

Workforce Education Course Manual (WECM)

**Duane Hiller, Program Director
Erin Sarbinoff, Grants Coordinator**

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Presentation Overview

This presentation is designed to answer basic questions about the Workforce Education Course Manual (WECM). Each of its five sections will address aspects of WECM that you will find useful if you are new to postsecondary workforce education.



What You Will Learn in This Presentation

- What is WECM?
- How WECM is Organized
- Ongoing WECM Project
- WECM & CTE Guidelines
- Make WECM Work for You



Section I: What is WECEM?

What is WECM?

- The **Workforce Education Course Manual (WECM)** is the Texas Higher Education Coordinating Board's (THECB) web-based inventory of approved workforce education courses available for use by the state's public community and technical colleges.
- WECM was developed over the course of three years, from 1995 to 1998, through a Carl D. Perkins Leadership Grant administered by the Coordinating Board. Over 1,000 CTE faculty members and approximately 370 CTE administrators contributed to WECM's creation.
- Today, WECM is housed at and managed by the THECB and overseen by the WECM Advisory Committee. WECM is reviewed and revised for continuous improvement by community and technical college faculty through WECM Comments.

What is WECM?

WECM has six purposes:

1. Contribute to the quality and consistency of workforce courses from college to college.
2. Provide Texas colleges increased assistance and flexibility in responding to employer needs.
3. Enhance the portability of credits and credentials for students.
4. Provide increased access for students to workforce education degrees and career advancement.
5. Facilitate articulation with other providers of education at both the secondary and post-secondary levels.
6. Incorporate industry-established skill standards into Texas workforce education

What is WECM?

- WECM courses coordinate with the Texas Education Agency's Texas Essential Knowledge and Skills (TEKS) for Career and Technical Education in public high schools.
- WECM Aligns with the U.S. Department of Education's 14 Career Clusters.
- WECM provides 7,600 approved CTE courses tightly integrated with secondary and industry requirements.
- WECM is also a key component of state-level efforts toward coordinated workforce development.

What is WECM?

But it wasn't always this way:

- In the 1990's, Texas began to look at how to position itself for economic prosperity in the 21st century.
- The Coordinating Board initiated the WECM Project in 1995 with guidance from a statewide advisory committee.
- A fully developed WECM went into effect in 1998.

What is WECM?

Before WECM

- 48,000 courses statewide
- Each course required individual approval.
- Courses were locally developed, varied widely, and difficult to compare.
- What students learned at one college may not have been transferrable to another college or even adequate to get a job.

Today

- 7,600 courses with flexible credit and contact hour options
- All courses are pre-approved and ready for program development and revisions.
- Courses have been agreed upon statewide.
- Courses are standardized and industry-ready for improved employability.

Section II: How WECCM Is Organized

Every WECM course contains most or all of the following Course Elements

- **CIP Code**
- **Course Rubric**
- **Course Level**
- **Course Number**
- **End-of-Course Outcomes**
- **Course Title**
- **Course Description**
- **Suggested Prerequisite**
- **Contact Hour Range**
- **Licensing/Certification Agency (if applicable)**

This is an actual course listing from WECM:

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
51.0910	DSPE	2253	Pediatric Cardiac Sonography Procedures	Active	2	32	80
51.0910	DSPE	2053	Pediatric Cardiac Sonography Procedures	Archived #	0	32	96
51.0910	DSPE	2353	Pediatric Cardiac Sonography Procedures	Active	3	48	96
51.0910	DSPE	2453	Pediatric Cardiac Sonography Procedures	Archived #	4	80	128

Course Level: Advanced

Course Description: Advanced pediatric cardiac sonography procedures including: 12-lead EKG interpretation, transesophageal echocardiography, the use of contrast, intra-operative and interventional techniques. Considerations associated with intensive care of the pediatric patient will be addressed and includes intracardiac monitoring lines, and other accessories of the post-operative patient, pharmacological treatments, and other therapies.

End-of-Course Outcomes: Describe the procedures and applications of 12-lead EKG interpretation, transesophageal echocardiography, use of contrast, intra-operative and interventional techniques; discuss the cardiac sonographer's role in the care of the pediatric intensive care patient; and describe treatments for the critical patient.

Lab Recommended

CIP Code Description: 51.0910 (Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

Effective Date: September 1, 2022

Course Title

- Consistent with and reflective of end-of-course outcomes
- No vendor information unless a vendor-specific course
- Must appear in college publications and on transcripts as it appears in the WECM Course Inventory
- May use marketing titles for continuing-education-unit (CEU) courses except CEU mirror courses

Course Number

The **1st digit** (in combination with the third and fourth digits) indicates **Course Level**

- 1x00 to 1x39—Introductory
- 1x40 to 1x59 and 2x00 to 2x29—Intermediate
- 2x30 to 2x59—Advanced

The **2nd digit** defines the **SCH/CEU Value**

The **3rd and 4th digits** together indicate **Course Type** and **Sequence**

Contact Hour Range

- Contact hour and SCH ranges for each WECM course are listed in the WECM Course Inventory
- Contact hour ranges are set by instructional specialists during WECM course reviews
- Guidelines for determining the allowable lecture-lab combinations for contact hours and semester credit hours appear in the Career and Technical Education Guidelines (CTE Guidelines)

Course Description

An overview of course content or subject matter.

- Usually between 25-100 words in length
- Communicates course goals and major topics
- Echoes end-of-course outcomes without restating them
- Explains abbreviations before using them:
“Board of Nursing Examiners (BNE)”
- Contains no product names (unless the course is vendor-specific)

Course Description

Uses appropriate introductory phrases

- *Fundamentals of ...*
- *A continuation of...*
- *Exploration of...*
- *Examination of...*
- *Discussion of...*
- *In-depth coverage of...*

End-of-Course Outcomes

End-of-course outcomes are the “heart” of a WECM course.

- Included in every WECM course
- Define the purpose of a course and distinguish it from other courses
- Must be taught every time the course is taught
- Provide clear, simple statements about observable, measurable competencies

End-of-Course Outcomes

Start with present-tense, action verbs...

- *Administer...*
- *Solve...*
- *Sketch...*
- *Create...*
- *Apply...*
- *Control...*
- *Execute...*
- *Perform...*
- *Locate...*
- *Assist...*
- *Change...*
- *Complete...*
- *Employ...*
- *Access...*

End-of-Course Outcomes

State the object of the action:

- Solve **a quadratic equation...**
- Sketch **a story line...**
- Create **a complex telecommunications network...**

Include conditions:

- *...using [specific equipment, software, etc.]*
- *...in under an hour.*
- *...referring to the appropriate protocol.*

Add standards:

- *...at least 90% accuracy.*
- *...to the satisfaction of an expert panel.*
- *...performed in accordance with [manual or text].*

WECM Course Types

Every WECM course falls into one of 10 course types:

1. **Standard College-Credit Course** - A semester-long course. Students earn semester credit hours (SCH) for taking it.
2. **Vendor-Specific Course** - Accommodate the instructional requirements of commercial vendors, usually in Information Technology programs, for students seeking certification in specific software, network engineering, etc.
3. **Generic Non-Vendor Course** - Identical to vendor-specific courses, but without a specific industry standard.
4. **Continuing Education (CE) Short-Hour Course** - Students may earn 7-40 contact hours. Usually developed in state Course Review Workshops as the result of a large volume of Special Topics/Local Need courses.

WECM Course Types

- 5. CE Professional Development Course** - 7-24 contact-hour course taught for individuals who need to maintain their licensure or certification.
- 6. Less than 7-Hour Mandatory Licensure/Credentialing Course** - written by instructional specialists during a WECM workshop or initiated by colleges submitting Local Needs courses to the Coordinating Board. There must be documentation from the licensing/credentialing agency supporting the need for the course.
- 7. External Learning Experience Course** - cooperative education, practicum, internships, and clinicals.
- 8. Mirror Course** – semester credit hour (SCH) courses with a non-credit option offered for Continuing Education Units (CEU). Institutions awarding credit for mirror courses taught in CEU format must meet all SACSCOC requirements, including faculty requirements.

WECM Course Types

9. **Special Topics Course** - new and emerging topics in technical disciplines and to assist colleges in responding quickly to training needs of local employers. Intended to be temporary. Available only for workforce education programs (not community education) and are identified by a "9" in the third digit of the course number.
10. **Local Need Course** - unique local or regional conditions or regulatory changes, to expand an existing discipline to include a new specialty, or to create courses in new disciplines. Evidence of need for the course must be substantiated by support. Local need courses are identified by a "7" in the third digit of the course number.

WECM Course Categories

All WECM course types may appear any of the four WECM course categories:

New WECM Course - Written as the result of a review of special topics/local need courses. May also be written to meet the demand of emerging and high-tech occupations.

Revised WECM Course - A modified course to enhance course title, level, description, end-of-course outcomes, course reference information, recommended lab, and/or contact hours for increased usability.

Archive-Pending Course - Recommended for removal from the active WECM database because it is unused, obsolete, inadequate, or duplicated. Moved to an archive database in WECM, but they are available for use and are funded by the state until the indicated archive date. August 31 of the next fiscal year.

Archived Course - Removed from the active WECM database due to being unused, obsolete, inadequate, or duplicated and moved to an archive database for future reference. Archived courses are not eligible for state funding

Section III: The Ongoing WECM Project

WECM Course Review Process

Project Timeline:

- 1995-1998: WECM Development Period
- 1998-2017: WECM Leadership Committee
 - Carl D. Perkins Leadership Grant
- 2017-present: WECM Advisory Committee

WECM Course Review Process

Texas Higher Education Coordinating Board:

- Houses the WECM Course Inventory
- Manages the WECM database
- Provides guidance for programmatic uses of the WECM
- Coordinates WECM's integration with statewide initiatives
- Meets regularly with the WECM Advisory Committee

WECM Course Review Process

WECM Advisory Committee:

Meets quarterly to discuss WECM issues and current workforce education matters

Membership: Individuals who

- Hold administrative positions in a Texas community, state, or technical college
- Are recognized for noteworthy accomplishments, leadership, and professional standing in workforce education
- Possess demonstrated competence in WECM implementation at the institutional level

WECM Course Review Process

WECM Course Review: Triggers

- Emerging and/or changing technologies
- Changes in business/industry standards
- State or national credentialing requirements
- Employer-defined skill requirements
- Comments from one or more institutions
- Needs identified by statewide curriculum projects
- Coordinating Board requests for review
- Maintenance review cycle

WECM Course Review Process

WECM Course Review: Subject Matter Experts Community, State, or Technical College instructor who:

- Has expertise in the specific courses under review
- Has recently taught the courses
- Nominated by college administrator
- Selected by the WECM Advisory Committee
- A team player who is willing to represent the state in their particular area of expertise.

Selection Criteria:

- Proportional representation from small, medium, and large colleges
- Equal representation of geographic regions
- Currency and relevance of course instruction

WECM Course Review Process

WECM Course Review: Basis for Course Changes

- Technological Advances
- Local Need Course Requests
- Trends in Special Topics Courses
- Requirements of Licensing, Certifying, and Accrediting Bodies
- Course Utilization

Section IV: WECM & CTE Guidelines

The CTE Guidelines (formerly GIPWE) are THECB's official policy manual for career and technical education programs in the state of Texas. It provides comprehensive guidance to colleges and faculty members, including:

- General institutional and personnel requirements for workforce education programs;
- Required program elements for all types of career and technical education, from certificates to applied associate degrees;
- In-depth discussion of WECM and how to use it for program development and revision;
- The approval process for new workforce education programs and courses; and
- Requirements for program revision.

Section V: Make WECM Work for You

- WECM's purpose and history;
 - How WECM integrates with workforce-development initiatives and priorities;
 - The types of courses in WECM and the comm
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- on elements of WECM courses;
 - The categories WECM courses fall into, based on the WECM maintenance process;
 - How the field-driven, statewide WECM Project has kept WECM current since 1998; and
 - How WECM & CTE Guidelines work hand-in-hand for workforce education programs across the state.

Navigating the WECM Website

View WECM Reports

Use the following links to view the reports:

- [Search Courses](#)
- [Search Course Detail](#)

- [Course Review](#)
- [Courses By Workshop](#)
- [History Course Detail](#)
- [History Description](#)
- [Licensure](#)
- [Summary Report](#)
- [Technical Course Inventory](#)

<https://www.txhighereddata.org/institution-overviews/course-and-program-inventories/wecm/>

Questions?

**Duane Hiller, Program Director
Workforce Education, THECB
(512) 427-6440
Duane.Hiller@HigherEd.Texas.Gov**

**Erin Sarbinoff, Grants Coordinator
Workforce Education, THECB
(512) 427-6440
Erin.Sarbinoff@HigherEd.Texas.Gov**

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