innovation Online Course Dates:**

In 2023, the course will be offered June 26 to July 28, Monday through Friday. Each class will meet synchronously for a single 3-hour block at the same time each day. The synchronous class meeting will occur during one of the following time intervals: 9am – noon, 2-5pm, 7pm-10pm (all Baltimore local times).

**Teaching Fellow Responsibilities:**

Responsibilities of Teaching Fellows include but are not limited to:

* Teaching Fellows must be present and available during the entire course. This includes the daily synchronous 3-hour session as well as time to coordinate with the teaching team, grade student submissions, and hold occasional study sessions.
* Teaching Fellows must be prepared to spend time independently to review course materials and complete the online training program prior to the first day of the course.
* Teaching Fellows must be comfortable with the course material and be able to relate the curriculum to high school students.
* Teaching Fellows must work with the Instructor to develop a sense of community for the high school students participating in the class.
* Teaching Fellows must be able to assist students remotely as they conduct the various activities throughout the course.
* Teaching Fellows must work with the Instructor to monitor the discussion boards and answer student messages in a timely manner, typically less than 24 hours.
* Teaching teams must arrange for at least three study session hours each week that are hosted by one member of the team. At least one of these hours should be held by the Teaching Fellow. The study session hours should be scheduled so that all students may participate in at least one hour each week.
* Teaching Fellows must be available for supplementary instruction when requested by a student outside of the synchronous session.
* Teaching Fellows may create, as needed, additional videos to act as supplemental material to clarify/demonstrate the lab set up and/or to fill in any instructional holes that may arise.
* Teaching Fellows will assist Instructors and ensure that students receive their graded assigned work promptly – within 1-2 days of the assignment due date – and provide detailed feedback to students so that they are able to learn from the activity and improve their future performance.
* Teaching Fellows will assist Instructors and ensure that grades are posted to the learning management system in a timely manner.
* Teaching Fellows must ensure that child safety protocols are upheld.

**Contact:**

If you are interested, please email us at ei@jhu.edu for more information. The job will be posted on the JHUJobs website, <https://jobs.jhu.edu/> in early 2023.