San Bernardino Valley College

DISTANCE EDUCATION ADDENDUM

COURSE ID:	**ELEC 218**
DEPARTMENT:	**Electrical/Electronics**
SUBMITTED BY:	**Anthony S. Ababat**
DATE SUBMITTED:	**6/30/20**

For additional resources on completing this form, please visit the DE Website:
www.valleycollege.edu/onlinefacultyresources

1. **Please select the distance education method that describe how the course content will be delivered.**
    Check ALL methods that will be used for offering this course, even if previously approved.
    - ☐ FO – Fully Online
    - ☒ PO – Partially Online
    - ☐ OPA – Online with In-Person Proctored Assessments
    - ☐ FOMA – Fully Online with Mutual Agreement

2. **In what way will this course, being offered in distance education format, meet the needs of the campus?**
    (Ex: Student Access, Campus Strategic Plan, Campus Mission Statement, Online Education Initiative (OEI), Student Equity, Student Needs). Please be specific.

Student needs and OEI (Online Education Initiative)

3. **Will this course require proctored exams?**
    - ☒ No
    - ☐ Yes - If yes, how?

4. **How will the design of this course address student accessibility? Are you including any of the following?**
    - ☒ Captioned Videos
    - ☒ Transcripts for Audio Files
    - ☒ Alternative Text for Graphics
    - ☒ Formatted Headings
    - ☐ Other – If other, please explain.

5. **Provide a specific example of how the instructor will provide synchronous office hours for distance education students? (Ex: Online Conference Tool, Cranium Classroom, Zoom, Pisces, Skype, etc.)**

> **The instructor will provide regular scheduled synchronous office hours using Online Conference Tool, Microsoft Office Teams, and Zoom. Instructor will also develop an asynchronous material through Canvas for this purpose since it will be a Hybrid form.**

6. **Provide a specific example of how this course's design ensures regular and effective instructor-student contact? (Ex: Threaded discussion forums, weekly announcements, instructor prepared materials, posting video and audio files, timely feedback on exams and projects, synchronous online office hours, synchronous online meetings, synchronous online lectures, etc.)**

> Instructor prepared materials combination of synchronous and asynchronous types, threaded discussion forums, weekly Announcements and Assignments. If needed, conduct online meetings and online lectures.

https://www.valleycollege.edu/online-classes/faculty-resources/reg-effective-contact.php

7. **Provide a specific example of how this course will ensure regular and effective student-student contact?**
   (Ex: Threaded discussion forums, assigned group projects, threaded discussions, Note bowl, peer-to-peer feedback, synchronous online meetings, etc.)

> Students will be assigned a laboratory activity to perform at the campus and following a social distancing guideline. This course will also include threaded discussion forums, assigned group projects, and Simulation software designed specifically for ELEC-218 course or Simulation Software such as Logixpro. It will also include emulator software such as MicroLogix 1000, RS Links, and Emulator 500

8. **Describe what students in this online version of the course will do in a typical week on this class. Include the process starting after initial log in.**

> Typically, the students will read the Module assigned every week. Then answer the discussion topics/s. Work on the Weekly assignments and answer the quiz given in that week. In addition, they will also perform Lab Simulation activity programming to build the skills required for this course. Then the students will perform the actual laboratory work on campus following social distancing guidelines and procedures.

9. **Provide a sample statement that could be included in the syllabus for this course that communicates to students the frequency and timeliness of instructor-initiated contact and student feedback.**

> The frequency and timeliness of instructor-initiated contact and student feedback in this ELEC-218 class can be implemented by weekly monitoring of student's performance and checking on the student's analytics through Canvas. It will be implemented in DE format as follows:
> - The presentation or materials in an online format and other appropriate media (such as audio, video, PPT slides, Word and PDF files will be check for accessibility.

- A good design for weekly assignments and projects that promote collaboration among students.
- Model course netiquette at the beginning of the semester with instructor-guided introductions.
- Pose questions in the discussion boards which encourage various types of interaction and critical thinking skills among all course participants.
- Monitor content activity to ensure that students participate fully, and discussions remain on topic.
- Create a specific forum for questions regarding course assignments. (e.g. "Got a Question?")
- Guided practice through Simulation and On-Campus assigned laboratory activities.
- Testing and debugging PLC Programs

10. Provide a specific example of how regular and effective student-student interaction may occur in this online course.

The effective student-student interaction may occur in this online course by providing socially focused exchanges such as a guided instruction, positive and healthy exchange of information, and participation in activities designed to increase a social rapport. For example, the collaborations and discussion among students in performing their labs on campus and building up the required Program to successfully implement the assigned laboratory work. Discuss among themselves the appropriate strategy to perform the required program as well as the required troubleshooting in situations that the PLC Program will not initially work as expected.

11. Provide a specific example of how regular and effective instructor-student interaction may occur in this online course.

An effective instructor-student interaction implemented in this ELEC 218 class will be to encourage students in participating in discussions, providing students with feedback, listing the office hours availability and consistent communications. As a student, they can expect to interact with their instructor throughout the week, beginning with the weekly announcement posted each Sunday. Students should plan on checking Canvas at least three times during the week – once to post initial assignments, once to post feedback to other assignments, and responding to your peer and instructor's feedback. This can include:
- Solving and working electrical tasks using the Logix Pro Simulation Software
- Follow up reminders or previews of upcoming assignments
- Comments on or a summary of a current discussion
- General comments on how the class did on a test or assignment
- Remediation on a misunderstood or muddy learning point, based on student work
- A link to a relevant video or article
- Perform the required laboratory work using their laptop along with the required Lab equipment such as PLC MicroLogix 1000 or RSLogix 500
- Instructor will assist and evaluate students work after performing each laboratory activity and will provide feedback and demonstration to successfully implement the required laboratory tasks.

12. Does this course include lab hours? ☐ No   ☒ Yes – If yes, how are you going to accommodate the typical face to face activities in an online environment?

The laboratory will be implemented by following the required social distancing guidelines and assigned approved schedule to perform the required weekly laboratory work. The students will use the laptop assigned to them along

with the software and the PLC equipment needed for laboratory work. Each student will have their own laptop and will work individually to prove that their program will work using the PLC equipment and pre-built customize industrial application such as garage door opener and other interesting Automation projects.

13. **How will you accommodate the SLO and Course Objectives in an online environment?**

Through weekly assessments, quizzes, and submission of laboratory work. In this class, students are expected to be able to demonstrate their ability to correctly explain the common functions and operation of a DC motor and apply the general principles to drum switches and electronic programmable controllers in accordance with the correct technical reference data and pass a written exam with a minimum score of 70%. Explain the function of Ladder Logic diagrams and how to interface the switches, sensors, and field devices with the PLC I/O terminals. Students are also expected to demonstrate their ability to construct ladder diagrams, program these electric control circuits and troubleshoot any problems encountered using the proper technical data to determine if the problem is fixed with 100% accuracy.

14. **Are modifications needed to SLOs or Course Objectives in order to teach this course in the online modality?**

☒ **No**   ☐ **Yes – If yes, please explain the changes needed.**

(It is advised that if you are changing course content or objectives that you speak with the Curriculum Co-Chair or Articulation Officer for guidance moving forward.)

To be completed by a member of the Curriculum Committee Review Team:

CURRICULUM CHAIR REVIEWED:		☐ YES ☐ NO
DE REVIEW:		☐ YES ☐ NO
CURRICULUM COMMITTEE DIVISION REPRESENTATIVE REVIEWED:		☐ YES ☐ NO