Job Posting – Casual Part-Time Position

Overview of Position

The Centre for Climate Science and Engineering (CSE) is planning to develop a new course that will be offered to University of Toronto Graduate and Undergraduate students. Applicants are invited to lead in the development of this course, which will involve collaborating with the CSE executive team to develop the course structure and associated course material. The course is intended to act as an advanced overview/introduction to topics at the intersection of Engineering and Climate Change. Potential topics include: 1) Climate Science, 2) Atmospheric Physics, 3) Building Science, 4) Transportation, 5) Structures, 6) Sustainability, and 7) Greenhouse gas (GHG) Mitigation Strategies. Following the completion of this development position, the intended start date for the course is Summer or Fall 2021. The preferrable candidate will also teach the first offering of the course as part of a separate contract.

Description of Duties

The successful applicant will be responsible for the following:

- Collaborate with CSE executive team to create course syllabus, including learning outcomes
- Develop course schedule, assignments and lecture material (e.g. slide deck or detailed lecture notes, etc.)
- Coordinate with CSE executive for deliverables. All deliverables become the property of the CSE.

Compensation

Pay will be commensurate with experience; Minimum pay for this position will be $4,400.

Qualifications

Required qualifications

- Graduate degree in Engineering, Natural Science, or equivalent combination of education and work experience
- Experience in climate science or atmospheric physics
- Familiarity with at least one (and preferably more) of the following: building science, transportation, structures, infrastructure systems, and sustainability/GHG mitigation.

Experience with the following is a plus:

- Familiar with teaching methods
- Course design/development
- Integrated assessment models
- Building energy modelling
- Energy systems modelling
- Life cycle assessment
- Climate risk analysis

Application Instructions

All individuals interested in this position should submit a single PDF file consisting of a cover letter, detailed CV, and the names and email addresses of three references. Your cover letter should explain both your interest in the position and your most relevant experience. Preliminary ideas for the course are encouraged, but not required. The application should be submitted to the CSE Manager, Jamie Fine (cse.civmin@utoronto.ca), by the closing date. Please use the subject line **Application for CSE Course Development Position**.

Closing date: November 13th, 2020. The search will continue until the position is filled.

Supervisor: Prof. Daniel Posen

Expected Start Date: Immediately, or as available.

Term: 4-months

Time Commitment

Flexible schedule; exact hours to be determined

Preliminary Course Description

Climate change is a complex problem that requires a holistic solution. This topics-based course will provide an introduction to the different facets of climate science, along with an overview of how a variety of engineering subjects relate to climate change. An overview of climate models and their limitations, are covered to set a foundation within the course. Topics that are covered include atmospheric physics, building science, transportation, structures, sustainability, and GHG mitigation strategies. Graduates of this course will have an understanding of the climate impacts of different design decisions in a variety of projects.

Overview of CSE

The Centre for Climate Science and Engineering (CSE) is part of the Civil Engineering department at the University of Toronto. We are a multi-disciplinary research and education centre that was established in 2019 and are supported by the Dean's Strategic Fund from the Faculty of Applied Science and Engineering. At the CSE, we focus on the intersection of climate science, engineering, and policy. We aim to mitigate and adapt to the impacts of climate change through research on energy, air quality, GHG emissions, building structures, and transportation.

For more information about the CSE, including our team and research, please visit: https://csedep.ca.

Commitment to Diversity

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous /

Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.