Teaching Opportunity

Open Learning and Educational Support (OpenEd), University of Guelph is recruiting for an instructor with a passion for teaching, and the academic knowledge and experience to facilitate the online course Introduction to Data Science, one of three courses offered in the Data Science Certificate.

Position Description

We are looking for an instructor to facilitate the Introduction to Data Science course in the Fall 2019 semester. The course begins on Monday, September 16 and concludes on Sunday, November 10, 2019.

We provide our students with an engaging, relevant learning experience where they can immediately apply the acquired skills and concepts learned in the course towards various sectors—including healthcare, insurance, finance and marketing. In this course, students will learn about the practice of data science, including data cleaning, the data lifecycle and data processing. Students will also learn how to use statistical methods and R programming language to analyze data sets.

As an OpenEd instructor, you are required to facilitate the instruction and learning of the current course using the tools available in the course website, moderate online discussions and engage students by providing discussion prompts and asking questions, provide support material, and regularly interact with students through the course announcements and discussion forums to deliver an engaging learning experience.

Course Details

Description

Organizations need to find ways to extract and analyze all sources of data to make informed decisions. This course provides an overview of the practice of data science with an emphasis on data cleaning, the data life cycle, and data processing. Real-world and fragmented data will be examined in an effort to turn data into information. Students will learn how to use R programming language to ingest and clean data, and analyze it to uncover and communicate those insights. Experiential learning activities combined with hands-on learning practice sessions, will provide participants with practical skills in coding and data cleaning.

Learning Outcomes

Upon successful completion of this course, students will be able to:

- Define and describe the concepts of data science
• Explain the role of a data scientist in the real-world environment
• Outline the various phases of the data science lifecycle: data management, analysis and visualization
• Apply sound principles and practices of data manipulation, validation, and transformation leveraging R programming
• Explore data analysis techniques such as correlation, scatterplots, cross-tab analysis, distribution of data, and outlier analysis
• Program at a basic level using R programming language
• Deploy and communicate findings to a non-technical audience descriptively and visually

Course Format

The Introduction to Data Science course is a cohort-based, non-degree credit course. The course is eight weeks in length, and delivered entirely online through the University of Guelph’s learning management system (Brightspace by D2L). The course is fully facilitated by an instructor, and all students begin and end the course together.

Responsibilities

• Encourage student learning by creating a supportive online community
• Establish a presence in the online classroom and communicate effectively with students
• Share real-world experiences and provide examples that demonstrate your expertise in the topic area and meet the needs of the learners currently taking the course
• Provide feedback to students by engaging in online discussions and answering questions
• Working from the existing course, complete a review and provide revisions for the course outline, materials list, and course website
• Grade all assignments and quizzes following the rubric/grading criteria in the course outline and provide appropriate feedback on submitted work

Qualifications

• A university degree from an accredited institution with expertise in the subject area
• At least three years’ work experience in data science with direct knowledge analysis, mining, linear regression, statistical methods and programming using R
• Exceptional written communication skills including the ability to effectively communicate with students using tools such as email, Skype and web-conferencing
• Teaching experience in an online environment—you show a dedication to teaching and learning, and are committed to quality teaching and delivering courses online
• Previous participation in an online course as a student—you have first-hand experience as a student in an online class
• A commitment to meeting timelines—you can balance the competing priorities for your time and ensure they do not interfere with delivering the course
• A level of confidence with computer technology and the ability to master a learning management system—you have the ability and desire to learn the software required to successfully facilitate an online course
• Access to the internet and computer technology to participate in the course, including access to audio and video equipment and software—you have the equipment to participate and facilitate an online course successfully

To Apply

If you are interested in this position, please respond by sending a resume/CV with a cover letter that outlines your education and experience, how you meet the stated qualifications, and why you want to teach in this online continuing education course.

Resumes must be submitted by **Monday, July 1, 2019** to:

Jessica Martin  
Open Learning and Educational Support  
University of Guelph

[Email Jessica Martin](mailto:Jessica.Martin@uoguelph.ca)

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**Continuing Education at OpenEd**

Continuing Education at OpenEd provides innovative, high-quality professional development programs that reflect the unique teaching expertise and research strengths of the University of Guelph. We offer over 100 courses delivered to students in 26 countries, creating a network of learners who bring a rich, diverse cultural experience to our courses and programs.