

COURSE ID:	HMDT 064	
DEPARTMENT:	Heavy/Medium Duty Truck Department	
SUBMITTED BY:	Kenny Melancon	
DATE SUBMITTED:	4/30/2020	

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
- 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.

The HMDT 064 course will be offered in both online and Hybrid. A well-supported distance education program will support the college's mission statement and prepare students from diverse background to succeed academically and/or prepare the student to enter the workforce by completing the courses needed to earn a degree or certificate. In addition to the services that distance education provides to our students, DE offers the college an eco-friendly means of maintaining, supporting, and expanding programs through a wide spectrum of educational experiences flexible methodologies, and support services. The online class will incorporate language within the application of the course that will benefit the student that is employed within the industry, so he/she may perform and record by video the lab exercises as part of an assignment at their facility with the permission of the facility for which they work.

HMDT 064 offers hybrid lecture classes and lab classes that allow an appropriate portion of a core class to be offered online. In the Virtual, Augmented and Mixed Reality curriculum content, the student will assess and report on the performance of evaluation and diagnosing of a heavy-duty truck electrical system to manufacturer specifications.

- 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

 \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 send out an announcement every Tuesday and Thursday 1 hr. before the set classroom time so to give the students a chance to ask questions and get clarification on course material. There are a few different ways to complete the synchronous e-learning. The student will be in discussion with the instructor via online chat and/or video conferencing. The discussion will be held in real-time. Another method is instant messaging that allows students and teachers to ask and answer questions immediately. The times for these office hours will be sent to all students in LMS CANVAS announcement with further instructions on how to set up a one on one meeting with the instructor and the student.

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.)

We will have an exciting, informative, and meaningful time together as we explore the exciting dynamics of this topic. The course is an 5-week online course starting in Summer and 8 week course starting in Fall 2020 is constructed in such a way that you will need to research and implement examples within the topic covered, answer end of chapter questions, answer ASE questions, complete a weekly workbook on the chapters reviewed, watch video simulations/videos that are standard within the industry as an example; supplied by Cengage, Medium/Heavy Duty Truck Engines, Fuel & Computerized management systems, this will be in LMS CANVAS as part of the class. Also, with the free Cummins quick serve virtual reality website, (free student access after registration) controlled fuel injection systems electrical diagnostic trouble shooting section, will enforce the understanding and process of diagnostic and repairs to the standard that is acceptable within the industry. https://quickserve.cummins.com/info/index.html

The student will register to the web site, free of charge, access the assigned training module, take the online test then comment on the discussion board in CANVAS to go to discussion board to comment on what you have learned within the chapter, review 3 classmates discussions and reply to each of them with your thoughts and concerns and finally test at the end of each week. There will also be work sheets that will pertain to a lab function to complete by doing research on specific procedures and comment in the discussion board about the procedure you have researched.



 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.)

The LMS CANVAS will be used to strengthen the programs online and hybrid atmosphere. Included with the Virtual, Augmented and Mixed Reality curriculum content there will be many written tests, and several discussions within CANVAS to suffice the need of lab when a lab is not accessible. The full online course which includes Virtual simulations that are used within the industry will require the student to be employed within the industry so he/she may video themselves within the lab area of their shop with shop foreman or master technician reviewing the procedure. When completed the student will upload to LMS Canvas for evaluation by the instructor.

Participation Policy:

Students will show up to class at the assigned time and place by following clear expectations:

They will follow a weekly pattern Monday, Tuesday, Wednesday and Thursday to the equivalent AAR hours calculated within the schedule.

Instructions will be in a clear and detailed manner, leaving no room for confusion or doubt, as to communicate this pattern to the students in the class.

The Summer course is an 5-week course starting 6/1/20 ending 7/01/20. This course is constructed in such a way that you will need to research and implement examples within the topic covered, answer end of chapter questions, answer ASE questions, complete a weekly workbook on the chapters reviewed, go to discussion board to comment on what you have learned within the chapter, review 3 classmates discussions and reply to each of them with your thoughts and concerns and finally test at the end of each week. Lab will consist of a work sheet to do research on specific procedures and comment in discussion about the procedure you have researched.

When the assignment is online the student will demonstrate, by interpretation, the video assigned to the course and establish a strong written conversation in discussion with classmates. After the students submits his/her discussion, he/she must respond to 2 other classmates on the industry safety standards using Personal Protective Equipment (PPE).

In the Virtual, Augmented and Mixed Reality curriculum content, the student will assess and report on the performance of rebuilding and adjustment of a heavy-duty truck suspension and steering system to manufacturer specifications.

The Student, through videos and diagrams of components the student will identify the system design the student will be required to video themselves and upload to LMS Canvas for evaluation by the instructor and apply what he/she has learned into discussion with other classmates.

Example: watch video simulations/videos that are standard within the industry as an example; supplied by Cummins watch video simulations/videos that are standard within the industry as an example; supplied by Cengage, Medium/Heavy Duty Truck Engines, Fuel & Computerized management systems, this will be in LMS CANVAS as part of the class. Also, with the free Cummins quick serve virtual reality website, (free student access after registration)



controlled fuel injection systems electrical diagnostic trouble shooting section, will enforce the understanding and process of diagnostic and repairs to the standard that is acceptable within the industry. https://quickserve.cummins.com/info/index.html

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.

The student will log into the course via canvas.

There will be a weekly assignment with a rubric that explain the points to be earned with each project within the weekly assignment. Register with the Cummins quick serve virtual reality website, (free student access after registration) controlled fuel injection systems electrical diagnostic trouble shooting section, will enforce the understanding and process of diagnostic and repairs to the standard that is acceptable within the industry. https://quickserve.cummins.com/info/index.html

The student will review the announcement which will have instructions of what is to be covered/ reviewed and/or completed this day or week

The list of assignment for the week include

- 1: End of Chapter questions
- 2: ASE questions
- 3: Matching
- 4. Cummins quick serve web site
- 5. Discussion board
- 6. Weekly Test
- 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.

Hello

Welcome to the Fall 2020 semester!

I am excited you have enrolled in the online course, HMDT 064, Auto/Truck Electrical Systems, for which I will be teaching. We will have an exciting, informative, and meaningful time together as we explore the exciting dynamics of this topic. The course is an 8-week course starting 8/17/20 ending 10/08/20. This course is constructed in such a way that you will need to research and implement examples within the topic covered, answer end of chapter questions, answer ASE questions, complete a weekly workbook on the chapters reviewed, go to discussion board to comment on what you have learned within the chapter, review 3 classmates discussions and reply to each of them with your thoughts and concerns and finally test at the end of each week. Lab will consist of a work sheet to do research on specific procedures and comment in discussion about the procedure you have researched.

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

The student to student interaction will happen 3 times per discussion within each week.



The class lecture will be an online course to be completed within the total hours to be equivalent to 108 hrs. for 4unit class. Every Monday at time noted for class there will be an announcement on Canvas that class has begun.

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

The class will be an online course to be completed within the total hours to be equivalent to 108 hrs. for 4-unit class.

Monday at time noted for class there will be an announcement on Canvas that class has begun. The class will lead off with an ice breaker

A lecture and display a presentation for which all students will have access on Canvas to review.

The lecture and presentation will be recorded for those that missed the initial presentation and lecture.

Tuesday through Thursday, the instructor will make an announcement in Canvas that he/she are online to assist any students that are struggling with their assignment or wish to review the subject matter covered in class.

The instructor will also be reading/reviewing the discussion board Tuesday through Thursday replying to those who commented in the discussion box.

The students will complete the assignments which include:

- chapter questions
- ASE question (The ASE questions will help prepare the students for the nationally recognized ASE certification)
- Matching exercise
- weekly test
- Complete job sheets pertaining to Lab that will consist of exercises that must be completed via research on the subject matter to also include review of videos of the procedure performed by myself or videos supplied by manufacture or a specific produce.
- •

The student will be required to document on the discussion board what he/she has learned from the chapter they read, questions they answered and exercises they completed, the research and reviews of the video's presented to them. Then, after the initial input the student must reply to 3 classmates about their ideas on the subject matter. Grades will be posted weekly. This will total 96 – 108 hrs. of total class time.

Other classes will be hybrid where the student will complete lecture online. This course will be a short term or long-term semester course.

Every Monday at a time noted for class in the catalog the instructor will send out an announcement on Canvas that class has begun.

The instructor will lead off the class with an ice breaker then lecture and display a presentation for which all students will have access on Canvas to review.

The instructor will also record the presentation and lecture for those that missed the initial presentation and lecture.

Monday and Wednesday, the instructor will make an announcement in Canvas that that he/she are online to assist and student that are struggling with their assignment or wish to review the subject matter covered in class. Lecture will total 48-54 hrs. online.



Lab will be 8 weeks in length, held Tuesday and Thursday at the facility for a total of 48 - 54 hours if it's a short-term class. If the class if a full semester the class will be held 1 day a week at the facility to be equivalent to 48 - 54 hrs. of lab.

Students will perform the task at hand to demonstrate how diagnostic procedures and/or repairs are performed. The student will demonstrate the proper safety procedures along with the proper use of tools required to perform a procedure. Meetings will be adjusted as needed by the instructor.

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

The Hybrid course will include lab hours which will be at the facility,

The online course will not be a face to face lab hours but will include lab/job sheets that will be equivalent in hours as lab, with many components that will need to be researched to complete the correct action that is required to be equivalent to that of a specific lab function.

In online course the student will benefit by being employed within the industry and be able to perform the skills needed within the business they are working.

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

The Department will accommodate the SLO and course objectives by use of Rubric that will set the level of accomplishment and the score will provide the success of the student

1. Read electrical diagrams, and diagnostic of electrical circuits

Explanation:

When the assignment is online the student will demonstrate, by interpretation, the video assigned to the course and establish a strong written conversation in discussion with classmates. After the students submits his/her discussion, he/she must respond to 2 other classmates on the industry standards or reading electricala diagrams and diagnostic of electrical circuits.

2. Apply critical thinking and written skills in the diagnose and repair malfunctions in electrical systems and components

In the Virtual, Augmented and Mixed Reality curriculum content, the student will assess and report on the repair and electrical testing of a heavy-duty truck electrical system to manufacturer specifications. EXAMPLE: SBVC partnered with the Cummins Fuel injection systems Manufacturer, students will participate in manufacturer training which mirror the procedures used within the industry. This virtual training is comparable to the standards of hands on training used within the industry for training professional technicians at dealers.



3. Perform electrical repair and diagnostic to manufacturer specifications

In the Virtual, Augmented and Mixed Reality curriculum content, the student will assess and report on the process of repairing and proper procedure and testing of a heavy-duty truck electrical system to manufacturer specifications. Through videos and diagrams of components circuits the student will identify the system design and procedure to properly perform repairs on wiring harness, and apply what he/she has learned into discussion with other classmates. After the students submits his/her discussion, he/she must respond to 2 other classmates about the specific system in the assignment.

The rubric will clearly define the student's knowledge, and his/her ability to provide the accurate material listed that is needed to provide do the process within industry standards. This will in turn describe the student's ability to synthesize many discreet skills using higher level thinking skills and the produce something that asks them to apply what they've learned.

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	
DE REVIEW:	🗆 YES	
CURRICULUM COMMITTEE DIVISION REPRESENTATIVE REVIEWED:	🗆 YES	