

| | COURSE ID: | ELEC 101 | | | |
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| | 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/ | <u>onlinefacultyresources</u> | | | |
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| 1. | Please select the distance education method that descri | be 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) | | | | |
| 2 | Will this course require proctored exams? | | | | |
| J . | No No | | | | |
| | ☐ Yes - If yes, how? | | | | |
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| | | | | | |
| 4. | How will the design of this course address student access | sibility? Are you including any of the following? | | | |
| | ☑ Captioned Videos | | | | |
| | ☑ Transcripts for Audio Files | | | | |
| | ☑ Alternative Text for Graphics | | | | |
| | □ Formatted Headings | | | | |

 \Box 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

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, Notebowl, 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-101 course or Simulation Software for Industrial Eqpt form Festo.

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 be performed Lab Simulation activity as their option before they will perform the real hands-on exercise intended for Laboratory portion.

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-101 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.
- 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 circuit to successfully implement the assigned laboratory work. Discuss among themselves the appropriate strategy to build the circuit as well as the required troubleshooting in situations that the circuit 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 101 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 Simulation Software FESTO
- 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 A Frame Lab Equipment
- 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? \square No | oximes Yes – If yes, how are you going to accommodate the typical face to |
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| 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 three various A-Frame equipment and assigned two students for each equipment. Since the equipment is constructed back-to-back in a metal frame it will accommodate a total of 4 students per equipment. With this procedure we can easily accommodate the number of students that will use our Laboratory equipment from FESTO.



Through weekly assessments, quizzes, and submission of laboratory work. In this class, students are expected to be able to read and understand a relay logic diagram as well as ladder logic diagrams and understand all switch symbols as well as device symbols used in control circuits and systems. Explain the function of Ladder Logic diagrams and how to interface the switches, sensors, and field devices with the PLC I/O terminals. Then be able to calculate and explain mechanical advantage of a mechatronics system comprised of chains and sprockets, belts and pulleys, gears, and fluid power components. With the Simulation software that will accompany this course, students will be very confident when they will perform the real hands-on laboratory work.

| Are modifications needed to SLOs or Course Objectives in order to teach this course in the online modality? No | | | |
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| To be completed by a member of the Curriculu | um Committoo Poviove | v Toom: | |
| To be completed by a member of the curricula | III Committee Keview | Teaiii. | |
| CURRICULUM CHAIR REVIEWED: | | ☐ YES | □ NO |
| DE REVIEW: | | ☐ YES | □ № |
| CURRICULUM COMMITTEE DIVISION REPRESENTATIVE REVIEWED: | | ☐ YES | □ № |