April 17, 2018

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Dear Sir or Madam:

I would like to submit a proposal to teach an Introduction to Python Programming course for the 2018 UNLV STEM Summer Camp. Python is widely used as an introductory programming language for students, and it is an industry standard among the scientific community. The most recent TIOBE Index cites Python as one of the top 5 most-used programming languages.

My proposed course would follow a common path for teaching introductory programming. Starting with the basics of input and output, variables and data types, and arithmetic operations, students would progress to conditional logic, repetition structures, aggregate data types, functions, and finally object-oriented programming. Along the way there will be challenging programming assignments for each topic designed to give the students hands-on practice in applying the concepts covered. The course will culminate with a comprehensive assessment exam to give the students an idea of where they stand with respect to the material. The attached syllabus describes the course in more detail.

Ideally the course will be taught in a computer lab, and I will work with the STEM Summer Camp coordinator to secure lab space. The lab environment will allow the students to follow along with practice exercises and examples in class: the general flow for each class period will be a short lecture on a specific topic, then a guided lab exercise that illustrates that topic.

In conjunction with teaching this course in a lab, a lab monitor is preferred to assist in helping individual students' questions during the lab exercises. The Computer Science department typically employs upper-level undergraduate students as such, and a stipend of \$1500 seems appropriate for this summer camp. See the attached resume for details about Jennifer Lee, who is my choice to fill this role.

I look forward to the opportunity to teach high-achieving middle and high school students. I believe this course will successfully illustrate some of what UNLV, the College of Engineering, and the Department of Computer Science have to offer, and I am excited to see the results!

Sincerely,

// signed

Guymon Hall Lecturer