Job Title: Student Assistant, Web Developer (part-time) Closing Date: March 31, 2013

Qualifications: Enrolled in CSULA computer science graduate program, web development/programming skills

Payment Schedule: Spring 2013 (April 2, 2013 – June 30, 2013) for maximum 200 hours (\$4000 maximum). Payment contingent upon completion of activities listed below.

Employer: Dr. Tammy Chan, Assistant Professor in Mechanical Engineering (tylchan@calstatela.edu)

Project Description: On-line Interactive Textbook on Mechanical Engineering Thermodynamics The focus of this project is to publish an on-line, interactive textbook on thermodynamics to replace expensive course textbooks, enhance student learning with technology-based web and software tools, provide a template for on-line publishing of faculty course lectures/notes/knowledge, promote CalStateLA faculty and staff talent, and assess the effectiveness of web-based technology in engineering education. Unique features of this on-line text include regularly updated contemporary engineering topics directly affecting our community, sample quizzes/exams and EXCEL calculation spreadsheets to augment student learning, interactive cross-reference links relating important engineering concepts, student/user feedback for continuous improvement, and assessment tools to track usage and student learning outcomes. CalStateLA students, alumni, staff, and faculty will have free life-long access. Non-CalStateLA users will be charged a fee to access the on-line text. The revenue generated in this manner will help sustain this project by paying for support personnel to maintain and update the content and features.

The minimum activities required of the Student Assistant, Web Developer (part-time) to establish the major features of the on-line textbook are to:

- 1. Develop the "look" of the website and layout of features and content
- 2. Upload slides and content (already available) provided by Dr. Chan
- 3. Digitally draw and upload figures and graphs provided by Dr. Chan
- 4. Set up cross-links to content among different chapters as provided by Dr. Chan
- 5. Track number of users, set up surveys/feedback for assessment
- 6. Work with ITS support staff to set up secure protocol to accept payment from non-CSULA users
- 7. Work with ITS support staff to set up website and troubleshoot any website issues

8. Design for minimal maintenance and easy uploading capabilities for Dr. Chan to frequently update content

9. Meet once a week by teleconference (less than 1 hour) with Dr. Chan to report progress and discuss issues

Please email using your myCSULA userid email account to Dr. Tammy Chan at tylchan@calstatela.edu the following information with subject heading: Web Developer, Student Assistant (Part-Time) On-line Thermodynamics Textbook

- 1. Resume
- 2. Contact information for three professional references
- 3. URL links of websites with layouts that you like and reflect your style/preferences