

AGENDA

Workforce Education Course Manual (WECM) Advisory Committee

Friday, February 4 | 10 a.m.-1 p.m.

1200 E. Anderson Lane – Board Room. This meeting will be held via teleconferencing. A link to the live broadcast and meeting materials will be available at highered.texas.gov.

1. Welcome, introduction & remarks

Assistant Commissioner Dr. Tina Jackson

2. Consideration and approval of minutes from the October 22, 2021 meeting

Chair, Dr. Olga Valerio

3. Public testimony on agenda items

Chair, Dr. Olga Valerio

4. Coordinating Board update –Perkins, GIPWE, SB64 Cybersecurity Pathway, Reskilling and Upskilling support fund

Assistant Director, Mindy Nobles

5. Professional organizations updates

Representatives, TACTE, TACE, and TACRAO

6. Discussion and possible action on recommendations made by the WECM Renovation Project Steering Committee

Dr. Lesley Keeling-Olson

7. Discussion and possible action on recommendations made by the Course Review subcommittee

Dr. Ronda Dozier

8. Discussion and possible action on recommendations made by the WECM Comments Review subcommittee

Mr. Rob Blair

9. Discussion and possible action on recommendations made by the Special Topics and Local Need course review subcommittees

Ms. Christina Bergvall and Dr. Lesley Keeling-Olson

10. Discussion and possible action on recommendations made by the WECM Protocols subcommittee

Mr. D'Wayne Shaw

11. Discussion of future meetings

Chair, Dr. Olga Valerio

12. Adjournment

Individuals who may require auxiliary aids or services for this meeting should contact Glenn Tramel, ADA Coordinator, at 512.427.6193 at least five days before the meeting so that appropriate arrangements can be made.

All persons requesting to address the Committee regarding an item on this agenda should do so in writing at least 24 hours before the start of the meeting at duane.hiller@highered.texas.gov. A toll-free telephone number, free-of-charge video conference link, or other means will be provided by which to do so.

Weapons Prohibited: Pursuant to Penal Code § 46.03(a)(14) a person commits an offense if the person intentionally, knowingly, or recklessly possesses or goes with a firearm, location-restricted knife, club, or prohibited weapon listed in Section 46.05 in the room or rooms where a meeting of a governmental entity is held, if the meeting is an open meeting subject to Chapter 551, Government Code, and if the entity provided notice as required by that chapter.

If, during the course of the meeting, discussion of any item on the agenda should be held in a closed meeting, the Board will conduct a closed meeting in accordance with the Texas Open Meetings Act, Texas Government Code, Chapter 551, Subchapters D and E. Before any closed meeting is convened, the presiding officer will publicly identify the section or sections of the Act authorizing the closed meeting, including, but not limited to the following sections and purposes:

- 551.071 Consultation with Attorney and 551.129 if such attorney consultation is via conference call
- 551.073 Deliberation regarding Prospective Gift
- 551.074 Personnel Matters
- 551.0821 Confidential Student Information

All final votes, actions, or decisions will be taken in open meeting.

TEXAS HIGHER EDUCATION COORDINATING BOARD
Summary Notes/Minutes
Workforce Education Course Manual Advisory Committee Meeting
1200 East Anderson Lane, Board Room
Austin, Texas
October 22, 2021 10:00 a.m.

A [link](https://www.highered.texas.gov/apps/events/other-meetings/workforce-education-course-manual-wecm-advisory-committee12/) to the webcast of this meeting is available on the CB website at:

<https://www.highered.texas.gov/apps/events/other-meetings/workforce-education-course-manual-wecm-advisory-committee12/>)

1. Call to order

The Advisory Committee convened at 10:10 a.m. Olga Valerio, Committee Chair, called the meeting to order.

The following appointed Advisory Committee members were present:

- | | |
|-------------------------|--------------------------|
| 1. Mary Gallegos Adams* | 11. Linda L. Head* |
| 2. Joe Arrington | 12. Lesley Keeling-Olson |
| 3. Dixon Bailey* | 13. Kevin Morris* |
| 4. Rob Blair* | 14. Gregory Newman* |
| 5. James Chegwiddden | 15. Phillip Nicotera |
| 6. Tom Cox | 16. Terri Nix* |
| 7. Ronda Dozier | 17. Gretchen Riehl |
| 8. Robin Garrett | 18. D'Wayne Shaw |
| 9. Andrew Gregory | 19. Olga Valerio (Chair) |
| 10. Cynthia Griffith* | |

The following ex-officio members were present:

- 20. Christina Bergvall (TACE)*
- 21. Will Fanning (TACTE)

The following members were not present:

- 22. Thera Celestine
- 23. Sara Lozano
- 24. Gaston White (TACRAO)

THECB Staff present:

- Dr. Tina Jackson, Assistant Commissioner of Workforce Education
- Duane Hiller, Manager II, Workforce Education
- Dr. Stephanie Perkins*, Manager II, Workforce Education
- Dr. Sheri Ranis*, Manager II, Workforce Education*

Others present

- Dr. Catherine O'Brien, Consultant, WECM Renovation Grant

*(Attended virtually via Zoom.)

Following the introductions, Dr. Tina Jackson, Assistant Commissioner for Workforce Education, provided an update on workforce education-related work.

2. Election of committee vice-chair and subcommittee chairs

Dr. Robin Garrett nominated Mr. D'Wayne Shaw to the vice-chair position. Mr. Shaw accepted the nomination. After asking for additional nominations and receiving none, Dr. Valerio called the nominations closed. The nomination was seconded by Dr. Ronda Dozier.
Motion passed.

3. Consideration and approval of minutes from the June 23, 2021 meeting

Minutes from the June 23, 2021, meeting were emailed to the committee on October 18. A correction was made to Item 7, which should read, "Dr. Cynthia Griffith did not have anything to report at this time."

A motion to approve the minutes of the June 23, 2021, minutes as corrected was made by Joe Arrington and seconded by James Chegwiddden. Motion passed.

4. Public testimony on agenda items

There was no public testimony provided.

5. Coordinating Board update

Coordinating Board staff provided updates on legislation impacting workforce education, the Perkins grants program, the *Guidelines for Instructional Programs in Workforce Education* (GIPWE), Cybersecurity Pathways, the Reskilling Grants and TRUE program, and the Accelerating Credentials of Value grant program.

6. Professional organizations updates

The representatives from the professional organizations provided their updates.

- TACTE – Will Fanning reported that the TACTE board has scheduled next year's conference for April 6-8, 2022, titled "Back in the Saddle". The conference will be held in-person at the Omni-Southpark in Austin, and two pre-conferences have been planned, one on Perkins and one on WECM and GIPWE.
- TACE – Christina Bergvall reported that the Conference Planning Committee is meeting regularly via Zoom, and the theme of next year's conference is "TACE: An Ocean of Knowledge." The conference will be held in-person on April 20-22, 2022 at the Omni Southpark in Austin. A virtual mini-conference will be held next week to discuss data-driven decision making and best practices with adult learners. TACE will also be asked by the Texas Success Center to present at the upcoming Guided Pathways Institute in November in Dallas; the institute is focusing on CE onboarding and CE-to-CTE Pathways.
- TACRAO – Gaston White was not present to present a report. Information about TACRAO can be found at www.TACRAO.org.

7. Discussion and possible action on recommendations made by the WECM Renovation Project Steering Committee

Dr. Lesley Keeling-Olson provided a summary of the background of the WECM Renovation grant project. The project has just started its second year.

Dr. Catherine O'Brien described the activities of the WECM Renovation project, including three course review workshops that were held recently – Avionics/Airway Management & Operations, Maritime Transportation, and Small Engine Repair & Motorcycle Maintenance. Additional course review workshops for Transportation, Distribution, and Logistics courses are planned for October-December, and course review workshops for Manufacturing, Health Science, Human Services, and STEM courses are being planned for next spring and summer. Facilitator Training Workshops will be held in early spring to prepare facilitators for these workshops.

8. Discussion and possible action on recommendations made by the Course Review subcommittee

The minutes of the WECM Course Revisions Subcommittee meetings held on August 11, September 9, and October 15 were emailed to the Advisory Committee on October 20, along with the course revisions that were made at the course review workshops. Dr. Cynthia Griffith presented seven recommendations to the Advisory Committee:

- a. Approval of the Radio-Television Broadcasting (RTVB) course revisions from the course review workshop held May 4, 2021
- b. Approval of the Fire Science/Technology (FIRS, FIRT) course revisions from the course review workshop held May 18, 2021, with the understanding that the contact hour ranges for the CE courses will be updated to match changes in SCH course contact hour ranges
- c. Approval of the Information Technology course revisions from the course review workshop held June 8, 2021, with the following updates included:
 - ITSC/ITSW: Local Need Course Review recommended writing a new course for Portfolio Development (ITSW 2472); was the course written? (Response, 10/18/21: See "ITSC Portfolio Development.pdf")
 - ITSC 1316/1416 – Max Contact Hours reduced from 144 to 128
 - ITSC 1019/1319 – since ITSC 1419 was archived, the CE contact hour range should be changed to match ITSC 1319 (96 max contact hours)
 - IMED: Contact hour ranges do not match Table 4.1 in the GIPWE. Add a note to GIPWE saying that "actual contact hour ranges for courses may be more limited than the ranges in this table".
- d. Changing of the CIP Code for Homeland Security (HMSY) courses from 44.0401 to 43.0301.
- e. Approval of Small Engine Repair (SMER) and Motorcycle Maintenance (MTRC) course revisions from the course review workshop held July 22, and proposal of a change in the WECM Protocols to state that "institutions may narrow the contact hour range, but may not expand it."
- f. Approval of Aviation (AVIM, AVNC) course revisions from the course review workshop held July 13, 2021
- g. Approval of new NAUT courses written at the course review workshop held July 14, 2021

A motion was made by Robin Garrett and seconded by D'Wayne Shaw to accept the recommendations from the WECM Course Revisions Subcommittee. Motion passed.

9. Discussion and possible action on recommendations made by the WECM Comments Review subcommittee

Rob Blair reported that no WECM comments have been received by the Coordinating Board since the last meeting.

10. Discussion and possible action on recommendations made by the Special Topics and Local Need course review subcommittees

Olga Valerio reported that the SCH LN-ST Course Review Subcommittee met on August 12 and requested clarification about what recommendations the subcommittee should be making regarding Special Topics and Local Need courses, what recommendations the course review workshop teams should be making, and how the two sets of recommendations could be cross-referenced. The concern was that recommendations made at the workshops may not be in alignment with recommendations made previously by the Subcommittee. The request was forwarded to the WECM Renovation Project Steering Committee, which met on August 24 and proposed the following workflow:

1. The Subcommittee reviews LN/ST courses as they come in (monthly or quarterly) and recommends that an existing WECM course (if available) be used or that the course remain LN/ST.
2. The recommendations are reported to the WECM Advisory Committee, conveyed to the college, and saved for the next time the courses are reviewed at a course review workshop.
3. At the course review workshop, the Instructional Specialists receive the subcommittee's recommendations and decide whether to write a new course (if several colleges have submitted the same topic), revise an existing course (if a suitable one is available), or leave the LN/ST course as is.

Christina Bergvall reported on the most recent CE LN-ST course reviews, which were emailed to the Advisory Committee members on October 21. Most courses were recommended to remain as special topics or local need courses. Courses that the committee felt should become new WECM courses are highlighted in yellow, and courses that should be followed up on with the community college point of contact for further discussion are highlighted in pale red. The subcommittee requested clarification about whether they should contact the institutions for clarification, and whether the courses that are recommended for new WECM courses would be tracked for trending. Dr. Valerio explained that only coordinating board staff should contact the institutions with questions about the courses. Coordinating board staff confirmed that the subcommittee's recommendations will be saved and presented at the course review workshops when the specific courses are reviewed.

11. Discussion and possible action on recommendations made by the WECM Protocols subcommittee

D'Wayne Shaw presented the following recommendations from the WECM protocols subcommittee, which were emailed to the advisory committee on October 20 and October 21.

Changes to WECM Protocol No. **03-01-01, "Course Review Workshops":**

Change from

"At all Workshops, a team of Instructional Specialists are led by a workforce education **administrator** who serves as a **mentor** or facilitator"

to

"At all Workshops, a team of Instructional Specialists are led by a workforce education **expert** who serves as a **lead facilitator** or facilitator."

Changes to WECM Protocol No. **04-01, "Workshop Participants: Qualifications, Roles & Responsibilities:**

Change section title from "Mentor/Facilitator" to "Lead Facilitator"

Change description to read as follows:

Qualifications:

- A member of the WECM Advisory Committee. or someone who has substantial and contemporary experience working with WECM workshops.
- Knowledge of WECM Protocols, standards and practices.

Role and Responsibilities:

- Coordinate with THECB WECM Staff in the planning, scheduling, and overall preparation for WECM Workshops.
- Prepare preliminary course review materials, prepare and present the Instructional Specialist Orientation, disseminate course data to facilitators, and coordinate with facilitators on workshop strategies.
- Assists the facilitator and the team when guidance or mediation is needed.
- Deliver final course review material from the teams to THECB WECM Staff.

Add section titled "Facilitator" to read as follows:

Qualifications:

- Community or technical college workforce educator with workforce program leadership experience.
- Previous workshop experience and/or training.
- Knowledge of WECM Protocols, standards and practices.

Role and Responsibilities:

- Review all courses, data, and information related to the team meeting.
- Review and disseminate preliminary course review materials for their team.
- Facilitate and/or document team decisions.
- Deliver final course review material from the team to the lead facilitator or THECB WECM Staff.

Change to WECM Protocol No. **01-00, "Membership and Officers":**

Add the following:

(d) After completion of the presiding officer's term, they will remain in a Past Chair advising position.

A motion was made by Lesley Keeling-Olson and seconded by Terri Nix to approve the proposed revisions to the WECM Protocols. Motion passed.

12. Discussion of future meetings

The next meeting of the WECM Advisory Committee is scheduled for Friday, December 3, 2021. Since the September 15 meeting was postponed to today and some conflicts have arisen with holding the meeting on December 3, the advisory committee agreed to postpone the next meeting until February 4, 2022. The following meetings will be scheduled during that meeting.

13. Adjournment

Chair Olga Valerio adjourned the meeting at 11:46 a.m.

Spring 2022 Workshops (2021-2022 CYCLE)				
	Model 1	Model 2	Non Enough Nominations	
Transportation/Distribution/Logistics	6	10	2	Completed
Manufacturing	9 This cycle.	8	1	
Health Science	22	9		
Human Services	10	1		
STEM	2	1		

Notes

The 2nd is a run with others watching to see how we run everyone. FITs then do the Module 2 and then are ready for Module 1

Date (Wednesday)	Program by Rubric - Manufacturing						
2/2/2022 - Manufacturing Lead Facilitator: Catherine O'Brien	EECT - Telecommunications # of Nominated IS = 2.	INMT/MFGT / Manufacturing # of Nominated IS = INMT 12 / MFGT = 3 Facilitator: Lesley and C. Casparis. FIT: T. Celestine and M. Hopper	OSHT - Occupational Safety # of Nominated IS = 5 Facilitator: D. Shaw. Data Specialist: Emma Canul	ELMT/WIND - Solar/Wind # of Nominated IS = ELMT - 7 & WIND - 1 Facilitator: C. O'Brien and J. Parks. FIT: O. Valerio	FCEL/INCR/INTC - Fuel Cell/Instrumentation # of Nominated IS = FCEL - 0 / INCR - 2 / INTC - 8 Facilitator:- R. Dozier and R. Garrett. FIT: D. Hopes		
2/16/2022 - Manufacturing Lead Facilitator:	Model 2 Workshops (Rubric and Number of College Offering the Program) RBTC - 3, BIOM - 4, QCTC - 2, CETT/SMFT - 4, NANO - 1, WDWK - 2, IRAD - 1, NUCP - 1, IEIR - 1. Duane is contacting the colleges to see if there are any changes needed in the courses. Once we know about changes, these will be scheduled as Model 2s.						
3/2/2022 - Manufacturing Lead Facilitator: Robin Garrett	CPMT/ITSC - Possible need to archive ITSC specific with Manufacturing and replace CPMT - Per Duane.	MCHN # of Nominated IS - Facilitator:	NDTE/WLDG/METL # of Nominated IS Facilitator: L. Keeling-Olson and FIT:	CTEC/PTAC/PTRT # of Nominated IS Facilitator: R. Dozier and FIT:	EEIR # of Nominated IS Facilitator:	HRGY Facilitator: Already Done but needs to be here next cycle	FITS Agreeing to be Facilitator for these workshops after FIT Training. T. Celestine and D. Hopes

Date (Tuesday)	Program by Rubric - STEM						
5/17/2022 - STEM Lead Facilitator: Jeff Parks	ENTC Facilitator:	GISC Facilitator:	Rubrics pending. Facilitator:				
Date (Tuesday)	Program by Rubric - Human Services						
5/24/2022 Lead Facilitator:	CSME/General Facilitator:	CSME/Facial Facilitator:	CSME/Nail Facilitator:	CSME/Beauty Salon Management Facilitator:	BARB/ Barber Facilitator:	BARB/Cosmetology, Barbering, and Nail Instructor Facilitator:	MRTS (Funeral) Facilitator:
5/31/2022 Lead Facilitator: Ronda Dozier	FMLD / CDEC Facilitator:	GERS Facilitator:	DAAC/PMHS/SCWK Facilitator:	CMSW Facilitator:	CHLT Facilitator:		
Date (Wednesday)	Program by Rubric - Health Services						
5/11/2022 Lead Facilitator:	No Workshops but back-up week if needed.						
5/18/2022 Lead Facilitator: Catherine O'Brien	DNTA and DLBT/Dental Facilitator:	DHYG/Dental Hygiene Facilitator:	RSPT/Respiratory Care Facilitator:	SRGT/Surgical Tech Facilitator:	MDCA / Medical Asst. Facilitator:	EMSP Facilitator:	DMSO/DSAE/DSPE/DS VT / Sonography Facilitator:
6/1/2022 Lead Facilitator:	OTHA /Occ Therapy Facilitator:	PHRA /Pharm Tech Facilitator:	PTHA / Physical Therapy Facilitator:	RNSG / Registered Nursing Facilitator:	VNSG / Vocational Nursing Facilitator:	VTHT /Vet Tech Facilitator:	MSSG / Massage Facilitator:
6/8/2022 Lead Facilitator:	No Workshops but back-up week if needed.						
6/15/2022 Lead Facilitator:	SLNG/Sign Language Facilitator:	BITC /Biotech Facilitator:	HPRS/Health Services Facilitator:	MLAB/Medical Lab Facilitator:	HITT/Medical Term. Facilitator:		
6/22/2022 Lead Facilitator: Lesley Olson	CVTT/VIRT / Card Vasc Facilitator:	NMTT /Nuclear Facilitator:	LTCA Facilitator:	ENDT/PSGT Facilitator:	MRMT Facilitator:	CSPD - ALL LN Facilitator:	OPTS / Optical Facilitator:

Cluster	Workshops	Institutional Count	Nomination Info	Workshop Info	Results
Transportation Distribution and Logistics (6 Module 1 Workshops)	Wednesday, October 27: ABRD, AERM, and AUMT				
	ABDR (Autobody/Collision and Repair Technology) - Workshop was not held	21 institutions for	2 nominations for ABDR after first request for nominations. Second request only brought in another 3	This workshop was cancelled. - Per Duane, Good afternoon, Lesley. This is not a sufficient number for holding a workshop. Since the request for nominations was sent out twice and still not enough instructional specialists were nominated, we can only conclude that there is no need to change any of those courses. – Duane Good afternoon, Lesley. Due to the low percentage of nominations and small number of Local Need courses and WECM comments regarding these courses, we will not be holding a workshop at this time. – Duane	
	AERM (Airframe Mechanics; Aircraft Powerplant Tech)	8 institutions for AERM	2 nominations for AERM and second request only brought 1 more.	Hi, I am checking on it. There are 8 institutions that offer AERM and only three institutions nominated instructional specialists. THECB will make the call if 3 out of 8 is sufficient to move forward or if we need a majority representation before we hold a workshop. I hope that provides you some information on why there is a hold-up moving forward. - Lesley	Possible trigger coming because of FAA changes.
	AUMT (Automotive Technology)	43 institutions for AUMT, with duplicates in multi-campus districts	16 nominations for AUMT	This workshop was held accordingly. Catherine was the Lead and Lesley was the Facilitator. The following institutions had an instructional specialist helping with the workshop: Bbirkenfeld1@alamo.edu; carlos.vela@laredo.edu; charris1@kilgore.edu; darryle.burris@hccs.edu; dmcnabb@dccc.edu; dmustain@alvincollege.edu; ewillars@epcc.edu; Hking3@austinctc.edu; jhampton@hillcollege.edu; myarnall@angelina.edu; Tony.A.Lewis@lonestar.edu; Tracy.miller@tccd.edu; pavalos@midland.edu; sboyll@collin.edu	
	Wednesday, November 10: AIRP, CVOP, and DEMR				
	AIRP - Scheduled for 12/1/2021	5 institutions with AIRP Programs	3 nominations	This workshop was held after we received additional nominations. Catherine was the Lead and Lesley was the Facilitator. There was representation from TSTC, Tarrant, and CTC. There are 5 programs offered in te state.	28 courses were reviewed, 14 courses were modified, 3 courses were archived, 24 LN/ST were reviewed and 18 were left as LN/ST. One new course for Drone Certification was written.
	CVOP			Not enough - will not be held.	
	DEMR		10 nominations with 8 participants	This Workshop was held November 10, 2021. Catherine was the Lead and Ronda Dozier was the Facilitator. There were representation from the following colleges: TCCD, Kilgore, El Paso, Laredo, South Texas, Delmar, Midland, & TSTC. miguel.zoleta@tstc.edu ; pavalos@midland.edu; cchilders@kilgore.edu; Aaron.smith@tccd.edu; Kelvin Jones <kjones1@delmar.edu>; Jgarz312@southtexascollege.edu; jose.gamez@laredo.edu; hestra26@epcc.edu	<ul style="list-style-type: none"> They reviewed 31 courses and of those 31 courses, 25 were modified in some way (hours and/or content). They reviewed 4 local needs/special topic courses and all 4 were left as local needs/special topics. No new courses were written.

Course Revision and Archival Subcommittee Meeting

Friday, January 7, 2022

10:00 AM – 11:00 AM

MEMBERS PRESENT: Ronda Dozier (Chair), Andrew Gregory, Robin Garrett

MEMBERS ABSENT: Gaston White

OTHERS PRESENT: Duane Hiller, Tanisha Shorter-Lott

1. The Subcommittee reviewed **AUMT**, **AIRP**, and **DEMR** courses revised at recent course review workshops.
 - a. **DEMR 1x10 “Diesel Engine Testing and Repair I” and DEMR 2x12 “Diesel Engine Testing and Repair II”**: Robin pointed out that the Course Outcomes for DEMR 1x10 and DEMR 2x12 were identical, even though the courses are taught at different levels. She also noted that the outcome is a single sentence with six action verbs, contrary to the model described in the WECM Protocols Manual.
Robin also noted that the outcomes don’t include any mention of “repairs”, even though it is included in the course title and description.
 - Since the Instructional Specialists would need to be reconvened in order to separate the outcomes and clarify additional requirements for the Intermediate Level course (DEMR 2x12), the subcommittee decided to leave the outcomes alone for now.
 - The subcommittee decided to change the outcomes from “reassemble” to “repair/reassemble”, which would still give the institutions the flexibility to determine when the repairs would be taught in the sequence.
 - Since there are several other courses that have identical outcomes for different levels, the subcommittee recommended that a slide addressing this be included in the Facilitator Training.
 - b. **DEMR 1x03 “Basic Driving Skills”**: Andrew pointed out that the Department of Public Safety refers to the CDL as a “Commercial Driver License” (without the -s).
 - The subcommittee agreed to update the course description by removing the s from “Commercial Drivers License”
 - c. **AUMT 2x07 “Hybrid Systems Diagnostics”**: Robin asked whether “BEV” was a familiar term for electric vehicles, since “EV” seems more commonly used. Andrew pointed out that BEV was commonly used in the industry to distinguish battery electric vehicles from hybrid vehicles.
 - d. **AIRP 1x08 “DRONE PILOT TEST PREPARATION” (New Course)**: Robin pointed out that the suggested contact hour range for the course (16-64) was of concern, since the range appears in the “Other Allowable” column of the Range Chart and it seemed unlikely that the same amount of material would be covered in 16 hours at one institution and 64 hours at another. After reviewing the Local Need courses that were considered in determining the contact hour range, it was noted that Houston Community College’s “DRONE APPLIED PROJECT” course, which was the only course submitted for 64 hours, did not really fit the description of the new course. Since the other courses were 16

hours (College of the Mainland) and 24 hours (Howard College), the range of 16-32 hours would cover both courses.

- The subcommittee agreed to change the contact hour range for the new course from 16-64 to 16-32.
 - The subcommittee also agreed to add the name of the exam ("Remote Pilot Certificate Exam") to the description, instead of just "exam".
- e. **AIRP 1x55 "Intermediate Flight"**: Robin noted that AIRP 1355 was archived in order to add AIRP 1155 and asked whether this would have any impact on colleges currently offering AIRP 1355. Since the frequency chart had been consulted at the workshop to verify that AIRP 1355 was not currently being offered, the change was accepted.
- f. Robin also pointed out that several courses still include "demonstrate knowledge" in the course outcomes, albeit with additional words added (such as "demonstrate proficiency in knowledge" or "demonstrate aeronautical knowledge").
- A recommendation was made to include a slide in Facilitator Training that would instruct facilitators to steer the team away from using "demonstrate" in the course outcomes.

With the modifications noted above, the subcommittee recommends approval of the changes made at the AUMT, AIRP, and DEMR course review workshops.

2. The subcommittee will meet regularly after the winter and spring course review workshops in order to review the course changes made. The subcommittee meetings will be scheduled as soon as the workshops are scheduled. (It might be worthwhile to invite Facilitators and Facilitators in Training to attend these meetings as well.)

Air Navigation

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1001	Air Navigation	Active	0	48	128
49.0102	AIRP	1301	Air Navigation	Active	3	48	96
49.0102	AIRP	1401	Air Navigation	Active	4	64	128

Course Level: Introductory

Course Description: Instruction in visual flight rules navigation in the National Airspace System. Topics include, flight computers, plotters, navigation logs, and publications.

End-of-Course Outcomes: Complete flight plans for cross-country flights; demonstrate the use of flight computers; and explain airspace classification as it pertains to the National Airspace System.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Aircraft Science

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1005	Aircraft Science	Active	0	48	128
49.0102	AIRP	1305	Aircraft Science	Active	3	48	96
49.0102	AIRP	1405	Aircraft Science	Active	4	64	128

Course Level: Introductory

Course Description: An introduction to the study of basic sciences in the aeronautical field as it pertains to theoretical and practical application in aircraft construction and design.

End-of-Course Outcomes: Describe the basic aerodynamics involved in flight; discuss the history of aircraft design and its evolution; explain basic flight systems and powerplant design; and list the factors of aircraft flight characteristics and performance.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Aviation Meteorology

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1007	Aviation Meteorology	Active	0	32	96
49.0102	AIRP	1307	Aviation Meteorology	Active	3	48	96

Course Level: Introductory

Course Description: Coverage of meteorological phenomena affecting aircraft flight. Topics include basic concepts of aviation meteorology in the study of temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing, and fog. Also includes analysis and use of weather data for flight planning.

End-of-Course Outcomes: Explain the basic atmospheric processes that produce weather in the atmosphere; identify the weather hazards that pilots will encounter associated with flight; utilize multiple methods to receive and analyze weather data; and explain the use of meteorological information to conduct safe flight.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Flight Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1011	Flight Theory	Active	0	48	128
49.0102	AIRP	1311	Flight Theory	Active	3	48	96
49.0102	AIRP	1411	Flight Theory	Active	4	64	128

Course Level: Introductory

Course Description: Ground school for Federal Aviation Administration Private Pilot Certificate, providing the student with the necessary aeronautical knowledge that can be used for Private Pilot Certification. Topics include principles of flight, radio procedures, weather, navigation, aerodynamics, and Federal Aviation Administration regulations.

End-of-Course Outcomes: Identify aeronautical knowledge areas required for the Federal Aviation Administration Private Pilot Practical Test; demonstrate proficiency in knowledge required by the Federal Aviation Administration for the Private Pilot Written Test.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022 – Recommended for Archival

Introduction To Aviation

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1013	Introduction To Aviation	Active	0	48	128
49.0102	AIRP	1313	Introduction To Aviation	Active	3	48	96
49.0102	AIRP	1413	Introduction To Aviation	Active	4	64	128

Course Level: Introductory

Course Description: A study of the historical development of the aviation industry, including key events in civil, military, and space exploration and an overview of legislation relating to aviation.

End-of-Course Outcomes: Discuss the development of civil and military aviation from balloons to space flight; and recall the historical legislation affecting aviation.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Private Flight

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1015	Private Flight	Active	0	32	112
49.0102	AIRP	1215	Private Flight	Active	2	32	80
49.0102	AIRP	1315	Private Flight	Active	3	48	112

Course Level: Introductory

Course Description: Flight and ground training to prepare student for completion of the Federal Aviation Administration Private Pilot Certificate.

End-of-Course Outcomes: Explain flight maneuvers and procedures; demonstrate private pilot flight maneuvers; perform cross-country flight; and ~~meet~~ demonstrate performance within the guidelines of the Federal Aviation Administration Airman Certification Standards for Private Pilot.

Lab Recommended

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Private Pilot Ground School

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1017	Private Pilot Ground School	Active	0	48	160
49.0102	AIRP	1317	Private Pilot Ground School	Active	3	48	144
49.0102	AIRP	1417	Private Pilot Ground School	Active	4	64	160

Course Level: Introductory

Course Description: Ground school for the Federal Aviation Administration Private Pilot Certificate, providing the student with the necessary aeronautical knowledge that can be used for Private Pilot Certification. Topics include principles of flight, radio procedures, weather, navigation, aerodynamics, and Federal Aviation Administration regulations.

End-of-Course Outcomes: Display the skills necessary for air navigation; explain the aerodynamic factors involved in the operation of aircraft; and ~~meet~~ demonstrate aeronautical knowledge areas required for the Federal Aviation Administration Private Pilot Written Test and the Private Pilot Practical Test; ~~demonstrate proficiency in knowledge required by the Federal Aviation Administration for the Private Pilot Written Test.~~

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Advanced Meteorology

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2031	Advanced Meteorology	Active	0	48	128
49.0102	AIRP	2331	Advanced Meteorology	Active	3	48	96
49.0102	AIRP	2431	Advanced Meteorology	Active	4	64	128

Course Level: Advanced

Course Description: Evaluation of meteorological conditions including weather hazards to flight, techniques for minimizing risk from weather hazards, and aviation weather services.

End-of-Course Outcomes: Identify conditions favorable for the formation of adverse weather; analyze techniques to minimize risk from weather hazards as they affect flight operations; assess weather information from appropriate sources; and explain the theory of weather radar and procedures for using technology for weather avoidance.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022 – Recommend for Archival

Aircraft Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2033	Aircraft Systems	Active	0	48	128
49.0102	AIRP	2333	Aircraft Systems	Active	3	48	96
49.0102	AIRP	2433	Aircraft Systems	Active	4	64	128

Course Level: Advanced

Course Description: Study of the theory, operation, and application of pneumatic, hydraulic, electrical, fuel, environmental, protection, and warning systems. Emphasis on subsystems and control systems.

End-of-Course Outcomes: Summarize the operation of hydraulic, pneumatic, electrical, and fuel systems; explain the operation of aircraft protection and warning systems; and explain aircraft flight control, instrumentation, and navigation systems.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Airline Transport Pilot Flight

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2035	Airline Transport Pilot Flight	Active	0	32	96
49.0102	AIRP	2235	Airline Transport Pilot Flight	Active	2	32	80
49.0102	AIRP	2335	Airline Transport Pilot Flight	Active	3	48	96

Course Level: Advanced

Course Description: Provides the flight training and ground instruction required to meet the Federal Aviation Administration regulations for the Airline Transport Pilot Certificate. Emphasis on achieving the competency to pass the oral and practical exams as prescribed in the Federal Aviation Administration Practical Test Standards.

End-of-Course Outcomes: Perform instrument flight procedures to practical test standards; evaluate aircraft performance charts for flight operations; describe federal aviation regulations as required for airline transport pilots; and interpret meteorological information related to flight operations.

Lab Recommended

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Certified Flight Instructor - Flight

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0108	AIRP	2036	Certified Flight Instructor - Flight	Active	0	48	96
49.0108	AIRP	2236	Certified Flight Instructor - Flight	Active	2	48	80
49.0108	AIRP	2336	Certified Flight Instructor - Flight	Active	3	64	96

Course Level: Advanced

Course Description: Flight and ground instruction required to qualify for the Federal Aviation Administration Certified Flight Instructor. Preparation for the Federal Aviation Administration Airman Certification Standards for Certified Flight Instructor.

End-of-Course Outcomes: Demonstrate commercial level competencies; apply the fundamentals of instruction; analyze and correct maneuvers of student pilots in flight; meet the guidelines of the Federal Aviation Administration Airman Certification Standards for Certified Flight Instructor.

Lab Recommended

CIP Code Description: 49.0108 (Flight Instructor)

Effective Date: September 1, ~~2016~~2022

Commercial Ground School

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2037	Commercial Ground School	Active	0	48	128
49.0102	AIRP	2337	Commercial Ground School	Active	3	48	96
49.0102	AIRP	2437	Commercial Ground School	Active	4	64	128

Course Level: Advanced

Course Description: A study of advanced aviation topics used for Federal Aviation Administration certification at the commercial pilot level. Preparation for the Federal Aviation Administration Airman Certification Standards for Commercial Pilot Certificate.

End-of-Course Outcomes: Calculate advanced aircraft performance; describe systems for complex aircraft; explain the Federal Aviation Regulations that apply to commercial flight operations; and analyze advanced airplane operations; ~~identify aeronautical knowledge areas required for the Federal Aviation Administration Commercial Pilot Practical Test;~~ and demonstrate proficiency in knowledge required by the Federal Aviation Administration for the Commercial Pilot Written Test ~~and the Federal Aviation Administration Commercial Pilot Practical Test.~~

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Commercial Flight

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2039	Commercial Flight	Active	0	48	144
49.0102	AIRP	2239	Commercial Flight	Active	2	48	128
49.0102	AIRP	2339	Commercial Flight	Active	3	64	144

Suggested Prerequisite: Private Pilot Certificate

Course Level: Advanced

Course Description: Flight instruction necessary to qualify for the Federal Aviation Administration Commercial Pilot Certificate. Instruction includes both dual and solo flight training to prepare the student to perform commercial pilot maneuvers. Preparation for the Federal Aviation Administration Airman Certification Standards for Commercial Pilot Certificate.

End-of-Course Outcomes: Explain flight maneuvers and procedures; demonstrate specific flight maneuvers; demonstrate cross-country flight procedures; and demonstrate performance within meet-the the guidelines of the Federal Aviation Administration Airman Certification Standards for Commercial Pilot Certificate.

Lab Recommended

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, 20162022

Advanced Air Navigation

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1041	Advanced Air Navigation	Active	0	48	128
49.0102	AIRP	1341	Advanced Air Navigation	Active	3	48	96
49.0102	AIRP	1441	Advanced Air Navigation	Active	4	64	128

Course Level: Intermediate

Course Description: Skill development in advanced airplane systems and performance including radio navigation and cross-country flight planning. Includes an introduction to instrument flight operations and navigation.

End-of-Course Outcomes: Determine aircraft performance factors based on aircraft charts and graphs; explain radio navigational theory; perform cross-country planning using all available information; and evaluate navigational charts for both visual flight rules and instrument flight rules navigation.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Flight Instructor - Instrument Flight

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0108	AIRP	2042	Flight Instructor - Instrument Flight	Active	0	48	96
49.0108	AIRP	2242	Flight Instructor - Instrument Flight	Active	2	48	80
49.0108	AIRP	2342	Flight Instructor - Instrument Flight	Active	3	64	96

Course Level: Advanced

Course Description: Flight and ground instruction required to qualify for the Federal Aviation Administration Certified Flight Instructor--Instrument Certificate. Preparation for the Federal Aviation Administration Airman Certification Standards for Certified Flight Instructor - Instrument.

End-of-Course Outcomes: Demonstrate instrument and commercial competencies; apply the fundamentals of instruction while in instrument flight; analyze and correct instrument maneuvers of student pilots in flight; and demonstrate performance within meet the guidelines of the Federal Aviation Administration Airman Certification Standards for Certified Flight Instructor-Instrument.

Lab Recommended

CIP Code Description: 49.0108 (Flight Instructor)

Effective Date: September 1, 20162022

Aerodynamics

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1043	Aerodynamics	Active	0	48	128
49.0102	AIRP	1343	Aerodynamics	Active	3	48	96
49.0102	AIRP	1443	Aerodynamics	Active	4	64	128

Course Level: Intermediate

Course Description: Study of the physical laws of flight. Topics include physical terms and the four forces of flight. Aircraft design, stability control, and high-speed flight characteristics are also included.

End-of-Course Outcomes: Analyze the four forces of flight and aircraft design concepts; and explain aircraft stability and control factors in all flight regimes.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Flight Instructor - Multiengine Airplane

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0108	AIRP	2043	Flight Instructor - Multiengine Airplane	Active	0	32	80
49.0108	AIRP	2143	Flight Instructor - Multiengine Airplane	Active	1	32	64
49.0108	AIRP	2243	Flight Instructor - Multiengine Airplane	Active	2	32	80

Course Level: Advanced

Course Description: Flight instruction necessary to qualify for the Federal Aviation Administration Flight Instructor - Multiengine Airplane Rating. Includes combined ground and flight instruction and analysis of flight maneuvers. Preparation for the Federal Aviation Administration Airman Certification Standards for Flight Instructor Multiengine.

End-of-Course Outcomes: Instruct multiengine maneuvers both on the ground and in flight; apply fundamentals of instruction while in flight; and demonstrate performance within meet the guidelines of the Federal Aviation Administration Airman Certification Standards for Flight Instructor Multiengine.

Lab Recommended

CIP Code Description: 49.0108 (Flight Instructor)

Effective Date: September 1, 20162022

Aviation Safety

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1045	Aviation Safety	Active	0	48	128
49.0102	AIRP	1345	Aviation Safety	Active	3	48	96
49.0102	AIRP	1445	Aviation Safety	Active	4	64	128

Course Level: Intermediate

Course Description: A study of the fundamentals essential to the safety of flight. A survey of the aviation industry including decision-making factors, accident reporting, accident investigation, air traffic systems, aircraft technologies, and accident case studies.

End-of-Course Outcomes: Discuss and outline risk mitigation and accident prevention through the discussion of case studies; outline the development of early federal legislation that changed the aviation industry; describe possible aviation hazards; explain the National Airspace System and procedures; describe how data is collected and assessed by the federal agencies; evaluate the risk factors related to flight operations; and summarize safety inspection programs.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Human Factors In Aviation

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1047	Human Factors In Aviation	Active	0	48	128
49.0102	AIRP	1347	Human Factors In Aviation	Active	3	48	96

Course Level: Intermediate

Course Description: Instruction in flight physiology, the decision-making process, pilot health maintenance, psychological aspects of flight, human behavior as related to the aircraft flight deck, and aeromedical information of significance to flight crews.

End-of-Course Outcomes: Describe various aspects of flight physiology; analyze the pilot decision-making process; identify aeromedical factors hazardous to the pilot; and explain basic health maintenance factors.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Instructor Ground School

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0108	AIRP	2049	Instructor Ground School	Active	0	48	128
49.0108	AIRP	2349	Instructor Ground School	Active	3	48	96
49.0108	AIRP	2449	Instructor Ground School	Active	4	64	128

Course Level: Advanced

Course Description: Skill development in the fundamentals of teaching and learning in an aviation- oriented environment. Introduction to the techniques of instruction and analysis of flight maneuvers. Preparation for the Federal Aviation Administration Airman Certification Standards for Certified Flight Instructor.

End-of-Course Outcomes: Demonstrate the fundamentals of instruction through lesson presentations; ~~meet aeronautical knowledge areas required for the Federal Aviation Administration Certified Flight Instructor Practical Test;~~ and demonstrate proficiency in knowledge required by the Federal Aviation Administration for the Certified Flight Instructor Written Test and the Federal Aviation Administration Certified Flight Instructor Practical Test.

CIP Code Description: 49.0108 (Flight Instructor)

Effective Date: September 1, ~~2016~~2022

Instrument Flight

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2050	Instrument Flight	Active	0	48	128
49.0102	AIRP	2250	Instrument Flight	Active	2	48	96
49.0102	AIRP	2350	Instrument Flight	Active	3	64	128

Suggested Prerequisite: Private Pilot Certificate

Course Level: Advanced

Course Description: Preparation for the Federal Aviation Administration Airman Certification Standards for the Instrument Rating.

End-of-Course Outcomes: Demonstrate full and partial panel operations in all flight attitudes, instrument maneuvers and approaches, and air traffic control procedures; display proficiency in chart interpretation and instrument flight planning; ~~meet aeronautical knowledge areas required for the Federal Aviation Administration Instrument Rating Practical Test;~~ and demonstrate proficiency in knowledge required by the Federal Aviation Administration for the Instrument Rating Written Test and the Federal Aviation Administration Instrument Rating Practical Test.

Lab Recommended

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Instrument Ground School

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1051	Instrument Ground School	Active	0	48	128
49.0102	AIRP	1351	Instrument Ground School	Active	3	48	96
49.0102	AIRP	1451	Instrument Ground School	Active	4	64	128

Course Level: Intermediate

Course Description: A study of basic instrument radio and navigation fundamentals used in instrument flight. Topics include a description and practical use of navigation systems and instruments, charts used for instrument flight, and Federal Aviation Administration regulations.

End-of-Course Outcomes: Explain Federal Aviation Administration regulations for Instrument Flight; read and interpret instrument publications; describe the operation of navigation systems; describe the aircraft flight instruments operation; and explain the air traffic control (ATC) procedures and flight physiology related to instrument flight; identify aeronautical knowledge areas required for the Federal Aviation Administration Instrument Practical Test; and demonstrate proficiency in knowledge required by the Federal Aviation Administration for the Instrument Written Test and the Federal Aviation Administration Instrument Practical Test.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Multiengine Flight

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2051	Multiengine Flight	Active	0	16	128
49.0102	AIRP	2151	Multiengine Flight	Active	1	16	48
49.0102	AIRP	2251	Multiengine Flight	Active	2	32	128

Course Level: Advanced

Course Description: Preparation for the multiengine class rating which will be added to a current pilot certificate. Includes explanation and demonstration of all required Federal Aviation Administration normal and emergency operations and procedures. Preparation for the Federal Aviation Administration Airman Certification Standards for Multiengine Add-On.

End-of-Course Outcomes: Explain and demonstrate normal and emergency multiengine maneuvers, procedures, and performance calculations; discuss multiengine aerodynamics; and demonstrate them aeronautical knowledge areas required for the Federal Aviation Administration Multiengine Practical Test.

Lab Recommended

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Practical Dispatching I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2052	Practical Dispatching I	Active	0	48	128
49.0102	AIRP	2352	Practical Dispatching I	Active	3	48	96
49.0102	AIRP	2452	Practical Dispatching I	Active	4	64	128

Course Level: Advanced

Course Description: Study of advanced concepts in weight and balance, performance calculations, avionics, and engine and airplane specifications including Federal Aviation regulations. Preparation for the Federal Aviation Administration Airman Certification Standards for Aircraft Dispatcher Exam.

End-of-Course Outcomes: Explain the regulations applicable to the aircraft dispatcher; compute weight and balance for advanced aircraft; and solve aircraft performance problems; ~~meet aeronautical knowledge areas required for the Federal Aviation Administration Aircraft Dispatcher Practical Test~~; and demonstrate proficiency in knowledge required by the Federal Aviation Administration for the Aircraft Dispatcher Written Test and for the Federal Aviation Administration Aircraft Dispatcher Practical Test.

Licensing/Certification Agency: Federal Aviation Administration (FAA)

Lab Recommended

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Practical Dispatching II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2053	Practical Dispatching II	Active	0	48	128
49.0102	AIRP	2353	Practical Dispatching II	Active	3	48	96
49.0102	AIRP	2453	Practical Dispatching II	Active	4	64	128

Suggested Prerequisite: Practical Dispatching I

Course Level: Advanced

Course Description: A study of the duties and responsibilities required of an aircraft dispatcher. Topics include instruction in Federal Aviation Administration regulations, flight planning, and company operations for both domestic and international operations. Preparation for the Federal Aviation Administration Airman Certification Standards for Aircraft Dispatch Practical Test.

End-of-Course Outcomes: Perform the skills required to dispatch aircraft; and demonstrate the meet aeronautical knowledge areas required for the Federal Aviation Administration Aircraft Dispatch Practical Test.

Licensing/Certification Agency: Federal Aviation Administration (FAA)

Lab Recommended

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Intermediate Flight

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1055	Intermediate Flight	Active	0	48 32	144 80
		11 55	Intermediate Flight	New	1	32	64
49.0102	AIRP	1255	Intermediate Flight	Active	2	48	128 80
49.0102	AIRP	13 55	Intermediate Flight	Active Recommended for Archival	3	64	144

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Suggested Prerequisite: Private Pilot Certificate

Course Level: Intermediate

Course Description: Provides students with flight hours and skills necessary to fulfill cross-country hours required for the Federal Aviation Administration Commercial Pilot Certificate.

End-of-Course Outcomes: Plan and perform cross-country flight necessary for Commercial Pilot Certificate.

Lab Recommended

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Propulsion Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2355	Propulsion Systems	Active	3	48	96
49.0102	AIRP	2455	Propulsion Systems	Active	4	64	128

Course Level: Advanced

Course Description: In-depth coverage of aircraft engine theory and principles of operation of various types of aircraft engines. Topics include propellers, superchargers, engine accessories, controls, and instrumentation.

End-of-Course Outcomes: Compare the engine types and major components; explain the principles of operation for various powerplants; and explain powerplant instrumentation, controls, and accessories.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022

Turbine Aircraft Systems Ground School

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	2057	Turbine Aircraft Systems Ground School	Active	0	48	128
49.0102	AIRP	2357	Turbine Aircraft Systems Ground School	Active	3	48	96
49.0102	AIRP	2457	Turbine Aircraft Systems Ground School	Active	4	64	128

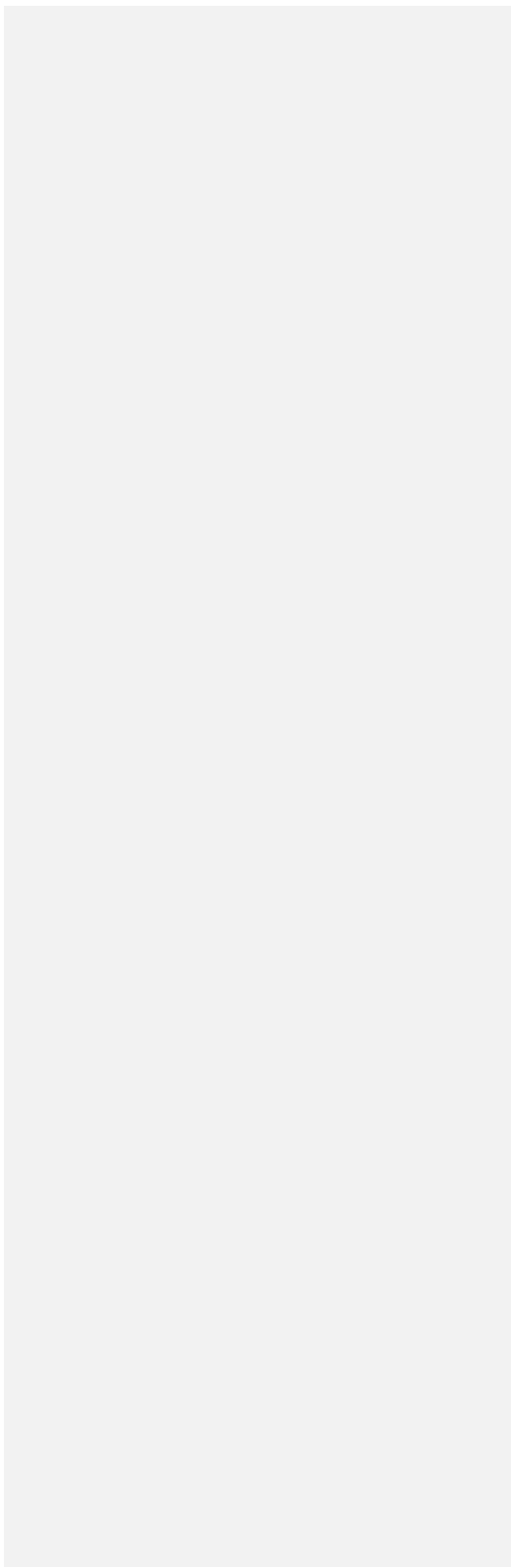
Course Level: Advanced

Course Description: Instruction in the systems of turbine aircraft. Emphasis on the glass cockpit, auxiliary power, aircraft systems, and the first officer's operational role.

End-of-Course Outcomes: Explain the systems of a turbine aircraft; identify the location and use of cockpit controls, instruments, and switches; and differentiate the duties and procedures of an air carrier first officer.

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Effective Date: September 1, ~~2016~~2022 – Recommended for Archival



Drone Pilot Test Preparation

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
49.0102	AIRP	1008	Drone Pilot Test Preparation	In Progress	0	16	32
49.0102	AIRP	1108	Drone Pilot Test Preparation	In Progress	1	16	32

Course Level: Introductory

Course Description: This course is designed to prepare students to better understand the information that will be tested on the Remote Pilot Certificate exam. Includes regulations, airspace classification and operating requirements, weather, loading and performance, and operations specifics.

End-of-Course Outcomes: Demonstrate the aeronautical knowledge specified within the guidelines for Federal Aviation Administration Part 107 Remote Pilot Certificate exam.

Licensing/Certification Agency: Federal Aviation Administration

CIP Code Description: 49.0102 (Airline/Commercial/Professional Pilot and Flight Crew)

Automotive Management

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2001	Automotive Management	Active	0	48	96
47.0604	AUMT	2301	Automotive Management	Active	3	48	96

Course Level: Intermediate

Course Description: Study of human and customer relations, and customer satisfaction in the automotive service industry. Emphasis on management and building relationships between the service department and the customer.

End-of-Course Outcomes: Explain current management practices; describe customer relation techniques; and explain the importance of customer satisfaction in the automotive industry.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Introduction and Theory of Automotive Technology

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1001	Introduction and Theory of Automotive Technology	Active	0	32	96
47.0604	AUMT	1201	Introduction and Theory of Automotive Technology	Active	2	32	80
47.0604	AUMT	1301	Introduction and Theory of Automotive Technology	Active	3	48	96

Course Level: Introductory

Course Description: An introductory overview of the automotive service industry including history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and automobile maintenance.

End-of-Course Outcomes: Explain the history of the automobile and career possibilities of the automobile industry; describe safe, professional, and responsible work practices; describe proper use of shop tools and equipment; list the eight Automotive Service Excellence (ASE) vehicle subsystems; ~~and~~ explain the use of service publications; and identify basic automotive maintenance procedures.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Compression Ignition Engines & Fuel Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2002	Automotive Compression Ignition Engines & Fuel Systems	Active	0	64	160
47.0604	AUMT	2302	Automotive Compression Ignition Engines & Fuel Systems	Active	3	64	144
47.0604	AUMT	2402	Automotive Compression Ignition Engines & Fuel Systems	Active	4	80	160

Course Level: Advanced

Course Description: Diagnosis and repair of modern light-duty automotive compression ignition engines and related systems. Includes the use of advanced engine performance diagnostic equipment.

End-of-Course Outcomes: Explain the operating principles of compression-ignition (CI) engines including fuel, air induction, exhaust and emission control systems; diagnose CI engine systems; and perform service and repair procedures of CI engines including, fuel system, fuel quality, air induction, exhaust, and emission control systems.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~ 2022

Automotive Engine Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2005	Automotive Engine Theory	Active	0	32	96
47.0604	AUMT	2205	Automotive Engine Theory	Active	2	32	80
47.0604	AUMT	2305	Automotive Engine Theory	Active	3	48	96

Course Level: Intermediate

Course Description: Fundamentals of engine operation and diagnosis including lubrication and cooling systems. Emphasis on identification of components, measurements, inspections, and repair methods.

End-of-Course Outcomes: Explain engine diagnostic techniques; identify engine components; explain engine operation; and identify signs of engine component failure.

[Lab Recommended](#)

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Introduction to Automotive Technology

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1005	Introduction to Automotive Technology	Active	0	64	128
47.0604	AUMT	1305	Introduction to Automotive Technology	Active	3	64	96
47.0604	AUMT	1405	Introduction to Automotive Technology	Active	4	80	128

Course Level: Introductory

Course Description: An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and basic automotive maintenance. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize appropriate safety procedures; describe historical development and career information of the automotive industry; demonstrate safe, professional, and responsible work practices; demonstrate the proper use of shop equipment and tools; describe the eight Automotive Service Excellence (ASE) vehicle subsystems; use service information; and perform basic automotive maintenance.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Engine Removal and Installation

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1006	Automotive Engine Removal and Installation	Active	0	64	144
47.0604	AUMT	1306	Automotive Engine Removal and Installation	Active	3	64	144

Course Level: Introductory

Course Description: Fundamentals of engine inspection, removal and installation procedures. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize appropriate safety procedures; perform mechanical engine tests to determine extent of repair or service; remove and install engines in various types of vehicles.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Electrical Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1007	Automotive Electrical Systems	Active	0	64	160
47.0604	AUMT	1307	Automotive Electrical Systems	Active	3	64	144
47.0604	AUMT	1407	Automotive Electrical Systems	Active	4	80	160

Course Level: Introductory

Course Description: An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of, charging and starting systems, and electrical accessories. Emphasis on electrical principles, schematic diagrams, and service publications. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize safety procedures; define basic electrical principles; interpret wiring schematics and symbols; explain operation of batteries, starting/charging systems, and automotive circuits; use test equipment; and perform basic electrical repairs.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics
Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Hybrid and/or Battery Electric Vehicle (BEV) Systems Diagnostics

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CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2007	Hybrid Systems Diagnostics	Active	0	80	160
47.0604	AUMT	2307	Hybrid Systems Diagnostics	Active	3	64	144
47.0604	AUMT	2407	Hybrid Systems Diagnostics	Active	4	80	160

Suggested Prerequisite: AUMT 1307/1407/1007

Course Level: Advanced

Course Description: An advanced study of hybrid and/or battery electric vehicles (BEV) vehicles and the unique characteristics of hybrid and/or BEV-systems. Includes hybrid and/or BEV safety procedures, and diagnosis, and repair of hybrid and/or BEV systems. May be taught manufacturer specific.

End-of-Course Outcomes: Use hybrid and/or BEV -safety procedures; explain the operation of hybrid and/or BEV -vehicles; and diagnose and repair hybrid and/or BEV -systems.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Drive Train and Axle Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2009	Automotive Drive Train and Axle Theory	Active	0	32	96
47.0604	AUMT	2209	Automotive Drive Train and Axle Theory	Active	2	32	80
47.0604	AUMT	2309	Automotive Drive Train and Axle Theory	Active	3	48	96

Course Level: Introductory

Course Description: A study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials. Emphasis on theory of transmission/transaxle and drive line components.

End-of-Course Outcomes: Explain the theory of operation and the process of diagnosing clutch, transmission/transaxle, drive line and differential component problems.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Brake Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1010	Automotive Brake Systems	Active	0	64	160
47.0604	AUMT	1310	Automotive Brake Systems	Active	3	64	144
47.0604	AUMT	1410	Automotive Brake Systems	Active	4	80	160

Course Level: Introductory

Course Description: Operation and repair of drum/disc type brake systems. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize safety procedures; explain operation of modern brake systems, diagnose and repair hydraulic systems, drum/disc brake systems, parking brakes, and anti-lock brake systems; machine drums and rotors with current industry standard equipment.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Service Consultant

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2010	Automotive Service Consultant	Active	0	48	96
47.0604	AUMT	2310	Automotive Service Consultant	Active	3	48	96

Course Level: Intermediate

Course Description: Automotive service consulting skills and procedures. Includes vehicle identification, product knowledge, shop operations, warranty service contracts, communications, customer relations, internal relations, and sales skills. Emphasizes courtesy, professionalism, and communications.

End-of-Course Outcomes: Describe automotive service business operations; use effective customer communication skills; and interpret vehicle maintenance and service concerns.

[Lab Recommended](#)

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Automotive Electronic Controls

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2011	Automotive Electronic Controls	Active	0	32	96
47.0604	AUMT	2211	Automotive Electronic Controls	Active	2	32	128
47.0604	AUMT	2311	Automotive Electronic Controls	Active	3	64	144

Course Level: Advanced

Course Description: A study of electronic principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize safety procedures; apply service information; use scan tools and digital storage oscilloscopes; measure electronic controller inputs/outputs; explain common electronic circuit failures; develop diagnostic strategies; and explain on-board computer networks.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~ 2022

Basic Automotive Service

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1012	Basic Automotive Service	Active	0	64	160
47.0604	AUMT	1312	Basic Automotive Service	Active	3	64	96
47.0604	AUMT	1412	Basic Automotive Service	Active	4	80	160

Course Level: Introductory

Course Description: Basic automotive service. Includes compliance with safety and hazardous material handling procedures and maintenance of shop equipment.

End-of-Course Outcomes: Comply with safety and hazardous material handling procedures; perform basic automotive service procedures; and maintain shop equipment.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Drive Train and Axles

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2013	Automotive Drive Train and Axles	Active	0	48	160
47.0604	AUMT	2313	Automotive Drive Train and Axles	Active	3	48	144
47.0604	AUMT	2413	Automotive Drive Train and Axles	Active	4	64	160

Course Level: Intermediate

Course Description: A study of automotive clutches, clutch operation devices, manual transmissions/ transaxles, and differentials with emphasis on diagnosis and repair. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize appropriate safety procedures; diagnose and repair ~~drivelines~~drive train components, clutches, manual transmissions/transaxles, and differentials; and service constant velocity joints and universal joints.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Suspension and Steering Systems Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1013	Automotive Suspension and Steering Systems Theory	Active	0	32	64
47.0604	AUMT	1213	Automotive Suspension and Steering Systems Theory	Active	2	32	64

Course Level: Introductory

Course Description: A study of automotive suspension and steering systems including the theory of wheel and tire construction and alignment angles and procedures.

End-of-Course Outcomes: Explain function and diagnostic procedures of suspension system components; explain tire and wheel construction; and identify reasons for tire wear and alignment angles.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Engine Performance Analysis Theory I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2015	Automotive Engine Performance Analysis Theory I	Active	0	32	144
47.0604	AUMT	2215	Automotive Engine Performance Analysis Theory I	Active	2	32	128
47.0604	AUMT	2315	Automotive Engine Performance Analysis Theory I	Active	3	48	144

Course Level: Intermediate

Course Description: Operation and diagnosis of basic engine dynamics including the study of the ignition system, fuel delivery systems, and the use of engine performance diagnostic equipment.

End-of-Course Outcomes: Explain engine dynamics, principles of ignition and fuel delivery systems, explain the proper use and care of basic engine performance diagnostic equipment.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Suspension and Steering Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1016	Automotive Suspension and Steering Systems	Active	0	64	160
47.0604	AUMT	1316	Automotive Suspension and Steering Systems	Active	3	64	144
47.0604	AUMT	1416	Automotive Suspension and Steering Systems	Active	4	80	160

Course Level: Introductory

Course Description: Diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Includes component repair, alignment procedures and tire and wheel service. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize safety procedures; explain operations of suspension and steering systems; diagnose and repair system components, including electronically controlled systems; perform 4-wheel alignment procedures; and perform tire service and repair.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Engine Performance Analysis I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2017	Automotive Engine Performance Analysis I	Active	0	64	160
47.0604	AUMT	2317	Automotive Engine Performance Analysis I	Active	3	64	144
47.0604	AUMT	2417	Automotive Engine Performance Analysis I	Active	4	80	160

Course Level: Intermediate

Course Description: Theory, operation, diagnosis of drivability concerns, and repair of ignition and fuel delivery systems. Use of current engine performance diagnostic equipment. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize safety procedures; explain engine dynamics; diagnose and repair ignition and fuel delivery systems; and use current engine performance diagnostic equipment.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Engine Repair

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1019	Automotive Engine Repair	Active	0	64	160
47.0604	AUMT	1319	Automotive Engine Repair	Active	3	64	144
47.0604	AUMT	1419	Automotive Engine Repair	Active	4	80	160

Course Level: Introductory

Course Description: Fundamentals of engine operation, diagnosis and repair. Emphasis on identification, inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize safety procedures; explain engine operating principles; demonstrate engine diagnostic procedures; and repair cylinder head, valve train, block assembly, lubrication, and cooling systems.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Electrical Diagnosis and Repair

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2021	Automotive Electrical Diagnosis and Repair	Active	0	64	160
47.0604	AUMT	2321	Automotive Electrical Diagnosis and Repair	Active	3	64	144
47.0604	AUMT	2421	Automotive Electrical Diagnosis and Repair	Active	4	80	160

Course Level: Intermediate

Course Description: Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught manufacturer specific.

End-of-Course Outcomes: Utilize appropriate safety procedures; operate a Digital Multimeter and other electrical test equipment; diagnose and repair automotive electrical and accessory systems and instrumentation; and repair wiring and wiring harnesses.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Automatic Transmission and Transaxle Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2023	Automotive Automatic Transmission and Transaxle Theory	Active	0	32	64
47.0604	AUMT	2223	Automotive Automatic Transmission and Transaxle Theory	Active	2	32	64
47.0604	AUMT	2323	Automotive Automatic Transmission and Transaxle Theory	Active	3	48	64

Course Level: Introductory

Course Description: Theory of operation, hydraulic principles, and electronic circuits of modern automatic transmissions and transaxles. Discussion of diagnosing and repair techniques.

End-of-Course Outcomes: Explain hydraulic principles of the automatic transmission; identify components of the automatic transmission; and explain procedures for diagnosing and repairing automatic transmissions.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022 – [Recommend for Archival.](#)

~~Automotive~~ Automatic Transmission and Transaxle

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2025	Automotive Automatic Transmission and Transaxle	Active	0	64	160
47.0604	AUMT	2325	Automotive Automatic Transmission and Transaxle	Active	3	64	144
47.0604	AUMT	2425	Automotive Automatic Transmission and Transaxle	Active	4	80	160

Course Level: Advanced

Course Description: A study of the operation, hydraulic circuits and electronic controls of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and repair techniques. May be taught manufacturer specific.

End-of-Course Outcomes: Diagnose, service, adjust, and repair automatic transmissions/transaxles.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

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Automotive Service

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2028	Automotive Service	Active	0	64	160
47.0604	AUMT	2328	Automotive Service	Active	3	64	144
47.0604	AUMT	2428	Automotive Service	Active	4	80	160

Course Level: Advanced

Course Description: Mastery of automotive service including competencies covered in related courses. May be taught manufacturer specific.

End-of-Course Outcomes: Service, diagnose, and repair vehicle systems maintain shop facilities and equipment.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Engine Performance Analysis Theory II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2031	Automotive Engine Performance Analysis Theory II	Active	0	32	64
47.0604	AUMT	2231	Automotive Engine Performance Analysis Theory II	Active	2	32	64
47.0604	AUMT	2331	Automotive Engine Performance Analysis Theory II	Active	3	48	64

Course Level: Advanced

Course Description: A study of emission systems, computerized engine performance, and advanced ignition and fuel systems, including advanced engine performance diagnostic equipment.

End-of-Course Outcomes: Explain the operation and diagnosis of emission control systems; describe the operation, diagnosis, and repair of computerized engine performance systems and advanced ignition and fuel systems; and explain the proper use of advanced engine performance diagnostic equipment.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

~~Automotive~~ Automatic Transmission and Transaxle II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2032	Automotive Automatic Transmission and Transaxle II	Active	0	64	160
47.0604	AUMT	2332	Automotive Automatic Transmission and Transaxle II	Active	3	64	144
47.0604	AUMT	2432	Automotive Automatic Transmission and Transaxle II	Active	4	80	160

Course Level: Advanced

Course Description: An analysis of electronic controls and actuators and the related circuits of modern automatic transmissions/transaxles with an emphasis on diagnostics. May be taught manufacturer specific.

End-of-Course Outcomes: Diagnose transmission/transaxle shift concerns, fluid conditions, and pressures; and analyze electronic controller data, and component failure.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Engine Performance Analysis II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2034	Automotive Engine Performance Analysis II	Active	0	64	160
47.0604	AUMT	2334	Automotive Engine Performance Analysis II	Active	3	64	144
47.0604	AUMT	2434	Automotive Engine Performance Analysis II	Active	4	80	160

Course Level: Advanced

Course Description: Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems. Includes use of advanced engine performance diagnostic equipment. May be taught manufacturer specific.

End-of-Course Outcomes: Diagnose and repair emission control systems, computerized engine performance systems, and advanced ignition and fuel systems; and use advanced engine performance diagnostic equipment.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Electronics

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2037	Automotive Electronics	Active	0	64	160
47.0604	AUMT	2337	Automotive Electronics	Active	3	64	144
47.0604	AUMT	2437	Automotive Electronics	Active	4	80	160

Course Level: Advanced

Course Description: Study of electronic principles applied to microcomputers and communication systems. Includes digital fundamentals, and use of electronic test equipment. May be taught manufacturer specific.

End-of-Course Outcomes: Employ proper safety procedures; use scan tools, digital storage oscilloscopes, and other electronic test equipment; and apply electronic principles to the diagnosis of microcomputers, analysis of communication circuits, and interpretation of sensor data.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Climate Control Systems Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1041	Automotive Climate Control Systems Theory	Active	0	32	64
47.0604	AUMT	1241	Automotive Climate Control Systems Theory	Active	2	32	64
47.0604	AUMT	1341	Automotive Climate Control Systems Theory	Active	3	48	64

Course Level: Intermediate

Course Description: Theory of automotive climate control systems. Emphasis on the refrigeration cycle and diagnosis of system malfunctions. Includes manual and electronic climate control systems.

End-of-Course Outcomes: Explain the refrigeration cycle; describe the air distribution system; define the proper procedure for handling refrigerant; and explain the operation of climate controls.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Advanced Emission Systems Diagnostics

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2043	Advanced Emission Systems Diagnostics	Active	0	64	160
47.0604	AUMT	2343	Advanced Emission Systems Diagnostics	Active	3	64	144
47.0604	AUMT	2443	Advanced Emission Systems Diagnostics	Active	4	80	160

Course Level: Advanced

Course Description: Diagnosis and repair of emission control systems with emphasis on the application of advanced diagnostic information, tools, and techniques. Course will include state and federal laws required for preparation for licensing. May be taught manufacturer specific.

End-of-Course Outcomes: Diagnosis and repair emission control systems; comply with Federal, state, and local laws and regulations; and use advanced emission controls diagnostic equipment.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Climate Control Systems.

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1045	Automotive Climate Control Systems.	Active	0	64	160
47.0604	AUMT	1345	Automotive Climate Control Systems.	Active	3	64	144
47.0604	AUMT	1445	Automotive Climate Control Systems.	Active	4	80	160

Course Level: Intermediate

Course Description: Diagnosis and repair of manual/electronic climate control systems. Includes the refrigeration cycle and EPA guidelines for refrigerant handling. May be taught manufacturer specific.

End-of-Course Outcomes: Use safety procedures including proper refrigerant handling; explain the refrigeration cycle; and diagnose and repair systems including automatic temperature control.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Electronics Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1049	Automotive Electronics Theory	Active	0	32	96
47.0604	AUMT	1249	Automotive Electronics Theory	Active	2	32	80
47.0604	AUMT	1349	Automotive Electronics Theory	Active	3	48	96

Course Level: Intermediate

Course Description: A course in automotive technology including electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment.

End-of-Course Outcomes: Explain basic electrical and electronic principles; describe semiconductor theory; explain basic circuit laws; and describe proper use of electrical test equipment.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Electrical Systems Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1053	Automotive Electrical Systems Theory	Active	0	32	96
47.0604	AUMT	1253	Automotive Electrical Systems Theory	Active	2	32	80
47.0604	AUMT	1353	Automotive Electrical Systems Theory	Active	3	48	96

Course Level: Intermediate

Course Description: A course in automotive electrical systems including operational theory, testing and diagnosis of batteries, charging and starting systems, and electrical accessories. Use of electrical schematic diagrams and service.

End-of-Course Outcomes: Explain electrical principles; describe battery, starting system, and charging system operation and theory; determine the proper use of electrical test equipment; and explain the use of electrical schematics and symbols.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~ [Recommended for Archival](#)

Automotive Alternative Fuels

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	2057	Automotive Alternative Fuels	Active	0	48	160
47.0604	AUMT	2357	Automotive Alternative Fuels	Active	3	48	144
47.0604	AUMT	2457	Automotive Alternative Fuels	Active	4	80	160

Course Level: Advanced

Course Description: A study of the composition and use of various alternative automobile fuels including retrofit procedures and applications, emission standards, availability, and cost effectiveness. Overview of federal and state regulations concerning fuels.

End-of-Course Outcomes: Describe appropriate safety procedures; explain the properties and advantages of each fuel; make recommendations for use of each fuel using local criteria as a basis for proper choice; describe applicable federal and state regulations; and identify retrofits on various types of vehicles using various types of fuels.

Lab Recommended

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automotive Brake Systems Theory

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0604	AUMT	1057	Automotive Brake Systems Theory	Active	0	32	96
47.0604	AUMT	1257	Automotive Brake Systems Theory	Active	2	32	80
47.0604	AUMT	1357	Automotive Brake Systems Theory	Active	3	48	96

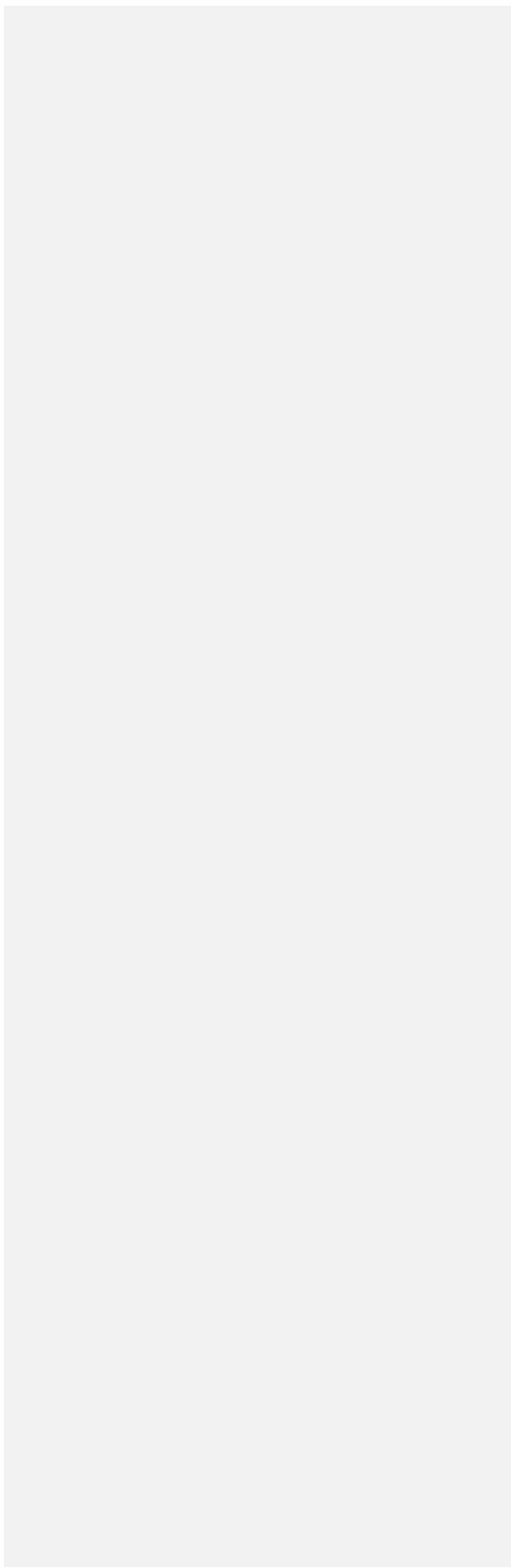
Course Level: Introductory

Course Description: Theory and principles related to the design, operation, and servicing of automotive braking systems. Includes disc and drum-type brakes, hydraulic systems, power assist components, anti-lock brake systems, and diagnosis and reconditioning procedures.

End-of-Course Outcomes: Explain the operation of disc and drum-type brakes; explain hydraulic system physical principles; describe the operation of power assist components; and explain the operation and theory of anti-lock brake systems.

CIP Code Description: 47.0604 (Automobile/Automotive Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022



Shop Safety and Procedures

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1001	Shop Safety and Procedures	Active	0	48	128
47.0605	DEMR	1301	Shop Safety and Procedures	Active	3	48	96
47.0605	DEMR	1401	Shop Safety and Procedures	Active	4	64	128

Course Level: Introductory

Course Description: A study of shop safety, rules, basic shop tools, and test equipment.

End-of-Course Outcomes: Identify and use basic hand tools; use personal protection equipment (PPE); and correctly use and dispose of hazardous materials.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: ~~September 1, 2016~~[September 1, 2022](#)

Basic Driving Skills

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1003	Basic Driving Skills	Active	0	48	96
47.0605	DEMR	1303	Basic Driving Skills	Active	3	48	96

Course Level: Introductory

Course Description: Introduction to the use of a Class 8 combination vehicle. Emphasis on preparation to obtain a Texas Commercial Drivers License (CDL).

End-of-Course Outcomes: Identify correct shift patterns; define safe operation of a commercial vehicle; and demonstrate proficiency to pass the written portion of the Texas Commercial Drive License Exam.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Basic Electrical Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1005	Basic Electrical Systems	Active	0	48 64	144 128
47.0605	DEMR	1305	Basic Electrical Systems	Active	3	48 64	128 96
47.0605	DEMR	1405	Basic Electrical Systems	Active	4	80	144 128

Course Level: Introductory

Course Description: Basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, and batteries.

End-of-Course Outcomes: Perform circuit analysis; identify electrical symbols; use special tools; and test circuits.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Diesel Engine I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1006	Diesel Engine I	Active	0	48 64	144 128
47.0605	DEMR	1306	Diesel Engine I	Active	3	48 64	128 96
47.0605	DEMR	1406	Diesel Engine I	Active	4	80	144 128

Course Level: Introductory

Course Description: An introduction to the basic principles of diesel engines and systems.

End-of-Course Outcomes: Describe the history ~~and evolution of~~ diesel engines ~~and diesel systems, and their evolution~~; demonstrate ~~knowledge of the basic~~ principles of diesel ~~systems and engines and how they function~~ operations; and utilize precision instruments to diagnose and repair ~~basic systems and diesel engines~~ ~~and systems~~.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Diesel Engine Testing and Repair I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1010	Diesel Engine Testing and Repair I	Active	0	48 64	444 128
47.0605	DEMR	1310	Diesel Engine Testing and Repair I	Active	3	48 64	128 96
47.0605	DEMR	1410	Diesel Engine Testing and Repair I	Active	4	80	444 128

Course Level: Introductory

Course Description: An introduction to testing and repairing diesel engines including related systems and specialized tools.

End-of-Course Outcomes: Identify, inspect, test ~~and~~ measure, ~~and~~ disassemble and reassemble diesel engines ~~parts~~.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Diesel Engine Testing and Repair II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2012	Diesel Engine Testing and Repair II	Active	0	48 64	144 128
47.0605	DEMR	2312	Diesel Engine Testing and Repair II	Active	3	48 64	128 96
47.0605	DEMR	2412	Diesel Engine Testing and Repair II	Active	4	80	144 128

Course Level: Intermediate

Course Description: Continuation of Diesel Engine Testing and Repair I. Coverage of testing and repairing diesel engines including related systems and specialized tools.

End-of-Course Outcomes: Identify, inspect, evaluate, disassemble and reassemble [diesel engines](#) ~~parts~~.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Fuel Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1013	Fuel Systems	Active	0	48 64	144 128
47.0605	DEMR	1313	Fuel Systems	Active	3	48 64	128 96
47.0605	DEMR	1413	Fuel Systems	Active	4	80	144 128

Course Level: Introductory

Course Description: ~~In-depth coverage~~[Overview](#) of ~~fuel injector pumps~~[diesel fuel systems](#) and ~~injection systems~~[related components](#).

End-of-Course Outcomes: Identify various components of ~~injector pumps and~~[diesel fuel](#) systems; and evaluate components by inspection and testing.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Basic Hydraulics

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1016	Basic Hydraulics	Active	0	48 64	144 128
47.0605	DEMR	1316	Basic Hydraulics	Active	3	48 64	128 96
47.0605	DEMR	1416	Basic Hydraulics	Active	4	80	144 128

Course Level: Introductory

Course Description: Fundamentals of hydraulics including components and related systems.

End-of-Course Outcomes: Explain hydraulics, theory, circuits, and application; ~~Identify~~ various components used in hydraulic systems; evaluate hydraulic components by inspection and testing; ~~and explain hydraulics, theory, circuits, and application.~~

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Basic Brake Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1017	Basic Brake Systems	Active	0	48 64	128 128
47.0605	DEMR	1317	Basic Brake Systems	Active	3	48 64	128 96
47.0605	DEMR	1417	Basic Brake Systems	Active	4	64 80	128

Course Level: Introductory

Course Description: Basic principles of brake systems, ~~of diesel-powered equipment.~~
Emphasis on maintenance, repairs, and troubleshooting.

End-of-Course Outcomes: Demonstrate the basic theory and operation of the brake systems; diagnose brake components for wear and usability; repair brake components by rebuilding or replacing parts; and adjust brake components.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Power Train I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1021	Power Train I	Active	0	48 64	144 128
47.0605	DEMR	1321	Power Train I	Active	3	48 64	144 96
47.0605	DEMR	1421	Power Train I	Active	4	64 80	144 128

Course Level: Introductory

Course Description: Fundamental repair and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair.

End-of-Course Outcomes: Perform visual inspection of components; determine serviceability of components; and disassemble and reassemble power train components.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1023	Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair	Active	0	48 64	144 128
47.0605	DEMR	1323	Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair	Active	3	48 64	128 96
47.0605	DEMR	1423	Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair	Active	4	80	144 128

Course Level: Introductory

Course Description: Introduction to heating, ventilation, and air conditioning theory, testing, and repair. Emphasis on refrigerant reclamation, safety procedures, specialized tools, and repairs.

End-of-Course Outcomes: Analyze heating, ventilation, and air conditioning systems; utilize specialized tools; and repair or replace components.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Small Air Cooled Engines

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1025	Small Air Cooled Engines	Active	0	48	64
47.0605	DEMR	1225	Small Air Cooled Engines	Active	2	48	64

Course Level: Introductory

Course Description: Fundamentals of air cooled engines including repair and testing.

End-of-Course Outcomes: Identify basic engines; and service and test air cooled engines.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Tractor Trailer Service and Repair

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1027	Tractor Trailer Service and Repair	Active	0	64	128
47.0605	DEMR	1327	Tractor Trailer Service and Repair	Active	3	64	128
47.0605	DEMR	1427	Tractor Trailer Service and Repair	Active	4	80	128

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Course Level: Introductory

Course Description: An introduction to and familiarization with components and systems related to tractor trailer service. Emphasis on records required by the Department of Transportation.

End-of-Course Outcomes: Inspect vehicles and make necessary repairs to the tractor or trailer to Department of Transportation standard; and complete Department of Transportation documentation using appropriate forms and procedures.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, 2016

Preventative Maintenance

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1029	Preventative Maintenance	Active	0	32 48	96
47.0605	DEMR	1229	Preventative Maintenance	Active	2	32 48	80
47.0605	DEMR	1329	Preventative Maintenance	Active	3	48 64	96

Course Level: ~~Introductory~~Intermediate

Course Description: An ~~introductory-intermediate~~ course designed to provide the student with basic knowledge of proper servicing practices. Content includes record keeping and condition of major systems.

End-of-Course Outcomes: Apply preventative maintenance practices; perform preventative maintenance on systems; and practice appropriate record keeping.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Steering and Suspension I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1030	Steering and Suspension I	Active	0	32 48	128 96
47.0605	DEMR	1230	Steering and Suspension I	Active	2	32 48	96 80
47.0605	DEMR	1330	Steering and Suspension I	Active	3	64	128 96

Course Level: Introductory

Course Description: A study of design, function, maintenance, and repair of steering and suspension systems. Emphasis on troubleshooting and repair of failed components.

End-of-Course Outcomes: Identify ~~steering and suspension failed~~ components; ~~using visual perform~~ inspections ~~ss, to determine -needed repairs~~ troubleshooting procedures and equipment; repair or replace parts on various steering and suspension systems; and adjust components on various steering and suspension systems.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Advanced Brake Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2031	Advanced Brake Systems	Active	0	64	96
47.0605	DEMR	2331	Advanced Brake Systems	Active	3	64	96

Course Level: Advanced

Course Description: An advanced brake system course for diesel powered equipment. Advanced concepts and schematics including anti-lock (ABS), air, pneumatic, and hydraulic brake systems and related components.

End-of-Course Outcomes: Apply advanced brake information with emphasis on diagnostics and component relationships; utilize specialized brake tools and diagnostic equipment; and perform advanced brake repairs.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Electronic Controls

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2032	Electronic Controls	Active	0	4864	144128
47.0605	DEMR	2332	Electronic Controls	Active	3	4864	12896
47.0605	DEMR	2432	Electronic Controls	Active	4	80	144128

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Course Level: ~~Advanced~~Intermediate

Course Description: ~~Advanced-Intermediate~~ skills in diagnostic and programming techniques of electronic control systems.

End-of-Course Outcomes: Utilize specialized tools to diagnose or change parameters; ~~read~~ navigate and interpret ~~technical manuals~~ Service Information Systems(SIS); and identify, ~~and~~ test sensors, ~~and~~ actuator circuits, and components.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Advanced Diesel Tune-Up and Troubleshooting

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2034	Advanced Diesel Tune-Up and Troubleshooting	Active	0	64	144 128
47.0605	DEMR	2334	Advanced Diesel Tune-Up and Troubleshooting	Active	3	64	128 96
47.0605	DEMR	2434	Advanced Diesel Tune-Up and Troubleshooting	Active	4	80	144 128

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Course Level: Advanced

Course Description: Advanced concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of [strategy-based](#) diagnostics. ~~with a common-sense approach.~~

End-of-Course Outcomes: Analyze engine malfunctions; determine corrective repair; perform engine repairs; and adjust engine tune-up according to manufactures specifications.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Advanced Hydraulics

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2035	Advanced Hydraulics	Active	0	64	128
47.0605	DEMR	2335	Advanced Hydraulics	Active	3	64	128 96
47.0605	DEMR	2435	Advanced Hydraulics	Active	4	80	128

Course Level: Advanced

Course Description: Advanced study of hydraulic systems and components including diagnostics and testing of [electronically controlled](#) hydraulic systems.

End-of-Course Outcomes: ~~Test~~ [Troubleshoot](#) hydraulic circuits; [test hydraulic systems utilizing specialized equipment](#)~~use a systematic approach to troubleshooting~~; and repair hydraulic systems.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Automatic Power Shift and Hydrostatic Transmissions I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1035	Automatic Power Shift and Hydrostatic Transmissions I	Active	0	64	144 128
47.0605	DEMR	1335	Automatic Power Shift and Hydrostatic Transmissions I	Active	3	64	128 96
47.0605	DEMR	1435	Automatic Power Shift and Hydrostatic Transmissions I	Active	4	80	144 128

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Course Level: Introductory

Course Description: A study of the operation, maintenance, and repair of automatic power shift hydrostatic transmissions.

End-of-Course Outcomes: Explain applications and oil flow circuits used in hydrostatic transmissions; identify parts using visual inspections and standard testing procedures; and follow Original Equipment Manufacturer (OEM) maintenance procedures.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Advanced Power Applications I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2338	Advanced Power Applications I	Active	3	64	128 96
47.0605	DEMR	2438	Advanced Power Applications I	Active	4	80	128 128

Course Level: Advanced

Course Description: Advanced power train applications with emphasis on testing and evaluation of components.

End-of-Course Outcomes: Use specialized tools to repair various power trains and their components; analyze components using visual and testing procedures; and complete repairs and adjustments to various types of power trains.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Advanced Electrical Systems

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2039	Advanced Electrical Systems	Active	0	64	128
47.0605	DEMR	2439 v	Advanced Electrical Systems	Active	4	80	128
47.0605	DEMR	2339	Advanced Electrical Systems	Active	3	64	96

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Suggested Prerequisite: DEMR 1x05

Course Level: Advanced

Course Description: A continuation of basic electrical systems to include ~~lighting~~[various accessories and electronic systems](#), ~~computer controls and accessories~~. Emphasis on diagnosis, testing, and repair using the various ~~diagnostic~~ tools and procedures for current [electrical and electronic](#) systems.

End-of-Course Outcomes: Complete repairs on various ~~lighting~~[electrical and electronic systems](#), ~~controls and accessory systems~~; describe the principles of analog and digital voltage signals; and troubleshoot and repair ~~electronic~~[electrical](#) circuits.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Advanced Power Applications II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2440	Advanced Power Applications II	Active	4	80	144 <u>128</u>

Course Level: Advanced

Course Description: Extended applications of power train with emphasis on testing and evaluation of components.

End-of-Course Outcomes: Use specialized tools to repair various power trains and their components; analyze components using visual and testing procedures; and complete repairs and adjustments to various types of power trains.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

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CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1240	Steering and Suspension II	Active	2	32 48	80

Course Level: Intermediate

Course Description: Extended applications of the mechanics and theory of design, function, maintenance, and repair of steering and suspension systems. Emphasis on troubleshooting and repair of failed components.

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End-of-Course Outcomes: Identify failed components using visual inspections, troubleshooting procedures and equipment; repair or replace parts on various steering and suspension systems; and adjust components on various steering and suspension systems.

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Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Power Train Applications I

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1342	Power Train Applications I	Active	3	48 64	128 96
47.0605	DEMR	1442	Power Train Applications I	Active	4	80	144 128

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Course Level: Intermediate

Course Description: In-depth coverage of the mechanics and theory of power trains. Emphasis on disassembly, inspection, and repair of power train components.

End-of-Course Outcomes: Interpret power flow; assess component failure; and demonstrate ability to make power train component repairs.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Automatic Power Shift and Hydrostatic Transmissions II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2044	Automatic Power Shift and Hydrostatic Transmissions II	Active	0	64	144 128
47.0605	DEMR	2344	Automatic Power Shift and Hydrostatic Transmissions II	Active	3	64	144 96
47.0605	DEMR	2444	Automatic Power Shift and Hydrostatic Transmissions II	Active	4	80	144 128

Course Level: Advanced

Course Description: Extended study of the operation, maintenance, and repair of automatic power shift hydrostatic transmissions.

End-of-Course Outcomes: Interpret applications and oil flow circuits used in hydrostatic transmissions; evaluate parts using visual and standard testing procedures; diagnose and repair problems; and perform adjustments to the transmission.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Power Train Applications II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2345	Power Train Applications II	Active	3	48 64	128 96
47.0605	DEMR	2445	Power Train Applications II	Active	4	80	144 128

Course Level: Advanced

Course Description: Extended applications of the mechanics and theory of power trains. Emphasis on disassembly, inspection, and repair of power train components.

End-of-Course Outcomes: Interpret power flow; assess component failure; and demonstrate ability to make power train component repairs.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Advanced Heating, Ventilation, and Air Conditioning (HVAC)

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2346	Advanced Heating, Ventilation, and Air Conditioning (HVAC)	Active	3	64	128

Course Level: Advanced

Course Description: Advanced concepts in heating, ventilation, and air conditioning. Emphasis on systematic troubleshooting.

End-of-Course Outcomes: Perform advanced diagnosis using specialized testing equipment and procedures; evaluate components using visual and standard testing procedures; and reclaim refrigerants using approved standards and equipment.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Power Train II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1347	Power Train II	Active	3	48 64	128 96
47.0605	DEMR	1447	Power Train II	Active	4	80	144 128

Course Level: Intermediate

Course Description: Continuation of fundamentals and theory of power train systems. Emphasis on disassembly, inspection, and repair of power train components.

End-of-Course Outcomes: Evaluate component failures; interpret power flow concepts; and repair power train components.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~2022

Failure Analysis

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	2348	Failure Analysis	Active	3	48 64	128

Course Level: Advanced

Course Description: An advanced course designed for analysis of typical part failures on equipment.

End-of-Course Outcomes: Identify the type of part failure using visual and special testing equipment; use nondestructive testing procedures to identify failures; and identify wear type and reasons for wear or failure.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)

Diesel Engine II

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
47.0605	DEMR	1049	Diesel Engine II	Active	0	64	144 128
47.0605	DEMR	1349	Diesel Engine II	Active	3	64	128 128
47.0605	DEMR	1449	Diesel Engine II	Active	4	80	144 128

Course Level: Intermediate

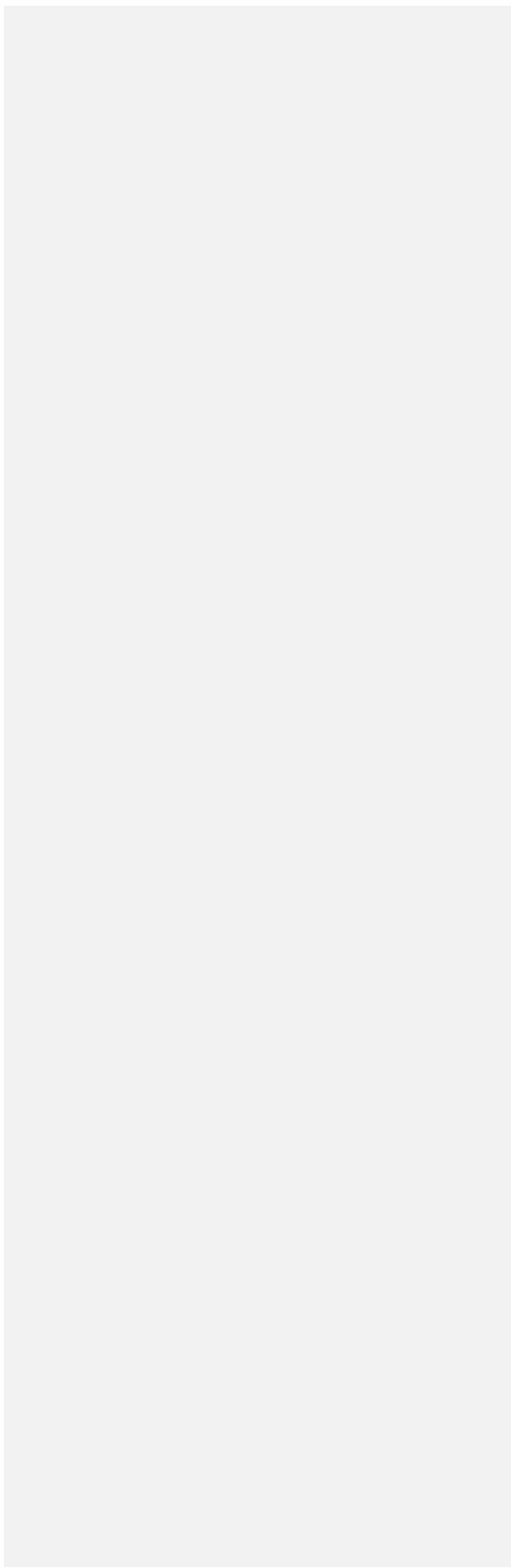
Course Description: An in-depth coverage of disassembly, repair, identification, evaluation, and reassembly of diesel engines.

End-of-Course Outcomes: Identify engine components and their working relationship to the engine; evaluate engine components by inspection, testing, and/or measurement; and demonstrate disassembly and reassembly of the diesel engine.

Lab Recommended

CIP Code Description: 47.0605 (Diesel Mechanics Technology/Technician)

Effective Date: September 1, ~~2016~~[2022](#)



Action Item: New Course Proposed for Cybersecurity

The workgroup that met to address Senate Bill 64* recommended the creation of a new WECM course in Network Protocol Analysis (see below). Please review the course and let me know if you approve recommending it to the WECM Advisory Committee for addition to the WECM as is, or if you would prefer to meet and discuss the course before recommending it. (The course was written by college faculty members serving on the Cybersecurity Pathway workgroup.) – Duane

* Senate Bill (SB) 64, passed by the 86th Texas Legislature, Regular Session, codified as Texas Education Code, Chapter 61, Subchapter C, Sections 61.09091 and 61.09092, required the Texas Higher Education Coordinating Board (THECB), in collaboration with the Department of Information Resources (DIR), to identify and develop strategies to incentivize Texas higher education institutions to develop more certificate and degree programs in the area of cybersecurity, and to submit a report detailing the strategies identified.

In September 2020, the THECB submitted the required report, “Strategies to Incentivize Institutions of Higher Education to Develop Degree Programs in Cybersecurity,” which made several recommendations. The THECB convened the SB 64 Cybersecurity Pathway Workgroup to address Recommendation 4 from that report, which states that THECB and DIR should ensure a clear articulation pathway from high school to college. The workgroup is comprised of members selected by the THECB and the Texas Education Agency (TEA) to include industry representation, secondary and postsecondary faculty and administrators, specialists in pathways creation and curriculum development, and DIR representatives.

The THECB worked with the TEA to develop the pathway, which allows high school students to earn credit toward one or more certificates with a seamless transition to associate degree completion. The end goal for this pathway is that Texas students will enter the workforce with cybersecurity credentials.

[The final report is currently being routed for Coordinating Board approval.]

Network Protocol Analysis

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
11.0401	ITNW	2044	Network Protocol Analysis	In Progress	0	48	96
11.0401	ITNW	2344	Network Protocol Analysis	In Progress	3	48	96
11.0401	ITNW	2444	Network Protocol Analysis	In Progress	4	64	96

Course Level: Advanced

Course Description: Use of networking scanning tools to perform network traffic analysis, protocol identification, report preparation, and evidence presentation. Emphasizes technical aspects of network protocol analysis where cybersecurity is employed.

End-of-Course Outcomes: Demonstrate network traffic pattern analysis preventing malicious and illegal network intrusion and penetration; explain detection of harmful networking data targeting organization business; identify business impact and corrective action; document network analysis and findings; demonstrate basic traffic pattern analysis utilizing scanning tools; analyze case studies involving collaborative investigation; and present findings of network analysis.

Lab Recommended

CIP Code Description: 11.0401 (Information Science/Studies)

Effective Date: September 1, 2022

Received 12/14/2021
From: Thera Celestine
Director of Community and Workforce Education
Lamar State College Orange
Thera.Celestine@lsco.edu
409.882.3010
Category WECM Course Structure
Subject PHRA 1045 Compounding Sterile Preparations

Is there anyway the minimum contact hours could be changed for PHRA 1045 Compounding Sterile Preparations from 64 to 40? A lot of the CE courses in the state are using the special topic PHRA 1091 and could be using PHRA 1045 if it was 40 hours. I would like to use to so it matched our credit side and easily crossed walked. Would you mind looking into that for me?

12/17/2021, 4:07 PM - (To: Thera N. Celestine)

Hi, Thera.

I'll relay this comment to the WECM Comments subcommittee. – Duane

NOTE: This is a CE Mirror Course to PHRA 1345 (64-128) & PHRA 1445 (80-128).

Subcommittee's Recommendation

All members agree contact hours for credit courses should not be lowered. Contact hour revisions should be discussed and recommended through upcoming PHRA WECM Workshop.

Credit Special Topic and Local Need Review Subcommittee Meeting

Friday., January 7, 2022

1:00 PM – 1:40 PM

MEMBERS PRESENT: Thera Celestine; Robin Garrett; Lesley Keeling-Olson; Sara Lozano; Kevin Morris;
Olga Valerio

MEMBERS ABSENT: Mary Adams; James Chegwiddden; Gaston White

OTHERS PRESENT: Duane Hiller, Tanisha Shorter-Lott

The subcommittee was presented with the Local Need-Special Topics course reviews from the AUMT, AIRP, and DEMR course review workshops. A change was recommended by the WECM Revisions Subcommittee Meeting (q.v.) to leave Houston Community College's AIRP 1071 "Drone Applied Project" as a Local Need course, since it does not cover the same material included in the new WECM Course written for Drone Pilot Test Preparation (AIRP 1008/1108).

The subcommittee received the SCH Local Need-Special Topics courses received between June 1, 2021, and December 31, 2021. Specific courses were assigned to each of the subcommittee members present, and members were asked to review those courses by Friday, January 21. The files will be uploaded to the Teams folder, where members may add their comments.

Local Need Course Review Form

6-Digit CIP (Course): **01.0601**

Course Number: **HALT 1073**

WECM Course Title: **HISTORY OF LANDSCAPE ARCHITECTURAL DESIGN**

Course Level: **Introductory**

Licensing Agency:

Justification:

Job demands in Landscape Design and Horticulture are increasing in the Central Texas Region which leads to opportunities for educational programs in the field. This course provides students with knowledge through lecture and hands on experience. No current WECM match.

Description:

Course addresses knowledges, and/or attitudes and behaviors pertinent to the occupation and relevant to the professional development of the student. A survey of the theories and principles that have shaped landscape design through history.

Outcomes:

- 1.Obtain information through study of architechtrual design history on significant places and people throughout landscape history.
**
- 2.Use the complex relationships between culture, environment, philosophy, agriculture, architecture, art, and urban development to plan landscape architectural design.
**
- 3.relate a particular historical period, style, or development to landscape design.
**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **24**

Maximum Hours: **24**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **2.4**

Maximum Hours: **2.4**

College: *AUSTIN COMMUNITY COLLEGE*

Printed 01/04/2022

Submitted 06/03/2021

Local Need Course Review Form

6-Digit CIP (Course): **12.0503**

Course Number: **CHEF 1075**

WECM Course Title: **SANITATION AND SAFETY**

Course Level: **Introductory**

Licensing Agency:

Justification:

This course has been developed by Navarro College in collaboration with FreshPet, a local business/industry partner. The course addresses specific training needs of the industry partner. This will be taught in a series of new employee trainings provided by Navarro College to FreshPet employees.

Description:

A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination; and workplace safety standards.

Outcomes:

At the end of the course, trainees will be able to: identify causes of and prevention procedures for food-borne illness, intoxication and infection; discuss personal hygiene and safe food handling procedures; describe food storage and refrigeration techniques; explain sanitation of dishes, equipment and kitchens including cleaning material, garbage, and refuse disposal.

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range: Minimum Hours: **16** Maximum Hours: **16**

Semester Credit Hour (SCH) Range: Minimum Hours: **0** Maximum Hours: **0**

Continuing Education Units (CEU) Range: Minimum Hours: **1.6** Maximum Hours: **1.6**

College: *Navarro College*

Printed 01/04/2022

Submitted 08/23/2021

Local Need Course Review Form

6-Digit CIP (Course): **13.1501**
Course Number: **EDTC 1077**
WECM Course Title: **SCIENCE OF TEACHING READING - SECONDARY**
Course Level: **Advanced**
Licensing Agency: **Texas Education Agency**

Justification:

The State of Texas mandates the requirements for certification of Texas educators. The requirements cover the number of course contact hours, content of the courses, clinical teaching/internship, testing requirements. This course is part of the requirements for teacher certification.

Description:

This course focuses on the Science of Reading and integrating reading instruction for middle and high school content specific areas of instruction. Strategies are provided to incorporate vocabulary development, comprehension, and fluency into daily content area instruction. Instruction will focus on strategies for preparing all students for college and career readiness in the literacy skills of speaking, listening, reading, and writing in all content areas.

Outcomes:

- 1. identify high-quality instructional practices in reading**
- 2. monitor student's implementation of reading strategies and identifying incorrect procedures**
- 3. identify ways to group students for reading instruction such as partner reading and cooperative small-group activities**
- 4. administer and score reading probes**
- 5. graph students' reading scores**
- 6. identify characteristics of Dyslexia and other reading issues and instructional methods of instructing students.**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 56	Maximum Hours: 56
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 5.6	Maximum Hours: 5.6

College: *Austin Community College*

Printed 01/04/2022

Submitted 08/10/2021

Local Need Course Review Form

6-Digit CIP (Course): **13.1501**
Course Number: **EDTC 2071**
WECM Course Title: **DESIGNING AND PRESENTING INSTRUCTION**
Course Level: **Advanced**
Licensing Agency: **Texas Education Agency**

Justification:

The State of Texas mandates the requirements for certification of Texas educators. The requirements cover the number of course contact hours, content of the courses, clinical teaching/internship, testing requirements. This course is part of the requirements for teacher certification.

Description:

This course prepares the teacher candidate to identify and use resources available for planning and designing interactive Texas Essential Knowledge and Skills-based lessons with an emphasis on specific content methodology. In addition, the course addresses assessment of student's learning and communicating of the student's progress to parents. Each candidate will plan and teach three micro teaches which will be critiqued.

Outcomes:

- demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today's learners.**
- work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational and developmental backgrounds and focusing on each student's needs.**
- exhibit a comprehensive understanding of their content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and their ability to match objectives and activities to relevant state standards.**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 56	Maximum Hours: 56
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 5.6	Maximum Hours: 5.6

College: *Austin Community College*

Printed 01/04/2022

Submitted 08/10/2021

Local Need Course Review Form

6-Digit CIP (Course): **13.1501**

Course Number: **EDTC 2072**

WECM Course Title: **USING DATA, ASSESSMENT, AND FEEDBACK TO DRIVE INSTRUCTION**

Course Level: **Advanced**

Licensing Agency: **Texas Education Agency**

Justification:

The State of Texas mandates the certification of Texas educators. The requirements cover the number of course contact hours, content of the courses, clinical teaching/internship, testing requirements. This course is part of the requirements for teacher certification.

Description:

This course will provide candidates with a deep knowledge of the process to implement data driven instruction using various assessments in order to provide feedback that will result in improving student performances. Analysis of the four building blocks of Data Driven Instruction and its relationship to Domain I and IV of the Texas Teacher Evaluation and Support System is included.

Outcomes:

(5) Standard 5--Data-Driven Practice. Teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed.

(A) Teachers implement both formal and informal methods of measuring student progress.

(i) Teachers gauge student progress and ensure student mastery of content knowledge and skills by providing assessments aligned to instructional objectives and outcomes that are accurate measures of student learning.

(ii) Teachers vary methods of assessing learning to accommodate students' learning needs, linguistic differences, and/or varying levels of background knowledge.

(B) Teachers set individual and group learning goals for

Lab Recommended:

No Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **56**

Maximum Hours: **56**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **5.6**

Maximum Hours: **5.6**

College: *Austin Community College*

Printed 01/04/2022

Submitted 08/10/2021

Local Need Course Review Form

6-Digit CIP (Course): **13.1501**
Course Number: **EDTC 2073**
WECM Course Title: **EDUCATIONAL TECHNOLOGY FOUNDATIONS**
Course Level: **Introductory**
Licensing Agency: **Texas Education Agency**
Justification:

The State of Texas mandates the requirements for certification of Texas educators. The requirements cover the number of course contact hours, content of the courses, clinical teaching/internship, testing requirements. This course is part of the requirements for teacher certification.

Description:

This educational technology foundations course is guided by the International Society for Technology in Education Standards for Educators and the Texas Technology Applications EC-12 standards. Topics include: digital citizenship, assessing digital content, copyright, lesson design, communicating with colleagues and parents, integration with English Language Arts/Reading/Math/Science standards, assessment and use of data collected. One of the ISTE standards for Educators is being a Learner. This class will explore Professional Learning Networks for you to join to keep moving forward in your educational technology skill set.

Outcomes:

- use and promote creative thinking and innovative processes to construct knowledge, generate new ideas, and create products.**
- collaborate and communicate both locally and globally using digital tools and resources to reinforce and promote learning**
- acquire, analyze, and manage content from digital resources.**
- make informed decisions by applying critical-thinking and problem-solving skills.**
- practice and promote safe, responsible, legal, and ethical behavior while using technology tools and resources.**
- demonstrate a thorough understanding of technology concepts, systems, and operations.**
- know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum.**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 56	Maximum Hours: 56
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 5.6	Maximum Hours: 5.6

College: *Austin Community College*
Submitted 07/30/2021

Printed 01/04/2022

Local Need Course Review Form

6-Digit CIP (Course): **13.1501**
Course Number: **EDTC 2076**
WECM Course Title: **SCIENCE OF TEACHING READING - ELEMENTARY**
Course Level: **Introductory**
Licensing Agency: **Texas Education Agency**

Justification:

The State of Texas mandates the requirements for certification of Texas educators. The requirements cover the number of course contact hours, content of the courses, clinical teaching/internship, testing requirements. This course is part of the requirements for teacher certification.

Description:

This course will focus on foundational concepts, principles and best practices related to the science of teaching reading, including development of oral language, phonological and phonemic awareness, assessment and instructional practices of print concept, alphabet knowledge, phonics and other word identification skills, syllabication and morphemic analysis skills, reading fluency, vocabulary development, reading comprehension, and critical thinking about literary and informational texts.

Outcomes:

Understand foundational concepts, principles, and best practices related to the science of teaching reading.
Understand foundational concepts, principles, and best practices related to reading assessment.
Understanding foundational concepts, principles, and best practices related to young children's development of oral language, including second-language acquisition, and demonstrate knowledge of developmentally appropriate, research-and evidence-based assessment and instructional practices to promote all students' development of grade-level oral language skills.
Understand foundational concepts, principles, and best practices related to the development of phonological and phonemic awareness, and demonstrate knowledge of developmentally appropriate, research-and evidence-based assessment and instructional practices to promote all students' development of grade-level phonological and phonemic awareness skills.

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 56	Maximum Hours: 56
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 5.6	Maximum Hours: 5.6

College: *Austin Community College*

Printed 01/04/2022

Submitted 08/10/2021

Local Need Course Review Form

6-Digit CIP (Course): **15.0613**
Course Number: **INMT 1074**
WECM Course Title: **MACHINE OPERATION AND PREVENTATIVE MAINTENANCE**
Course Level: **Introductory**
Licensing Agency:
Justification:

This course has been developed by Navarro College in collaboration with FreshPet, a local business/industry partner. The course addresses specific training needs of the industry partner. This will be taught in a series of new employee trainings provided by Navarro College to FreshPet employees.

Description:

Customized course that covers the basics of machine operation and preventative maintenance. Includes instruction in set-up and change-over, fasteners, lubricants, and pneumatics. Also includes an introduction to quality and visual inspection.

Outcomes:

At the conclusion of this course, trainees will understand safety, tools, torque, lubrication, pneumatics, preventative maintenance, set-up and change-overs.

Lab Recommended: **No** Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 16	Maximum Hours: 16
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 1.6	Maximum Hours: 1.6

College: *Navarro College*

Submitted *08/23/2021*

Printed *01/04/2022*

Local Need Course Review Form

6-Digit CIP (Course): **15.0702**
Course Number: **QCTC 1073**
WECM Course Title: **CSSGB EXAM PREPARATION**
Course Level: **Intermediate**

Licensing Agency:

Justification:

This course will provide recognized Six Sigma fundamental training and ?will prepare professionals to take the Certified Six Sigma Green Belt examination. This Six Sigma exam preparation is not currently offered in the WECM inventory, so a local needs course has been created.

Description:

This Certified Six Sigma Green Belt preparation course is designed to be an intensive review of fundamental knowledge and skills for quality professionals interested in taking the examination offered by the American Society for Quality (ASQ). The instructional content for this course is fully aligned with the subject matter as outlined in the ASQ Body of Knowledge.

Outcomes:

- 1. Be prepared to take the CSSGB Exam.**
- 2. Apply Lean tools and understand how they work with Six Sigma in job-related situations.**
- 3. Evaluate why and how Lean Six Sigma tools can be deployed for Business improvement.**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 36	Maximum Hours: 36
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 3.6	Maximum Hours: 3.6

Local Need Course Review Form

6-Digit CIP (Course): **15.1201**

Course Number: **SMFT 1072**

WECM Course Title: **GAS DELIVERY SYSTEMS**

Course Level: **Introductory**

Licensing Agency:

Justification:

No WECM Course. Course needed for Samsung employees

Description:

This course provides an introduction to the gas system components utilized in a semiconductor process tool. The MFC's electrical, mechanical and thermal characteristics will be discussed. Gas panel blue prints and schematics will be reviewed. Course will provide a hands-on familiarization and functional knowledge of the common components found in semiconductor process gas systems and how to maintain them.

Outcomes:

- **Understand each component found in a gas delivery system**
- **Explain the function and operation of common components**
- **Use schematics to troubleshoot and maintain gas delivery systems**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **8**

Maximum Hours: **8**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **0.8**

Maximum Hours: **0.8**

College: *Austin Community College*

Printed 01/04/2022

Submitted 11/29/2021

Local Need Course Review Form

6-Digit CIP (Course): **15.1201**

Course Number: **SMFT 1073**

WECM Course Title: **OPTICS AND LASERS**

Course Level: **Introductory**

Licensing Agency:

Justification:

No WECM course. Course required for Samsung employees

Description:

This course will be an introductory course in optics and lasers. Topics include the properties of light, optical positioning, light sources, laser safety, geometrical and physical optics, principles of lasers and operational characteristics of lasers. The course will also cover optical detector and optical fiber communications. This course will also look at the application of optics and lasers in the fabrication of semiconductor devices.

Outcomes:

- **Analyze optoelectronic components and circuits**
- **Explain the operation of lasers as light sources**
- **Understand fiber optic communications and basic laser fundamentals**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 8	Maximum Hours: 8
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 0.8	Maximum Hours: 0.8

College: *Austin Community College*

Printed 01/04/2022

Submitted 11/29/2021

Local Need Course Review Form

6-Digit CIP (Course): **19.0706**

Course Number: **CDEC 1070**

WECM Course Title: **INTRODUCTION TO TEACHING ESL**

Course Level: **Introductory**

Licensing Agency:

Justification:

CDEC 1070 is being offered as a linked course for the purpose of giving current K-12 and early childhood educators the opportunity to engage in professional development relevant to their teaching interests and/or to fulfill training requirements necessary for their certification or continued employment. Generally, these individuals will already possess an undergraduate degree.

Description:

An overview of ESL education. Topics include awareness of cultural diversity, assessment strategies, teaching techniques, instructional activity development and historical/philosophical concepts of ESL education.

Outcomes:

- 1. Describe historical and philosophical perspectives of ESL education.**
- 2. Explain ESL education terminology and learning theories.**
- 3. Demonstrate teaching styles and the application of assessment tools related to the ESL classroom.**
- 4. Use ESL education techniques and classroom resources.**
- 5. Summarize the political and legal aspects of ESL education.**

Lab Recommended: **Yes**

Lab Required:

Prerequisites:

Contact Hour Range: Minimum Hours: **48** Maximum Hours: **48**

Semester Credit Hour (SCH) Range: Minimum Hours: **0** Maximum Hours: **0**

Continuing Education Units (CEU) Range: Minimum Hours: **4.8** Maximum Hours: **4.8**

College: *Collin County Community College District*

Printed 01/04/2022

Submitted 11/02/2021

Local Need Course Review Form

6-Digit CIP (Course): **19.0709**

Course Number: **CDEC 1071**

WECM Course Title: **MONTESSORI 1: PRACTICAL LIFE EXERCISES (7-40 HOURS)**

Course Level: **Introductory**

Licensing Agency:

Justification:

The Montessori philosophy implements a unique educational model. Each course addresses specific skills that are not included in any existing WECM course. Existing WECM courses that might be considered are too generic and not specific enough to meet Montessori requirements.

The Montessori courses have been offered at Collin for more than 25 years. The courses consistently have strong enrollment and meet the staffing needs of the ever-growing Montessori schools in this area. The local need WECM courses will allow us to better align our continuing education courses with the curriculum requirements of the course sequence.

Description:

The first module in the Montessori Pre-Primary Teacher Training program focuses on curriculum activities designed to prepare the child for real life experiences and to develop the child's independence and self-confidence. The individual exercises develop the child's hand-eye coordination, large and small muscle control, care of self and the environment. The first hour of instruction each session is devoted to the study of classroom management and the Montessori philosophy.

Outcomes:

**Focus on activities designed to prepare the child for real life experiences.
Develop child's independence and self-confidence.
Develop child's hand-eye coordination, large and small muscle control.
Develop child's care of self and the environment. Understand classroom management and the Montessori philosophy.**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 40	Maximum Hours: 40
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 4	Maximum Hours: 4

College: *Collin County Community College District*

Printed 01/04/2022

Submitted 09/20/2021

Local Need Course Review Form

6-Digit CIP (Course): **19.0709**

Course Number: **CDEC 1072**

WECM Course Title: **MONTESSORI 2: SENSORIAL EXERCISES (7-40 HOURS)**

Course Level: **Introductory**

Licensing Agency:

Justification:

The Montessori philosophy implements a unique educational model. Each course addresses specific skills that are not included in any existing WECM course. Existing WECM courses that might be considered are too generic and not specific enough to meet Montessori requirements.

The Montessori courses have been offered at Collin for more than 25 years. The courses consistently have strong enrollment and meet the staffing needs of the ever-growing Montessori schools in this area. The local need WECM courses will allow us to better align our continuing education courses with the curriculum requirements of the course sequence.

Description:

The second module of the Montessori Pre-Primary Teacher Training program focuses on curriculum and exercises to introduce the young child to his/her five senses and assist him/her in developing these senses to observe and make discoveries in learning. The first hour of each class is devoted to the study of classroom management and the Montessori philosophy.

Outcomes:

**Focus on exercises to introduce the child to his/her five senses.
Develop child's senses to observe and make discoveries in learning.
Understand classroom management and the Montessori philosophy.**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 40	Maximum Hours: 40
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 4	Maximum Hours: 4

College: *Collin County Community College District*

Submitted 09/20/2021

Printed 01/04/2022

Local Need Course Review Form

6-Digit CIP (Course): **19.0709**

Course Number: **CDEC 1073**

WECM Course Title: **MONTESSORI 3: LANGUAGE EXERCISES (7-40 HOURS)**

Course Level: **Introductory**

Licensing Agency:

Justification:

The Montessori philosophy implements a unique educational model. Each course addresses specific skills that are not included in any existing WECM course. Existing WECM courses that might be considered are too generic and not specific enough to meet Montessori requirements.

The Montessori courses have been offered at Collin for more than 25 years. The courses consistently have strong enrollment and meet the staffing needs of the ever-growing Montessori schools in this area. The local need WECM courses will allow us to better align our continuing education courses with the curriculum requirements of the course sequence.

Description:

The Montessori language materials and exercises offer a systematical breakdown of the essential elements of reading, emphasizing the fundamentals of the phonics approach to reading. The individual exercises develop the child's vocabulary, writing and reading skills. The exercises include a variety of gross and fine motor skill activities that help the child develop hand and eye coordination.

Outcomes:

**Emphasizing the fundamentals of the phonics approach to reading.
Develop child's vocabulary, writing and reading skills.
Develop child's fine motor skills activities in hand and eye coordination.
Understand classroom management and the Montessori philosophy.**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 40	Maximum Hours: 40
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 4	Maximum Hours: 4

College: *Collin County Community College District*

Printed 01/04/2022

Submitted 09/20/2021

Local Need Course Review Form

6-Digit CIP (Course): **19.0709**

Course Number: **CDEC 1074**

WECM Course Title: **MONTESSORI 4: MATH EXERCISES (7-40 HOURS)**

Course Level: **Introductory**

Licensing Agency:

Justification:

The Montessori philosophy implements a unique educational model. Each course addresses specific skills that are not included in any existing WECM course. Existing WECM courses that might be considered are too generic and not specific enough to meet Montessori requirements.

The Montessori courses have been offered at Collin for more than 25 years. The courses consistently have strong enrollment and meet the ?staffing needs of the ever-growing Montessori schools in this area. The local need WECM courses will allow us to better align our continuing education courses with the curriculum requirements ?of the course sequence.

Description:

Instruction in the fourth module of the training program focuses on activities and exercises that introduce the child to counting, the numerical symbols, and the four basic mathematical operations. These concepts are introduced to the child through the use of concrete materials. The child obtains a visual concept of the math operations. The first hour of instruction each session focuses on the study of classroom management and the Montessori philosophy.

Outcomes:

**Focus on activities and exercises that introduce the child to counting, numerical symbols and the four basic mathematical operations.
Develop child's concept of mathematical operations.
Understand classroom management and the Montessori philosophy.**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 40	Maximum Hours: 40
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 4	Maximum Hours: 4

College: *Collin County Community College District*

Printed 01/04/2022

Submitted 09/20/2021

Local Need Course Review Form

6-Digit CIP (Course): **19.0709**

Course Number: **CDEC 1075**

WECM Course Title: **MONTESSORI 5: GEOGRAPHY/CULTURAL EXERCISES (7-40 HOURS)**

Course Level: **Introductory**

Licensing Agency:

Justification:

The Montessori philosophy implements a unique educational model. Each course addresses specific skills that are not included in any existing WECM course. Existing WECM courses that might be considered are too generic and not specific enough to meet Montessori requirements.

The Montessori courses have been offered at Collin for more than 25 years. The courses consistently have strong enrollment and meet the ?staffing needs of the ever-growing Montessori schools in this area. The local need WECM courses will allow us to better align our continuing education courses with the curriculum requirements ?of the course sequence.

Description:

Instruction focuses on exercises that introduce the young child to his environment and culture and then expands to other countries and cultures. This study begins with introducing the child to a series of globes, and terms such as continents, oceans, etc. The child furthers his/her studies with the use of puzzle maps, flags, land forms, classified nomenclature cards, and basic science concepts. The first hour of each session is devoted to the study of classroom management and the Montessori philosophy.

Outcomes:

Focus on activities and exercises that introduce the child to his/her environment and culture and then expands to other countries.

Introduce child to globes, and terms such as continents, oceans, etc.

Introduce child to science concepts.

Understand classroom management and the Montessori philosophy.

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range: Minimum Hours: **40** Maximum Hours: **40**

Semester Credit Hour (SCH) Range: Minimum Hours: **0** Maximum Hours: **0**

Continuing Education Units (CEU) Range: Minimum Hours: **4** Maximum Hours: **4**

College: *Collin County Community College District*

Printed 01/04/2022

Submitted 09/20/2021

Local Need Course Review Form

6-Digit CIP (Course): **23.1303**
Course Number: **ETWR 1070**
WECM Course Title: **SOCIAL MEDIA LAW AND ETHICS**
Course Level: **Introductory**

Licensing Agency:

Justification:

Understanding law and ethics as related to social media is critical to any practitioner in that field. This course will be added to the Business and Technical Communications' Social Media Communication Specialization Associate of Applied Science Degree.

Description:

Now that businesses and consumers rely more than ever on social media for most, if not all, business and brand awareness, they are at risk with posts made on the company pages as well as on employee pages. Explore best practices for business use of social media and learn to engage with new media legally. Use practical information to make good decisions related to digital communications. Create a social media policy and best practices guide for business to help reduce the legal and social risks associated with illegal, inappropriate, or unethical social media content. This course was designed to be repeated multiple times if content varies.

Outcomes:

Objectives: Study and understand the standard terms of use of most social media platforms. Study current State and Federal laws regarding social media communications and business compliance. Study the basics of employment law and regulating employee usage of social media. Study rules regarding advertising, contests, and sweepstakes. Study sharing and original content and better understand what is ethical and legal. Understand the difference between a civil offenses and criminal offenses and how social media content can be used in court trials. Study legal principles affecting social media such as libel, defamation, slander, copyright and trademark infringement, plagiarism, intellectual property, freedom of speech, and protected speech. Evaluate how social media disasters can damage a brand or company and how to avoid them. Outcomes: Read and dissect a user agreement from a social media platform and explore each section and examples of how to comply. Write a social media policy and best practices guideline for a business. Compile a list of inappropriate social media publications and rewrite them to be legal and appropriate. Evaluate a social media disaster and discuss how to avoid and correct it.

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 48	Maximum Hours: 48
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 4.8	Maximum Hours: 4.8

College: *AUSTIN COMMUNITY COLLEGE*
Submitted *06/29/2021*

Printed 01/04/2022

Local Need Course Review Form

6-Digit CIP (Course): **23.1303**

Course Number: **ETWR 1078**

WECM Course Title: **POLICY WRITING FOR GOVERNMENT AND BUSINESS ADMINISTRATORS**

Course Level: **Introductory**

Licensing Agency:

Justification:

Offered as ETWR 1378 on the credit side, ETWR 1078 is the continuing education "mirror" for this credit course. No WECM match for content/hours.

Description:

This course provides training and practice for people in government and business jobs who must write accurate, concise, readable reports and procedural materials. Students practice writing administrative rules (based on legislation), guidance documents (translations of administrative rules for ordinary citizens), compliance and audit reports, and other types of reports common in governmental settings. The course also includes practice in writing policy-and-procedure documents.

Note: This course is cross-listed with ETWR 1378

Outcomes:

- Describe common guidelines for writing administrative rules, guidance-type documents, and a variety of reports written by government employees.
**
- Plan, write, and revise administrative rules, guidance documents, policy-and-procedure documents, and government reports.
**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 48	Maximum Hours: 48
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 4.8	Maximum Hours: 4.8

College: *AUSTIN COMMUNITY COLLEGE*

Submitted 06/29/2021

Printed 01/04/2022

Local Need Course Review Form

6-Digit CIP (Course): **23.1303**

Course Number: **ETWR 2078**

WECM Course Title: **XML AND DITA FOR STRUCTURED AUTHORING FOR INFORMATION SPECIALISTS**

Course Level: **Introductory**

Licensing Agency:

Justification:

Offered as ETWR 2478 on the credit side, this course primarily attracts practicing technical writers and information specialists who need to understand the fundamentals of XML- based structured authoring, which enables publication to a variety of media and formats. This course is also valuable to people who are just beginning their careers as technical writers and information specialists and who need these skills to get employment in XML-related work environments. XML, along with its related technologies, is an important business solution that the target audience for this course is eager to learn and implement. (The XML courses available from Computer Information Systems are focused on traditional programming functions; in contrast, this course focuses on documents and publishing and sets the stage for content management.)

Description:

Introduces XML, DITA, and related technologies focusing on their application in business, government, and technical communications. In addition to an overview of the raw materials needed to create and transform XML (DTDs, schemas, XSL and CSS stylesheets), the course introduces students to industry-standard solutions such as DocBook, DITA and the related tools, both commercial and open source. Students learn to create and validate XML documents and to transform them into a variety of output formats (HTML, CHM, PDF, RTF, MIF). Students also learn the origins and evolution of SGML and XML and how to evaluate the appropriateness of an XML-based solution for various situations they might encounter as professionals.

Outcomes:

Explain in writing the origins, applications, and cultural context of XML-based publishing. Create simple well-formed XML documents. Describe in writing the elements of an XML-base publishing system (DTD/schema, XML-validating editor, XSL processor, XSL stylesheets, XSL-FO renderer). Create a resume as an XML document and transform it to HTML, PDF, RTF, and text formats using the open source xmlresume package (<http://xmlresume.sourceforge.net>). Produce semantically marked-up XML and professional-quality output in multiple formats from a single source using industry-standard DTDs and stylesheets such as DocBook.

Lab Recommended: **No**

Lab Required:

Prerequisites: **Program coordinator approval**

Contact Hour Range:

Minimum Hours: **64**

Maximum Hours: **64**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **6.4**

Maximum Hours: **6.4**

Local Need Course Review Form

6-Digit CIP (Course): **51.0902**

Course Number: **ECRD 1071**

WECM Course Title: **ELECTROCARDIOGRAPHY PRACTICUM**

Course Level: **Introductory**

Licensing Agency: **National Healthcareer Association**

Justification:

EKG practicum will provide students with hands-on experience in a clinic/hospital and reinforce lecture concepts.

Description:

Practical, workplace Electrocardiography training supported by an individualized learning plan developed by clinic/hospital supervision, college, and student.

Outcomes:

As outlined in the learning plan and under clinic/hospital supervision, students will apply Electrocardiography theory, concepts, and skills involving clinic/hospital specialized materials, tools, equipment, procedures, and regulations; will perform a minimum of 10 electrocardiograms; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using Electrocardiography terminology.

Lab Recommended: **No**

Lab Required:

Prerequisites: **ECRD 1011**

Contact Hour Range:

Minimum Hours: **13**

Maximum Hours: **13**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **1.3**

Maximum Hours: **1.3**

College: *South Texas College*

Printed 01/04/2022

Submitted 07/07/2021

Local Need Course Review Form

6-Digit CIP (Course): **51.1009**

Course Number: **PLAB 1070**

WECM Course Title: **PHLEBOTOMY PRACTICUM**

Course Level: **Introductory**

Licensing Agency:

Justification:

Phlebotomy Practicum will provide students with hands-on experience in a clinic/hospital and reinforce lecture.

Description:

Practical, workplace Phlebotomy training supported by an individualized learning plan developed by clinic/hospital supervision, college, and student.

Outcomes:

As outlined in the learning plan and under clinic/hospital supervision, students will apply Phlebotomy theory, concepts, and skills involving clinic/hospital specialized materials, tools, equipment, procedures, and regulations; will perform a minimum of 50 venipunctures and 10 dermal punctures; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using Phlebotomy terminology.

Lab Recommended: **No**

Lab Required:

Prerequisites: **PLAB 1023**

Contact Hour Range:

Minimum Hours: **60**

Maximum Hours: **60**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **6**

Maximum Hours: **6**

College: *South Texas College*

Printed 01/04/2022

Submitted 07/14/2021

Local Need Course Review Form

6-Digit CIP (Course): **51.3801**

Course Number: **RNSG 1079**

WECM Course Title: **NURSE REFRESHER VIRTUAL CLINICAL EXPERIENCE**

Course Level: **Introductory**

Licensing Agency:

Justification:

Since the pandemic, securing in-facility clinical hours has been a challenge. By offering a clinical experience of providing hands on care to virtual patients, the students will be able to complete the Nurse Refresher Course and apply for license reinstatement which will allow them to re-enter the workforce. Note: This modality is being widely used by Health Education institutions with positive outcomes.

Description:

This is an 80 hour online course providing an opportunity for students to work with a group of interactive, virtual patients. The students will perform health assessments on the patients who will provide immediate feedback to the students, giving answers as needed to questions asked.

This modality will allow the students to be able to use critical thinking skills and perform interventions in a safe, unhurried environment. The patients will be variable across the age span, and will present with a variety of medical conditions.

Outcomes:

At the conclusion of the course the student will be able to demonstrate by use of performance feedback tools :

- *Communication skills which promote therapeutic patient interaction,**
- *Perform Health Assessments which elicit maximum information on the patients' current health status.**
- *Identify when specific nursing interventions are indicated"**
- *Evaluate the effectiveness of interventions implemented.**
- *Perform hands on patient care effectively**

Lab Recommended: **No**

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 80	Maximum Hours: 80
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 8	Maximum Hours: 8

College: *Austin Community College*

Printed 01/04/2022

Submitted 08/13/2021

Local Need Course Review Form

6-Digit CIP (Course): **52.0401**

Course Number: **POFT 1070**

WECM Course Title: **ADMINISTRATIVE ASSISTANT PROGRAM**

Course Level: **Introductory**

Licensing Agency:

Justification:

Skilled Administrative Assistants are needed in all industries and businesses. Basic communication, math, computer applications and data entry skills are required in the business community. Administrative Assistants support mission-critical roles in the workplace, expertly using word processing tools, spreadsheets, databases, and presentation software in the business community. This series will enable students to efficiently apply the learned skills in daily office duties.

Description:

Study of current office procedures, duties, and responsibilities applicable to an office environment. The series includes instructions in word processing, spreadsheet, databases, presentation software, Internet searching, as well as data entry, practical business applications, business math and business communications.

Outcomes:

- 1. Demonstrate touch typing
**
- 2. Open, use and close word processing, spreadsheet, presentation and database software
**
- 3. Use selection and replacement techniques
**
- 4. Navigate in Word, Excel, PowerPoint, and Access documents, save documents, format documents, print documents
**
- 5. Use mail merge and formulas
**
- 6. Create, insert and manipulate graphics and charts in Word, Excel, PowerPoint and Access
**
- 7. Perform effective Internet searches and use email
**
- 8. Perform data entry and data manipulation
**
- 9. Create business letters, reports, and invoices
**
- 10. Demonstrate problem solving and usage of whole numbers, fractions, decimals, percent, equations, formulas and graphs
**
- 11. Demonstrate basic language skills, writing and editing skills
**
- 12. Develop time management techniques
**
- 13. Demonstrate appropriate communication skills
**

Lab Recommended: **Yes**

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **140**

Maximum Hours: **140**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **14**

Maximum Hours: **14**

College: *Austin Community College*

Printed 01/04/2022

Submitted 07/14/2021

Special Topics Course Review Form

6-Digit CIP (Course): **12.0401**

Course Number: **CSME 1091**

WECM Course Title: **COSMETOLOGY PRACTICAL TEST REFRESHER**

Course Level: **Introductory**

Licensing Agency:

Description:

A refresher course in Cosmetology practical skills.

Outcomes:

Demonstrate professional cosmetology services and exhibit workplace competencies.

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **8**

Maximum Hours: **8**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **0.8**

Maximum Hours: **0.8**

College: *Trinity Valley Community College*

Submitted 09/23/2021

Printed 01/04/2022

Special Topics Course Review Form

6-Digit CIP (Course): **16.0905**

Course Number: **SPNL 1091**

WECM Course Title: **BEGINNING WORKPLACE SPANISH**

Course Level: **Introductory**

Licensing Agency:

Description:

This course focuses on developing speaking, listening, reading, and writing skills in the target language of Spanish while building vocabulary, learning basic rules and terminology of the grammar. Practice verbal communication in the context of meetings, exchanges, video conferences, presentations, and professional discussion, in Spanish and in areas related to finance, marketing, accounting, operations.

Outcomes:

Manage a basic vocabulary and grammatical database to achieve successful communication in Spanish.

Understand basic spoken Spanish in conversations and presentations related to the workplace.

Speak in Spanish to communicate ideas and interact with Spanish speakers and coworkers at the company.

Understand basic written Spanish: write short compositions, notes, letters, and emails.

Approach reading and listening texts effectively with limited Spanish proficiency.

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **36**

Maximum Hours: **36**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **3.6**

Maximum Hours: **3.6**

College: *Austin Community College*

Submitted 08/09/2021

Printed 01/04/2022

Special Topics Course Review Form

6-Digit CIP (Course): **16.0905**

Course Number: **SPNL 1091**

WECM Course Title: **INTERMEDIATE WORKPLACE SPANISH**

Course Level: **Intermediate**

Licensing Agency:

Description:

This course focuses on developing reading strategies (skimming, recognizing cognates, making inferences, etc.), listening strategies (tone, content, context, intonation, etc.), speaking strategies (circumlocution, fluency, etc.) and writing strategies (process writing, discourse connectors, paragraph organization, paraphrasing, etc.). Practice verbal communication in the context of meetings, exchanges, video conferences, presentations, and professional discussion, in Spanish and in areas related to finance, marketing, accounting, operations.

Outcomes:

Manage vocabulary and grammatical database to achieve communicational success at Cintra US.

Maintain conversations, with co-workers, related to the workplace using specific terminology.

Produce written Spanish in short letters, memorandums, and emails using specific terminology.

Approach reading texts effectively using specific terminology.

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **36**

Maximum Hours: **36**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **3.6**

Maximum Hours: **3.6**

College: *Austin Community College*

Submitted 08/24/2021

Printed 01/04/2022

Special Topics Course Review Form

6-Digit CIP (Course): **27.0301**

Course Number: **TECM 1091**

WECM Course Title: **TECHNICAL MATH FOR SURVEYORS**

Course Level: **Introductory**

Licensing Agency:

Description:

This beginning level math course is intended for those who wish to pursue a career in surveying. Topics such as units of measurement, precision and accuracy, mistakes and errors, geometry (including coordinate and analytic), and trigonometry will be covered. In addition, participants will learn to measure horizontal and vertical distances and angles. This course is customized for McCarthy.

Outcomes:

**Solve surveying problems using units of measurement and computation tools.
Solve surveying problems using geometry (including coordinate and analytic), mensuration, and trigonometry.
Measure horizontal distances accurately.
Measure vertical distances accurately.**

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 24	Maximum Hours: 24
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 2.4	Maximum Hours: 2.4

Special Topics Course Review Form

6-Digit CIP (Course): **41.0204**

Course Number: **IRAD 1091**

WECM Course Title: **RADIATION SAFETY OFFICER**

Course Level: **Introductory**

Licensing Agency:

Description:

This course covers radiation concepts, regulatory standards, and duties of a Radiation Safety Officer (RSO) in an industrial setting. Course materials focus on the tasks a RSO performs when dealing with radioactive material on a day-to-day basis. Topics include radiation fundamentals, detection instrumentation and equipment, regulatory standards, management programs, recordkeeping requirements, emergencies, and transportation of radioactive materials.

Outcomes:

1. Describe the characteristics of radiation; 2. Explain the biological effects of radiation; 3. Demonstrate use of radiation survey instruments; 4. Demonstrate industrial personal hygiene techniques; 5. Demonstrate the use of personal monitoring equipment; 6. Explain sampling methods and methods of control; 7. Discuss the storage, control, disposal, and transport of radiation equipment; 8. Discuss key regulations pertaining to radiation safety; 9. Outline emergency preparedness and response to radiation emergencies; and 10. Analyze contaminants detected at mine sites.

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 16	Maximum Hours: 16
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 1.6	Maximum Hours: 1.6

College: *Kilgore College*

Printed 01/04/2022

Submitted 10/28/2021

Special Topics Course Review Form

6-Digit CIP (Course): **43.0203**

Course Number: **FIRS 1091**

WECM Course Title: **ELECTRIC AND AUTONOMOUS VEHICLES FOR FIRST AND SECOND RESPONDERS**

Course Level: **Introductory**

Licensing Agency:

Description:

This class will cover the ever expanding world of electric and autonomous vehicles as they pertain to the emergency (Fire/Police/EMS) and secondary responder (investigator and tow operator). The construction, safety features, operations, and disabling of these vehicles will be taught in a classroom session, with static display electric and autonomous vehicles available for the students to observe and interact with.

Outcomes:

At the conclusion of this class, the student will be able to:

Identify electric and autonomous vehicles based on common characteristics and markings

Identify hazards associated with these vehicles and vehicle batteries and demonstrate how to eliminate those hazards

Demonstrate proper stabilization and access techniques

Demonstrate how to safely disable the vehicle

Identify common extrication hazards and demonstrate how to mitigate those hazards

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **8**

Maximum Hours: **8**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **0.8**

Maximum Hours: **0.8**

College: *Tarrant County College - Northwest Campus*

Printed 01/04/2022

Submitted 08/26/2021

Special Topics Course Review Form

6-Digit CIP (Course): **49.0205**

Course Number: **CVOP 1091**

WECM Course Title: **PROFESSIONAL TRUCK DRIVER I**

Course Level: **Introductory**

Licensing Agency:

Description:

Preparation for mastery of the Commercial Driver's License general truck driving skills with hands-on component, and instruction coordinated with the Department of Transportation.

Outcomes:

Demonstrate the safe operation and compliance with the law in various maneuvers of a commercial vehicle in different traffic situations; operate a tractor-trailer combination; and maneuver the vehicle safely frontward and backward around various obstacles.

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 40	Maximum Hours: 40
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 4	Maximum Hours: 4

College: *South Texas College*

Submitted 12/01/2021

Printed 01/04/2022

Special Topics Course Review Form

6-Digit CIP (Course): **50.0408**
Course Number: **INDS 1091**
WECM Course Title: **SKETCH UP FOR DESIGNERS**
Course Level: **Introductory**

Licensing Agency:

Description:

This course examines the process of creating a 3-dimensional model of a residential floor plan, and populating that model with furnishings and fixtures to represent an Interior Design concept. PC Lab Computers will be used for this class. No late enrollment will be allowed due to large amount of content covered on first day of class.

Outcomes:

The objective of this course is to learn how to represent an Interior Design concept in a 3-dimensional visual computer environment.

The student will learn about the basic drawing tools used in SketchUp, and then use those tools to draft and build a 3D conceptual model

Demonstrate understanding of software interface and drafting tools

Create 3 dimensional geometry

Model furniture, cabinetry and accessories

Use trimble 3D warehouse

Draft and model floor plan

Add color, texture and photo matching

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 20	Maximum Hours: 20
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 2	Maximum Hours: 2

College: *Austin Community College*

Submitted 09/15/2021

Printed 01/04/2022

Special Topics Course Review Form

6-Digit CIP (Course): **50.0601**

Course Number: **FLMC 1091**

WECM Course Title: **PLAYING AROUND WITH SCREEN WRITING**

Course Level: **Introductory**

Licensing Agency:

Description:

This course covers developing a movie concept and writing the script to be entered into a contest for professional feedback.

Outcomes:

- 1. Working in groups, students will brainstorm story ideas then come together to present and defend their selection.**
- 2. Utilize activities from "Save the Cat!" and YouTube lessons to practice developing an idea into a story.**
- 3. Create individual and group worksheets for script analysis.**

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **24**

Maximum Hours: **24**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **2.4**

Maximum Hours: **2.4**

College: *Trinity Valley Community College*

Printed 01/04/2022

Submitted 10/25/2021

Special Topics Course Review Form

6-Digit CIP (Course): **50.0904**

Course Number: **MUSC 1094**

WECM Course Title: **ADVANCED APPLIED MUSIC COMPOSITION**

Course Level: **Advanced**

Licensing Agency:

Description:

This course offers private instruction in music composition. Students develop the ability to compose and edit original songs and musical scores.

Outcomes:

Develop ability to compose for a wide variety of instruments appropriate to their strengths. Gain an understanding of standard performance practices of different musical styles and eras. Perform a solo composition in at least one studio class and a final jury. Demonstrate an ability to read musical notation through singing, counting, clapping, and other various means.

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **32**

Maximum Hours: **32**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **3.2**

Maximum Hours: **3.2**

College: *South Texas College*

Submitted 09/01/2021

Printed 01/04/2022

Special Topics Course Review Form

6-Digit CIP (Course): **51.0000**

Course Number: **HPRS 1091**

WECM Course Title: **SPECIAL TOPICS IN HEALTH PROFESSIONS: CLINICAL SIMULATIONS**

Course Level: **Introductory**

Licensing Agency:

Description:

This course promotes and enhances patient safety and quality; improves practitioner productivity and efficiency in health care settings through the use of clinical simulations. Topics include integration of patient assessment and management procedures with situational awareness, team coordination, and crisis resource management techniques.

Outcomes:

1. demonstrate competence in patient assessment and management; 2. develop situational awareness, team coordination, and crisis resource management during clinical simulations; 3. use self directed learning in areas of clinical simulations.

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 7	Maximum Hours: 35
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 0.7	Maximum Hours: 3.5

College: *TEMPLE COLLEGE*

Printed 01/04/2022

Submitted 06/10/2021

Special Topics Course Review Form

6-Digit CIP (Course): **51.0707**

Course Number: **HITT 1091**

WECM Course Title: **CPB EXAM REVIEW**

Course Level: **Introductory**

Licensing Agency:

Description:

This course reviews health regulations that impact the processes of medical billing to prepare students to take the Certified Professional Biller (CPB) exam.

Outcomes:

Display preparation and readiness for the Certified Professional Biller (CPB) exam after completing a review of healthcare regulations pertinent to medical billing, including:

- 1. insurance modules and consumer driven health plans;**
- 2. the patient registration process and data capture;**
- 3. the basics of ICD-10-CM, CPT®, and HCPCS coding;**
- 4. medical necessity;**
- 5. medical claim forms and the billing process;**
- 6. accounts receivable and the collection process;**
- 7. details on government carriers, common commercial carriers, and workers' compensation.**

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 112	Maximum Hours: 112
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 11.2	Maximum Hours: 11.2

College: *Collin County Community College District*

Printed 01/04/2022

Submitted 11/04/2021

Special Topics Course Review Form

6-Digit CIP (Course): **51.3801**

Course Number: **RNSG 1093**

WECM Course Title: **HEALTH CARE CONCEPTS I**

Course Level: **Introductory**

Licensing Agency:

Description:

In-depth coverage of foundational health care concepts with application through selected exemplars. Concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, thermoregulation, grief, and tissue integrity. Emphasizes development of clinical judgment skills in the beginning nurse. This course lends itself to a concept-based approach. This will be a mirror course of RNSG 1430

Outcomes:

- 1. Utilize a systematic process to analyze selected foundational concepts for patients across the lifespan.**
- 2. Describe nursing management of care for selected foundational concepts.**
- 3. Describe the interrelatedness among foundational concepts to assist in developing clinical judgment.**

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:	Minimum Hours: 112	Maximum Hours: 112
Semester Credit Hour (SCH) Range:	Minimum Hours: 0	Maximum Hours: 0
Continuing Education Units (CEU) Range:	Minimum Hours: 11.2	Maximum Hours: 11.2

Special Topics Course Review Form

6-Digit CIP (Course): **52.0301**

Course Number: **ACNT 1091**

WECM Course Title: **PRINCIPLES OF FINANCIAL ACCOUNTING**

Course Level: **Introductory**

Licensing Agency:

Description:

This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company.

Outcomes:

- 1. Student will examine the procedures and systems to accumulate financial transactions.**
- 2. Student will use generally accepted accounting principles to analyze financial transactions.**
- 3. Student will demonstrate procedures to prepare a balance sheet and an income statement.**

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **96**

Maximum Hours: **96**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **9.6**

Maximum Hours: **9.6**

College: *Trinity Valley Community College*

Printed 01/04/2022

Submitted 11/09/2021

Special Topics Course Review Form

6-Digit CIP (Course): **52.1001**

Course Number: **HRPO 1091**

WECM Course Title: **COVID-19 AND THE ADA (7-112 HOURS)**

Course Level: **Intermediate**

Licensing Agency:

Description:

This course will explore COVID 19 and the ADA.

Outcomes:

Demonstrate an understanding of the possible ADA requests and reasonable accommodations resulting from Covid-19.

Lab Recommended:

Lab Required:

Prerequisites:

Contact Hour Range:

Minimum Hours: **112**

Maximum Hours: **112**

Semester Credit Hour (SCH) Range:

Minimum Hours: **0**

Maximum Hours: **0**

Continuing Education Units (CEU) Range:

Minimum Hours: **11.2**

Maximum Hours: **11.2**

College: *Collin County Community College District*

Submitted 10/01/2021

Printed 01/04/2022

ID	Submitted	College	CIP Code	Course Number (As Submitted)	Course Title or Subtitle	Contact Hours (As Submitted)	Leave as LN or ST	New WECM Course	Existing WECM Course	Does Not Meet WECM Guidelines	Comments
36541	09/23/2021	TRINITY VALLEY COMMUNITY COLLEGE	12.0401	CSME 1091	COSMETOLOGY PRACTICAL TEST REFRESHER	8	[X]	[]	[]	[]	Recommend leave as ST
36486	08/09/2021	AUSTIN COMMUNITY COLLEGE	16.0905	SPNL 1091	BEGINNING WORKPLACE SPANISH	36	[]	[X]	[]	[]	Recommend making this a WECM course
36504	08/24/2021	AUSTIN COMMUNITY COLLEGE	16.0905	SPNL 1091	INTERMEDIATE WORKPLACE SPANISH	36	[]	[X]	[]	[]	Recommend making this a WECM course
36468	07/28/2021	LONE STAR COLLEGE - UNIVERSITY PARK	27.0301	TECM 1091	TECHNICAL MATH FOR SURVEYORS	24	[X]	[]	[]	[]	Recommend leave as ST
36559	10/28/2021	KILGORE COLLEGE	41.0204	IRAD 1091	RADIATION SAFETY OFFICER	16	[]	[]	NUCP 1241 Personnel and Environmental Monitoring	[]	All the listed teaching metrics they want can be done through this course and its 32 hrs not 16 for this important safety personnel
36516	08/26/2021	TARRANT CO NORTHWEST CAMPUS	43.0203	FIRS 1091	ELECTRIC AND AUTONOMOUS VEHICLES FOR FIRST AND SECOND RESPONDERS	8	[]	Yes		[]	could not find an existing/similar course
36688	12/01/2021	SOUTH TEXAS COLLEGE	49.0205	CVOP 1091	PROFESSIONAL TRUCK DRIVER I	40	[]		CVOP 1X13, CVOP 1X40 Professional Truck Driver I, II	[]	State requires more hours of training than 40hrs.
36526	09/15/2021	AUSTIN COMMUNITY COLLEGE	50.0408	INDS 1091	SKETCH UP FOR DESIGNERS	20	[]	Yes	[]	[]	could not find an existing/similar course
36558	10/25/2021	TRINITY VALLEY COMMUNITY COLLEGE	50.0601	FLMC 1091	PLAYING AROUND WITH SCREEN WRITING	24	[X]	[]	[]	[]	
36517	09/01/2021	SOUTH TEXAS COLLEGE	50.0904	MUSC 1094	ADVANCED APPLIED MUSIC COMPOSITION	32	[X]	[]	[]	[]	
36420	06/10/2021	TEMPLE COLLEGE	51.0000	HPRS 1091	SPECIAL TOPICS IN HEALTH PROFESSIONS: CLINICAL SIMULATIONS	7	[X]	[]	[]	[]	
36563	11/04/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	51.0707	HITT 1091	CPB EXAM REVIEW	112	[X]	[]	[]	[]	
36460	07/15/2021	TRINITY VALLEY COMMUNITY COLLEGE	51.3801	RNSG 1093	HEALTH CARE CONCEPTS I	112	[X]	[]	[]	[]	
36564	11/09/2021	TRINITY VALLEY COMMUNITY COLLEGE	52.0301	ACNT 1091	PRINCIPLES OF FINANCIAL ACCOUNTING	96	[X]	[]	[]	[]	Consider using the BNKG rubric, as BNKG 1056 Analyzing Financial Statements had a related description: A study of the process of evaluating financial statements, cash flow, and ratio analysis of individuals and businesses. Emphasis on the relationship of comparative analysis and industry standards. End-of-Course Outcomes: Analyze the information provided in the balance sheet, statement of cash flow, and income statement; evaluate cash flow and financial ratios to determine credit worthiness; and compare financial ratios to industry standards. CIP Code: 52.0803 (Banking and Financial Support Services)
36542	10/01/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	52.1001	HRPO 1091	COVID-19 AND THE ADA (7-112 HOURS)	112	[X]	[]	[]	[]	

ID	Submitted	College	CIP Code	Course Number (As Submitted)	Course Title or Subtitle	Contact Hours (As Submitted)	Leave as LN or ST	New WECM Course	Existing WECM Course	Does Not Meet WECM	Comments
36404	06/03/2021	AUSTIN COMMUNITY COLLEGE	01.0601	HALT 1073	HISTORY OF LANDSCAPE ARCHITECTURAL DESIGN	24	[X]	[]	[]	[]	
36499	08/23/2021	NAVARRO COLLEGE	12.0503	CHEF 1075	SANITATION AND SAFETY	16	[X]	[]	[]	[]	
36490	08/10/2021	AUSTIN COMMUNITY COLLEGE	13.1501	EDTC 1077	SCIENCE OF TEACHING READING - SECONDARY	56	[X]	[]	[]	[]	Consider review since the documents states that this content is required by the state, and currently is not related to any current course rubrics. Additionally, this is related to teacher certification, but CIP is classified as Teacher Assistant/Aide
36489	08/10/2021	AUSTIN COMMUNITY COLLEGE	13.1501	EDTC 2071	DESIGNING AND PRESENTING INSTRUCTION	56	[X]	[]	[]	[]	Consider review since the documents states that this content is required by the state, and currently is not related to any current course rubrics. Additionally, this is related to teacher certification, but CIP is classified as Teacher Assistant/Aide
36488	08/10/2021	AUSTIN COMMUNITY COLLEGE	13.1501	EDTC 2072	USING DATA, ASSESSMENT, AND FEEDBACK TO DRIVE INSTRUCTION	56	[LN]	[]	[]	[]	The committee recommends to leave this class as a local need but also recommends a content review .
36469	07/30/2021	AUSTIN COMMUNITY COLLEGE	13.1501	EDTC 2073	EDUCATIONAL TECHNOLOGY FOUNDATIONS	56	[LN]	[]	[]	[]	The committee recommends to leave this class as a local need but also recommends a content review.
36487	08/10/2021	AUSTIN COMMUNITY COLLEGE	13.1501	EDTC 2076	SCIENCE OF TEACHING READING - ELEMENTARY	56	[LN]	[]	[]	[]	The committee recommends to leave this class as a local need but also recommends a content review .
36503	08/23/2021	NAVARRO COLLEGE	15.0613	INMT 1074	MACHINE OPERATION AND PREVENTATIVE MAINTENANCE	16	[LN]	[]	[]	[]	The committee recommends to leave this class as a local need but also recommends a content review .
36689	12/02/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	15.0702	QCTC 1073	CSSGB EXAM PREPARATION	36	[X]	[]	[]	[]	Cross referenced WECM to verify
36674	11/29/2021	AUSTIN COMMUNITY COLLEGE	15.1201	SMFT 1072	GAS DELIVERY SYSTEMS	8	[X]	[]	[]	[]	
36675	11/29/2021	AUSTIN COMMUNITY COLLEGE	15.1201	SMFT 1073	OPTICS AND LASERS	8	[X]	[]	[]	[]	
36562	11/02/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	19.0706	CDEC 1070	INTRODUCTION TO TEACHING ESL	48	[X]	[]	[]	[]	
36534	09/20/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	19.0709	CDEC 1071	MONTESSORI 1: PRACTICAL LIFE EXERCISES (7-40 HOURS)	40	[X]	[]	[]	[]	
36533	09/20/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	19.0709	CDEC 1072	MONTESSORI 2: SENSORIAL EXERCISES (7-40 HOURS)	40	[X]	[]	[]	[]	"
36532	09/20/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	19.0709	CDEC 1073	MONTESSORI 3: LANGUAGE EXERCISES (7-40 HOURS)	40	[X]	[]	[]	[]	"
36531	09/20/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	19.0709	CDEC 1074	MONTESSORI 4: MATH EXERCISES (7-40 HOURS)	40	[X]	[]	[]	[]	"
36530	09/20/2021	COLLIN COUNTY COMMUNITY COLLEGE DISTRICT	19.0709	CDEC 1075	MONTESSORI 5: GEOGRAPHY/CULTURAL EXERCISES (7-40 HOURS)	40	[X]	[]	[]	[]	"
36438	06/29/2021	AUSTIN COMMUNITY COLLEGE	23.1303	ETWR 1070	SOCIAL MEDIA LAW AND ETHICS	48	[LN]	[]	[]	[]	Course does not exist, information nor hours, LN is valid.
36437	06/29/2021	AUSTIN COMMUNITY COLLEGE	23.1303	ETWR 1078	POLICY WRITING FOR GOVERNMENT AND BUSINESS ADMINISTRATORS	48	[LN]	[]	[]	[]	Course does not exist, information nor hours, LN is valid.
36436	06/29/2021	AUSTIN COMMUNITY COLLEGE	23.1303	ETWR 2078	XML AND DITA FOR STRUCTURED AUTHORIZING FOR INFORMATION SPECIALISTS	64	[LN]	[]	[]	[]	Course does not exist, information nor hours, LN is valid.
36456	07/07/2021	SOUTH TEXAS COLLEGE	51.0902	ECRD 1071	ELECTROCARDIOGRAPHY PRACTICUM	13	[X]	[X]	[]	[]	There is no course currently, one should be created
36457	07/14/2021	SOUTH TEXAS COLLEGE	51.1009	PLAB 1070	PHLEBOTOMY PRACTICUM	60	[]	[]	[X]	[]	Should use PLAB1060 unless there is a different reason not indicate of why it cannot be.
36493	08/13/2021	AUSTIN COMMUNITY COLLEGE	51.3801	RNSG 1079	NURSE REFRESHER VIRTUAL CLINICAL EXPERIENCE	80	[X]	[X]	[]	[]	There is not a course that covers virtual refresher for this area, they all indicate inperson labroatroty or physical person. Due to the nature of pandemic we should consider adding this as a course, it may become more common than not.
36458	07/14/2021	AUSTIN COMMUNITY COLLEGE	52.0401	POFT 1070	ADMINISTRATIVE ASSISTANT PROGRAM	140	[X]	[X]	[]	[]	There is not one or two course that could be used and fit in the hour range. This would require over 5 different courses and the hours would be too high. A new course condense like this would be beneficial.