TEA

# **Proclamation 2024 CTE Publisher** Webinar

7/28/2022

To provide CTE-specific **Proclamation 2024** information so publishers can make informed decisions about participating in the **Texas State Board of** Education's review and adoption process and to provide the next steps in the process.

# Agenda

- CTE Overview
- Next Steps







# **Proclamation 2024 CTE Overview**

Michelle Sedberry, Statewide STEM Coordinator Steve Wilder, Curriculum Specialist



TEKS Review Process



- CTE Courses Included in the Proclamation
- Understanding the Texas Essential Knowledge and Skills (TEKS) and Breakouts

Work Group Charge

CTE Course Revision Overview



## **TEKS Review Process**





- The SBOE, with the direct participation of educators, parents, business and industry representatives, and employers, adopts revisions to the TEKS.
- The TEKS review and revision process takes between one to two years from start to finish.
- The CTE TEKS were initially adopted in 1998. The first review and revision of the CTE TEKS was completed in 2009.
- A full review of the CTE TEKS was completed again in 2015. All 16 career clusters in place at that time were included in the review.





- The SBOE may not adopt rules that designate the methodology used by a teacher.
- The SBOE may not adopt rules that designate the time spent by a teacher of a student on a particular task or subject.
- State law also requires that the College and Career Readiness Standards (CCRS) are integrated into the TEKS adopted by the SBOE.





- I. Initial steps by TEA and SBOE
- II. SBOE determinations and approvals
- III. Work groups begin
- **IV.** Feedback from content-area experts
- V. SBOE discussion
- VI. Final work group meetings
- VII. SBOE rulemaking (first and second reading)



# Courses Included in *Proclamation 2024* and Implementation Dates



## **Education and Training**

- Child Development (2022–23)
- Child Development Associate Foundations (2024–25)
- Communication and Technology in Education (2024–25)
- Instructional Practices (2022–23)
- Human Growth and Development (2024–25)
- Principles of Education and Training (2022–23)

#### **TEAC** Texas Education Agency Chapter 127, Texas Essential Knowledge and Skills for Career Development and CTE, Subchapter I

## **Health Science**

- Anatomy and Physiology\* (2024–25)
- Health Science Theory (2024–25)
- Healthcare Administration and Management (2022–23)
- Leadership and Management in Nursing (2022–23)
- Medical Assistant (2022–23)
- Medical Coding and Billing (2022–23)

- Medical Microbiology\* (2024–25)
- Medical Terminology (2024–25)
- Pathophysiology\* (2024–25)
- Pharmacology (2023–24)
- Pharmacy I (2024–25)
- Pharmacy II (2022–23)
- Respiratory Therapy I (2022–23)
- Respiratory Therapy II (2023–24)

\*CTE courses for which a student will earn science credit \*\* Courses with TEKS scheduled for adoption in June 2022



## **Hospitality and Tourism**

Food Science\* (2024–25)

## Law and Public Service

Forensic Science\* (2023–24)

\*CTE courses for which a student will earn science credit \*\* Courses with TEKS scheduled for adoption in June 2022

### **TEAC Chapter 127, Texas Essential Knowledge and Skills for Career Development and CTE, Subchapter O**

# STEM

- Biotechnology I\* (2023–24)
- Computer Science I\*\* (2024–25)
- Computer Science II\*\* (2024–25)
- Cybersecurity Capstone\*\* (2023–24)
- Digital Forensics\*\* (2023–24)
- Fundamentals of Computer Science\*\* (2023–24)

- Foundations of Cybersecurity\*\* (2023–24)
- Engineering Design & Presentation I (2024–25)
- Engineering Design & Presentation II (2024–25)
- Principles of Applied Engineering (2024–25)
- Intermediate Computer Aided Design and Drafting (2024–25)
- Introduction to Computer Aided Design and Drafting (2024–25)

\*CTE courses for which a student will earn science credit \*\* Courses with TEKS scheduled for adoption in June 2022



## Energy

- Foundation of Energy
- Introduction to Process Technology
- Petrochemical Safety, Health, and Environment
- Oil & Gas Production III
- Oil & Gas Production IV

These courses are new and were not revised by work groups.



## **CTE Courses Move to Chapter 127**

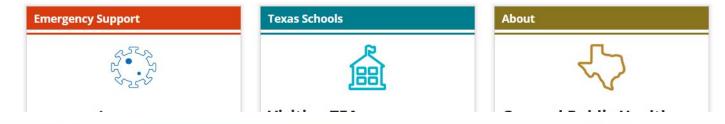
- In November 2019, the State Board decided to move the Chapter 130 courses to Chapter 127 incrementally. Revised TEKS were moved to Chapter 127 and everything in a subchapter was moved to avoid confusion.
- As the CTE TEKS are revised and adopted, they will move to Chapter 127 in the Texas Administrative Code.
- The CTE courses in *Proclamation 2024* have completed their review and the newly adopted courses are now located under Chapter 127.

# TEXAS Education Agency CTE Courses Move to Chapter 127



#### **The Latest TEA News**

The latest news from the Texas Education Agency is available through news releases, online correspondence, mailing lists, and other posted information.





### Texas Essential Knowledge and Skills by Chapter

The Texas Essential Knowledge and Skills (TEKS) are listed below in two different formats, a web-based version of the standards and a PDF version of the standards. Click on the link below to access the web version (Web) of the standards or a PDF version (PDF) of the standards. Please note that the web-version of the standards may contain more than one page.

	Chapter 110. English Language Arts and Reading	Web	PDF	
	Chapter 111. Mathematics	Web	PDF	
	Chapter 112. Science	Web	PDF	
	Chapter 113. Social Studies	Web	PDF	
	Chapter 114. Languages Other Than English	Web	PDF	
	Chapter 115. Health Education	Web	PDF	
	Chapter 116. Physical Education	Web	PDF	
	Chapter 117. Fine Arts	Web	PDF	
	Chapter 120. Other Texas Essential Knowledge and Skills	Web	PDF	
	Chapter 126. Technology Applications	Web	PDF	
_	Chapter 127. Career Development	Web	PDF	
	Chapter 128. Spanish Language Arts and English as a Second Language	Web	PDF	
	Chapter 130. Career and Technical Education	Web	PDF	





#### **Texas Administrative Code**

TITLE 19 EDUCATION

PART 2 TEXAS EDUCATION AGENCY

CHAPTER 127 TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR CAREER DEVELOPMENT AND CAREER AND TECHNICAL EDUCATION

Subchapters

SUBCHAPTER AMIDDLE SCHOOLSUBCHAPTER BHIGH SCHOOLSUBCHAPTER GEDUCATION AND TRAINING

SUBCHAPTER I HEALTH SCIENCE

SUBCHAPTER J HOSPITALITY AND TOURISM

SUBCHAPTER M LAW AND PUBLIC SERVICE

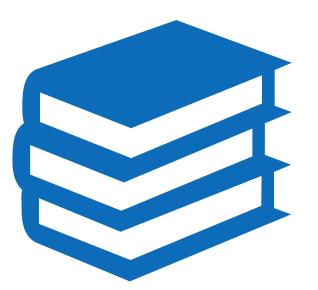
SUBCHAPTER O SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

HOME TEXAS REGISTER TEXAS ADMINISTRATIVE CODE OPEN MEETINGS



# **Understanding** the TEKS

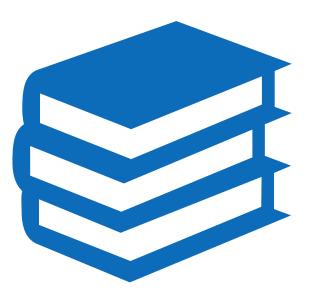




### The Texas Essential Knowledge and Skills, or TEKS, are

what students should know and be able to do at the end of each course or grade level.





The TEKS consists of four main parts--

- the implementation,
- the general requirements,
- the introduction, and
- the **standards**.

The standards are made up of

- knowledge and skill statements and
- student expectations (SEs).



### **Implementation for CTE courses:**

List when the course will be implemented in classrooms around the state.

Designate whether a course should be part of a proclamation.

Implementation

Each CTE course begins with an implementation section.



### **General Requirements**

# Each course has a general requirements section.

### **General requirements:**

- Provide information regarding the course credit.
- List any required prerequisites or recommended prerequisites or corequisites.





# Introductions for CTE courses follow a consistent format:

- Career and technical education instruction description
- 2. Career cluster description
- 3. Course description
- 4. Statement encouraging extended learning experiences for students
- Explanation of terms "including" and "such as" (included in all subject areas)

### Introduction

A description of the content of the course and key information about the course and the standards



## Knowledge and Skills (KS) Statements

Broad statements of what students must know/be able to do; sometimes organized into strands

# Each CTE course begins with a KS on employability skills :

 (1) The student demonstrates professional standards/ employability skills as required by business and industry. The student is expected to:





# Student Expectations (SEs)

### Wording in the TEKS

- *and*—must be included
- among—include all
- or—use one or the other (both not necessary)
- *including*—must be included
- *such as*—only examples



# **Breakouts**



**Content of an SE is determined using breakouts.** Breakouts are

- the component parts of each student expectation, and
- esed to determine coverage of an SE in instructional materials.

KS	SE	Breakout
Science concepts interdependence within environmental systems. The student knows that interactions at various levels of organization occur within an ecosystem to maintain stability.	(C) explain the significance of the carbon and nitrogen cycles to ecosystem stability and analyze the consequences of disrupting these cycles; and	<ul> <li>explain the significance of</li> <li>the carbon cycle to</li> <li>ecosystem stability</li> <li>explain the significance of</li> <li>the nitrogen cycle to</li> <li>ecosystem stability</li> </ul>
The student is expected to:		analyze the consequences of disrupting these cycles

# **TEA** Do break out lists joined by "and."

### Incorrect

(5) The student develops	(G) describe and perform	
management skills for	hazard analysis and	
agricultural resources.	follow safety laws	

### Correct

(5) The student develops management skills for agricultural resources.	(G) describe and perform hazard analysis and follow safety laws	(i) describe hazard analysis
(5) The student develops management skills for agricultural resources.		(ii) perform hazard analysis
(5) The student develops management skills for agricultural resources.		(iii) follow safety laws

# There are exceptions to the "and" rule.

Texas Education Agen	(5) The student develops management skills for agricultural resources. The student is expected to:	(F) decide between replacement, maintenance, repair, and reconditioning of agricultural vehicles and machinery	<ul> <li>(i) decide between replacement, maintenance, repair, and reconditioning of agricultural vehicles</li> </ul>
	(5) The student develops management skills for agricultural resources. The student is expected to:		(ii) decide between replacement, maintenance, repair, and reconditioning of agricultural machinery





### Incorrect

(D) evaluate the reliability of Information from informational texts, Internet sites, or technical materials and resources	(i) evaluate the reliability of information from information texts
	(ii) evaluate the reliability of Information from Internet sites
	(iii) evaluate the reliability of Information from technical materials





### Correct

(D) evaluate the reliability of information
from informational texts, Internet sites, or
technical materials and resources

 (i) evaluate the reliability of information from informational texts, Internet sites, or technical materials and resources



# **TEA** Do break out lists introduced by "including."

### Correct

<ul> <li>(1) The student demonstrates professional standards as required by business and industry. The student is expected to:</li> </ul>	<ul> <li>(B) demonstrate positive work</li> <li>behaviors and attitudes, including punctuality, time management, initiative, and cooperation;</li> </ul>	<ul> <li>(i) demonstrate positive work behaviors, including punctuality</li> </ul>
<ul> <li>(1) The student demonstrates professional standards as required by business and industry. The student is expected to:</li> </ul>		<ul> <li>(ii) demonstrate positive</li> <li>work behaviors, including</li> <li>time management</li> </ul>
<ul> <li>(1) The student demonstrates professional standards as required by business and industry. The student is expected to:</li> </ul>		(iii) demonstrate positive work behaviors, including initiative
(1) The student demonstrates professional standards as required by business and industry. The student is expected to:		<ul> <li>(iv) demonstrate positive</li> <li>work behaviors, including</li> <li>cooperation</li> </ul>





### Correct

(13) The student analyzes the processes of energy production in food. The student is expected to:	(C) investigate the role of latent heat in phase changes in food production such as crystallization and condensation; and	<ul> <li>(i) investigate the role of latent heat in phase changes in food production</li> </ul>
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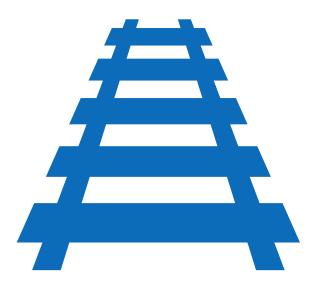


# Work Group Charge



#### **CTE TEKS Review Work Group Charge**

The charge of the CTE TEKS review work groups was to ensure that Texas has a high-quality set of CTE standards that will prepare students for postsecondary education and career opportunities.





# The work groups developed recommendations for revisions to the TEKS to—

- update the standards to align with current technology, research, and workforce needs;
- address the areas identified in the gap analysis for each assigned course within the program of study,
- support a coherent sequence of content and courses within the program of study, and
- establish a solid bridge to postsecondary education, training, and careers.







## TEKS review work groups were charged with ensuring that the revised TEKS are

- Streamlined
- Rigorous
- Observable and measurable
- Essential
- Teachable in the time allotted
- Aligned across subjects or programs of study
- Clear and well-written



## **TEA** CTE courses fall into two distinct categories.

## **Existing Courses**

- Existing TEKS-based courses revised by work groups
- New courses based on currently approved innovative courses

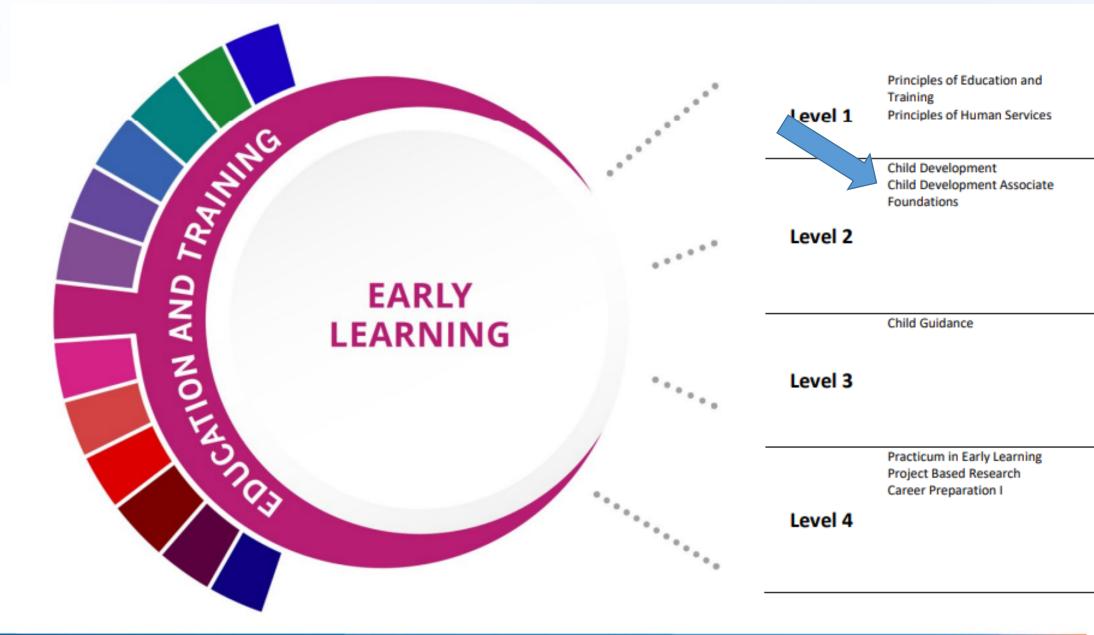
### **Newly Developed Courses**

- New courses that had been recommended for program of study
- New courses that had not previously been recommended for program of study

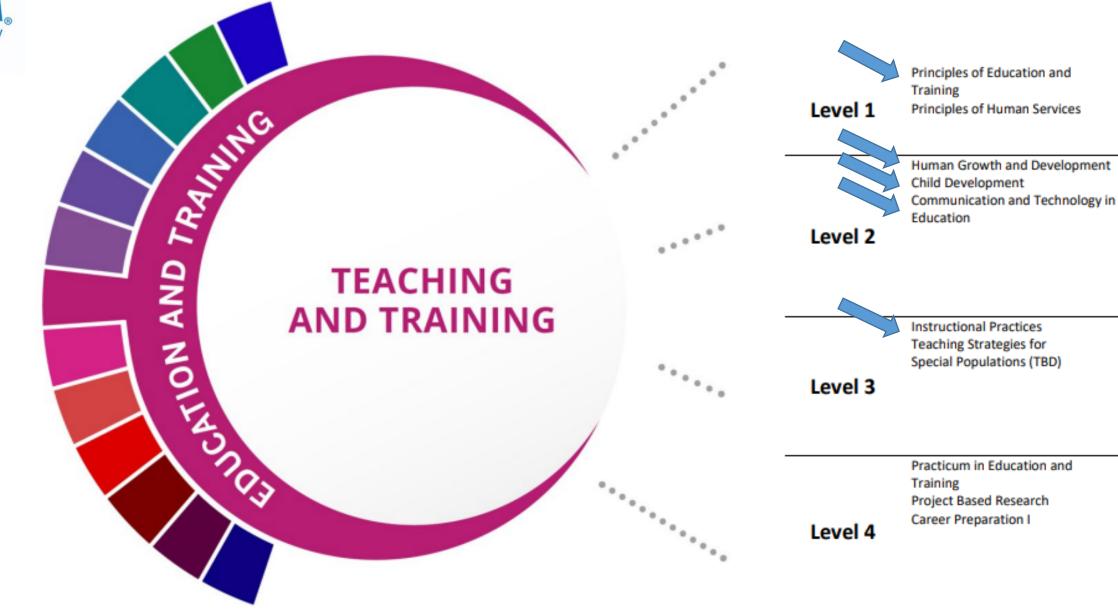


## **Course Revision Overview**









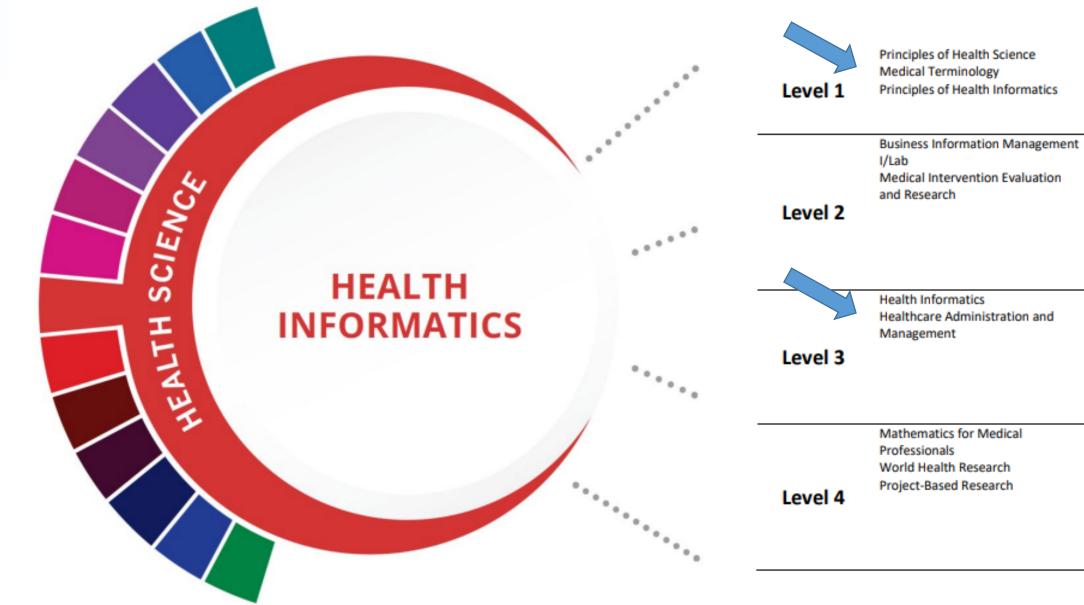


## Highlights—



- moved Child Guidance, Child Development, and Human Growth and Development into the Education and Training Program of Study
- reviewed the results of the gap analysis to align on the necessary required knowledge and skills for the program of study
- revised the course requirements to better scaffold knowledge and skills throughout the course sequence
- revised TEKS to increase rigor and better reflect careers in education
- updated the standards to reflect current practices in the field





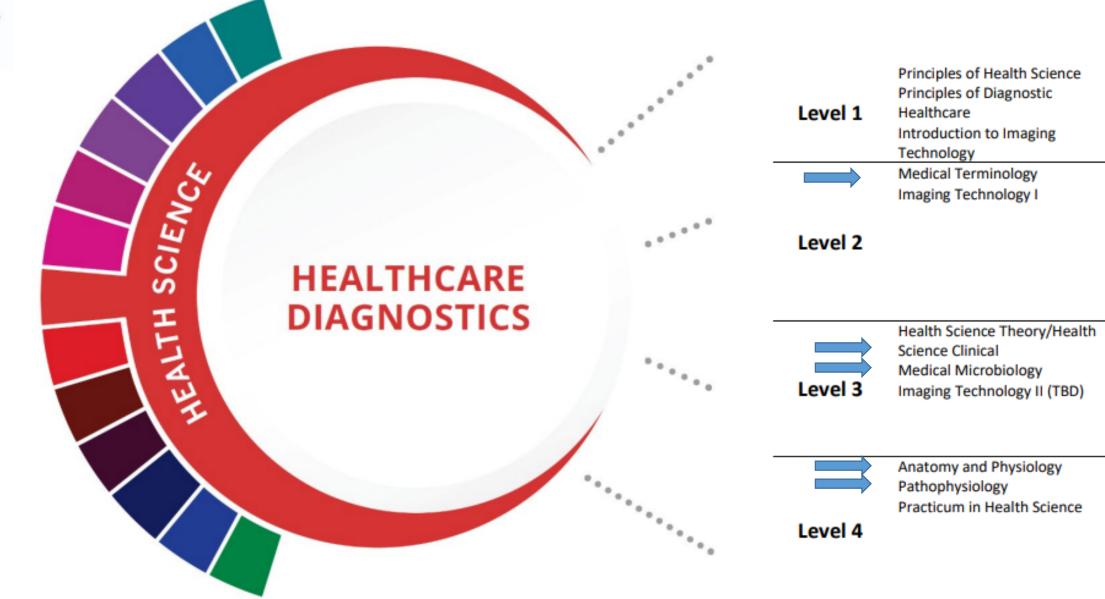


#### Highlights-



- performed a gap analysis to identify courses that were missing from the program of study
- developed new courses for Healthcare Administration and Management (Level 3 course) and Medical Coding and Billing (Level 4 course)
- rewrote World Health Research and changed name of course to World Health and Emerging Technologies





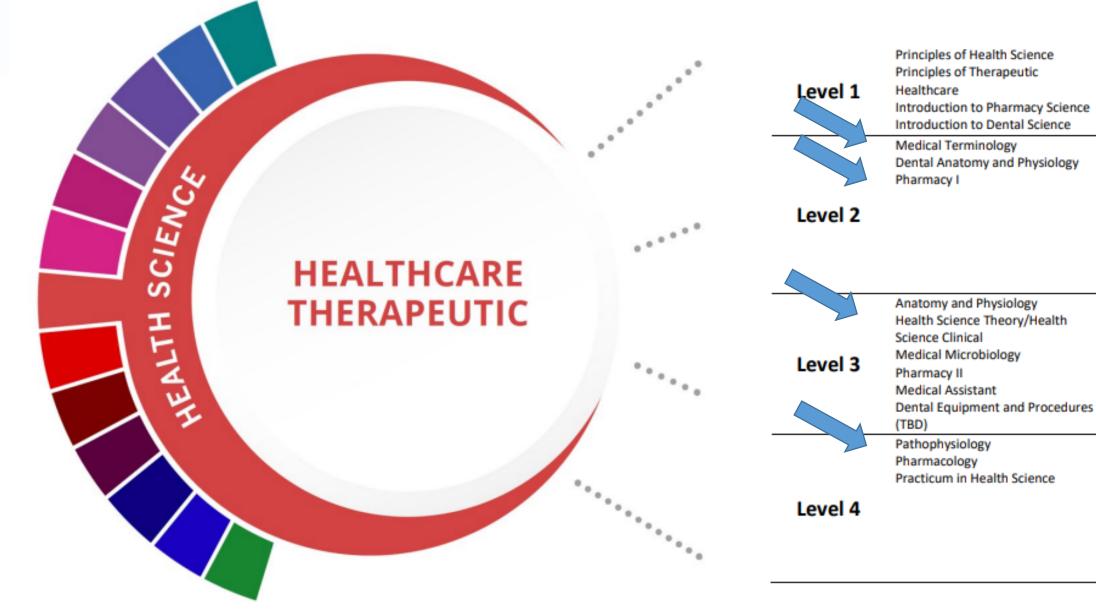


#### Highlights—



- worked on three courses in Healthcare Diagnostics were reviewed: Anatomy and Physiology, Health Science Theory, and Pathophysiology.
- used the gap analysis study with industry feedback to ensure essential knowledge and skills were aligned with practical classroom experiences and available teaching and technology resources.
- added specificity to student expectations to assure students have the required knowledge to prepare them to work with health care professionals in the field.





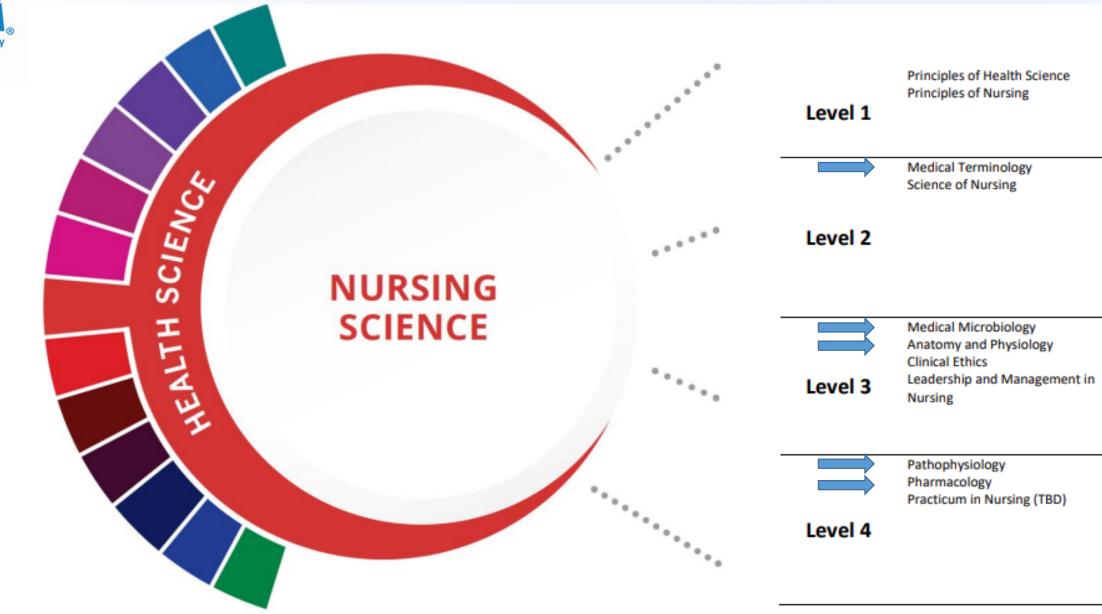


#### **Highlights**—



- discussed current workforce needs in developing course content systemically.
- considered district staffing and course offerings in pre-requisite decisions and course entry points for students.
- examined technology implications and ongoing changes that have an impact on the alignment of course content and student skill development in the field.







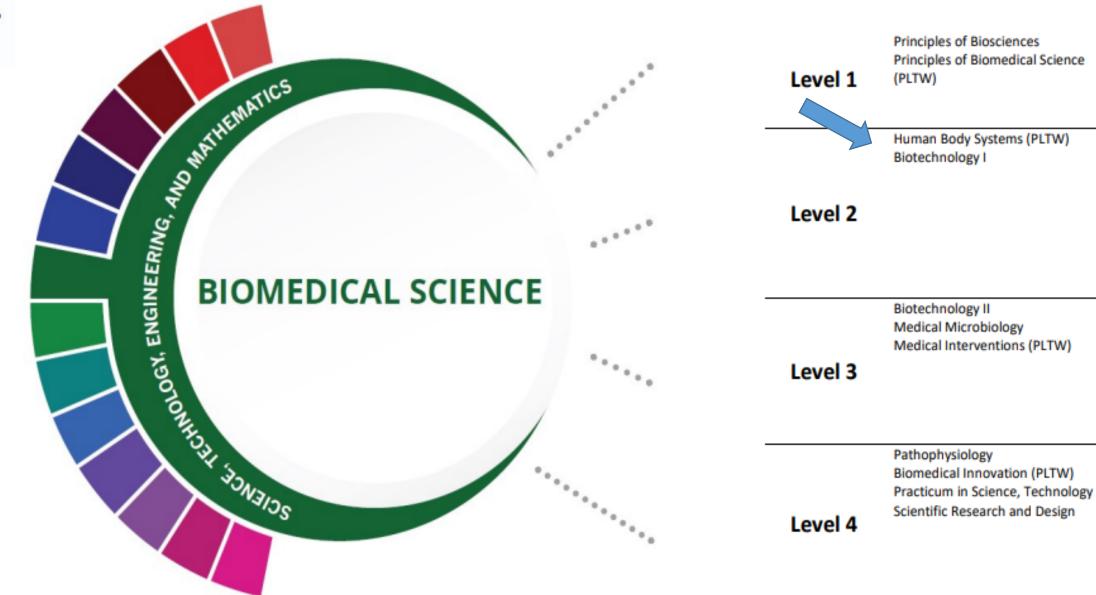
## Highlights-



The work group was asked to review current courses as they related to the program of study in Nursing Science. The work group:

- developed two new courses to be added to the program of study (POS): Leadership and Management in Nursing and Practicum in Nursing
- conducted a comparative study of the courses in the Nursing Science POS to ensure the new courses were not duplicative of current content.
- created a cohesive, sequential pathway to advance the development of standards across the program, giving special attention to pathways to attaining industry certifications and continuing study in Nursing Science.
- recommended Clinical Ethics, an innovative course, be included in the Nursing Science POS.





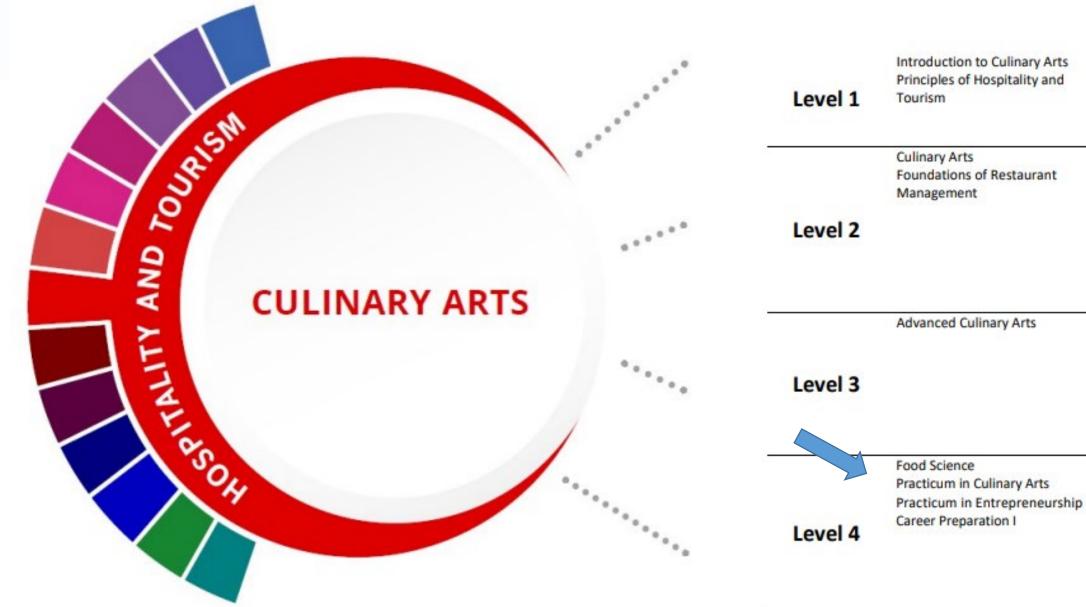


#### **Highlights**—



- reviewed vertical alignment of the Principles of Biosciences, Biotechnology I, and Biotechnology II courses with the goal of better preparing students to meet industry needs.
- rearranged course content to focus the content for each course and create a more coherent series of courses.
- made changes to student expectations to add clarity and specificity to course content.





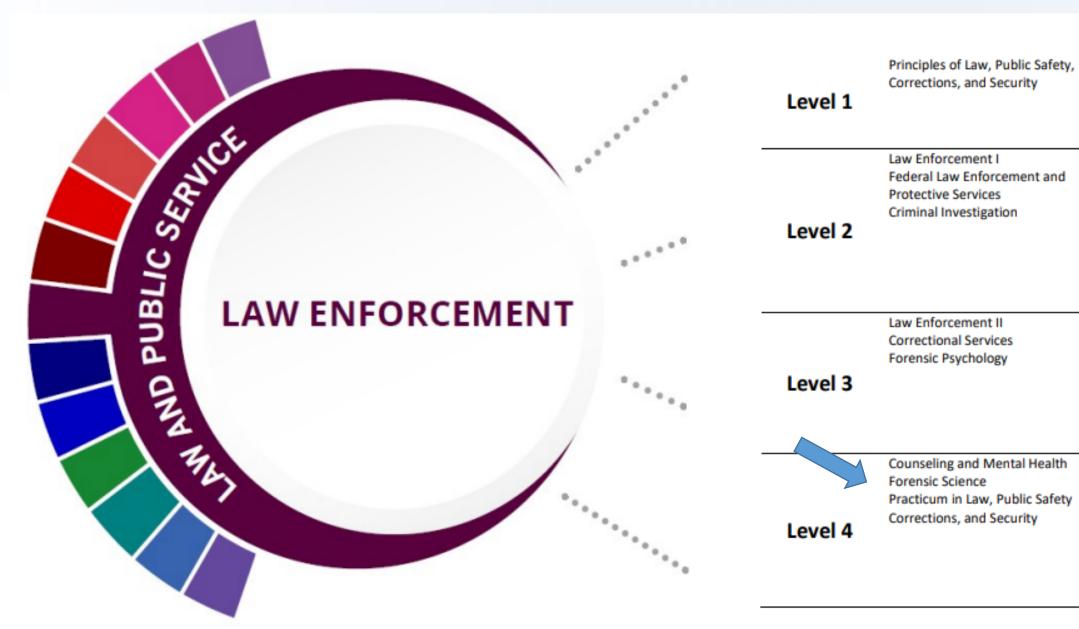


#### **Highlights**—



- adjusted course requirements to increase access to all students by allowing the course to count as both a science credit for students not pursuing a CTE program of study and as a level 4 course in the Culinary Arts program of study.
- aligned the coursework with industry positions and certifications.
- streamlined the coursework to prevent duplication between courses while still providing the knowledge and skills necessary for a thorough grounding in Food Science.





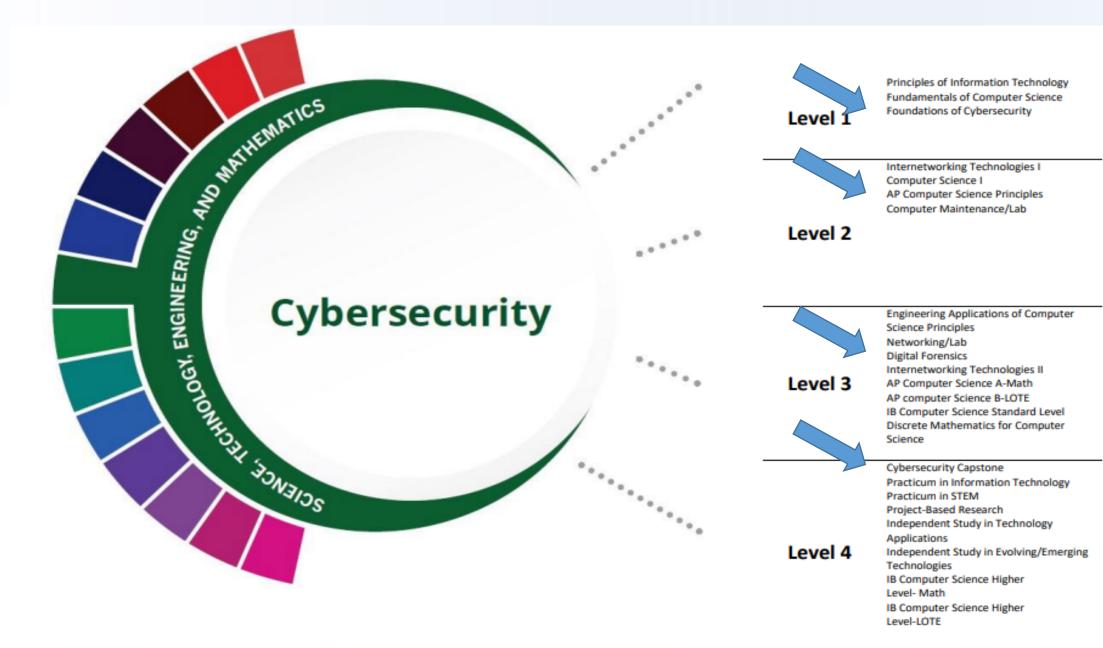


#### Highlights-



- updated information about strategies, techniques, technology, and equipment used in Forensic Science.
- made the course more in-depth and focused on robust knowledge and skills for students, especially in the area of possible future occupations related to the course and its program of study.
- refined the language regarding scientific inquiry to meet the new Science TEKS.
- added detailed information regarding knowledge and skills to make it easier for teachers to use the TEKS.



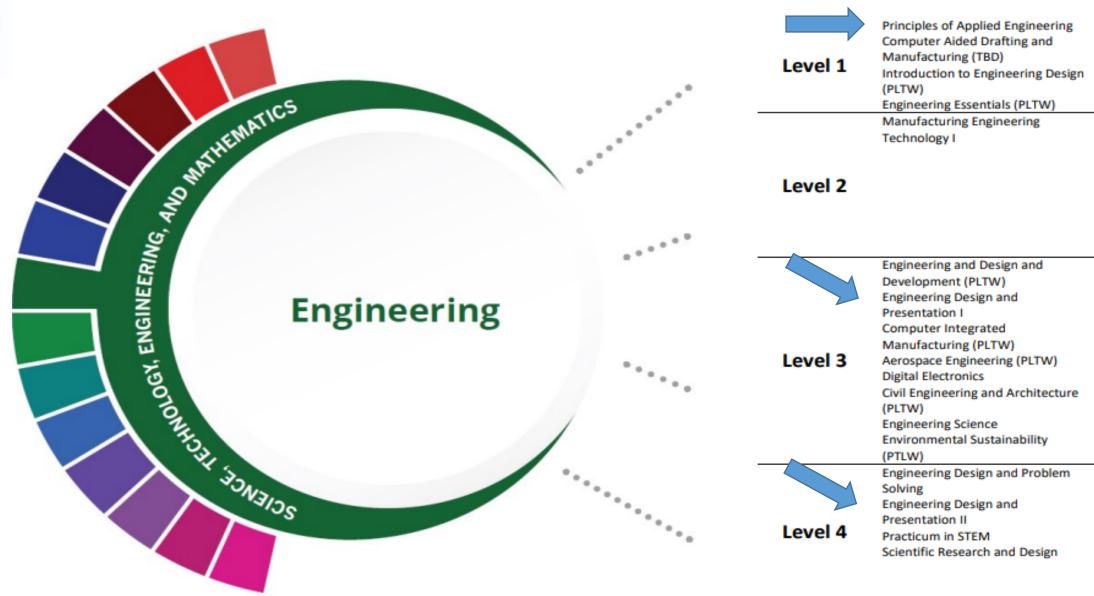




### Highlights-

- updated each course to reflect current career language.
- increased the level of rigor in all courses from defining to applying information.
- updated standards to reflect industry feedback on missing information and terminology to better align with cybersecurity careers.
- added a risk assessment strand.
- focused on industry alignment, which included artificial intelligence, zero trust, and modern cybersecurity strategy through systems thinking and behavior analysis.





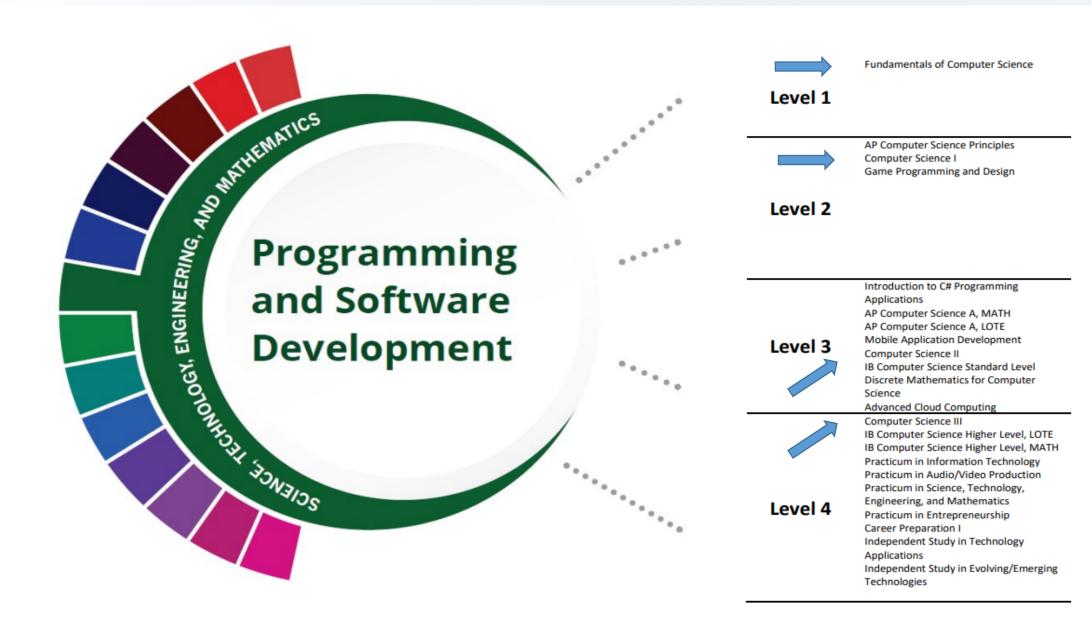


#### **Highlights**—



- took a deep dive in the review of Engineering Design and Presentation and Engineering Design and Problem Solving to make sure courses were true stand-alone courses and were not duplicative.
- updated knowledge skill statements and student expectations to include learning objectives more aligned to the myriad of engineering disciplines such as aerospace, electrical, civil, etc.
- reviewed vertical alignment with level 1 to level 4 courses.







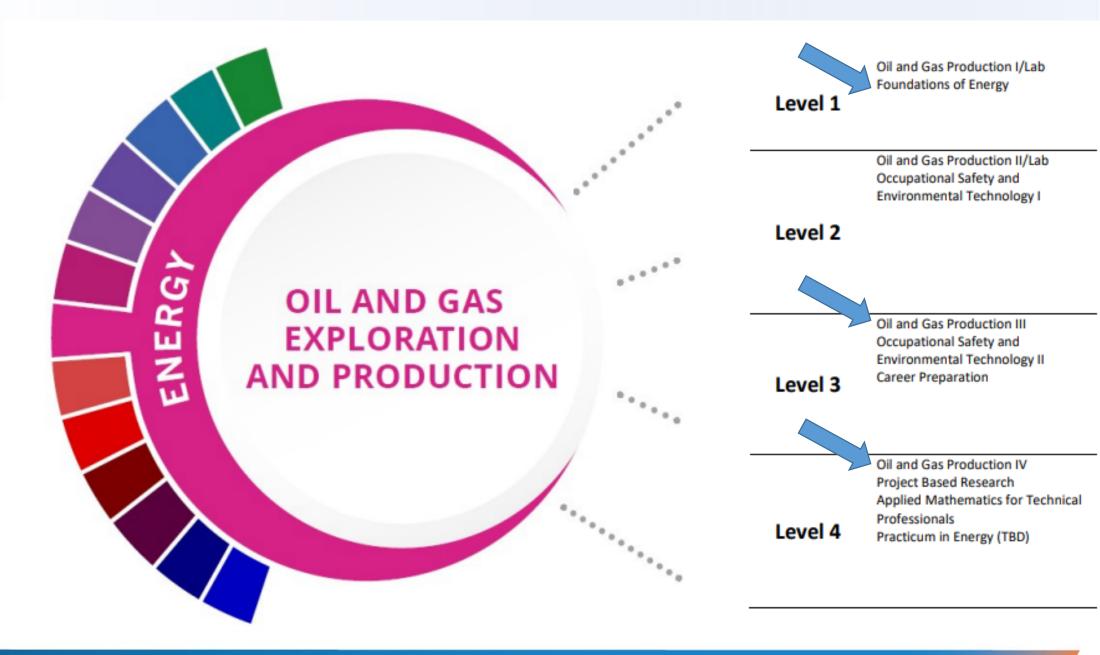
## **TEKS Changes: Programming and Software Development**

#### Highlights-



- used a backward design approach starting with Computer Science III and working back to Fundamentals of Computer Science to eliminate content duplication within the fourcourse sequence.
- changed Computer Science I course requirements to increase access to all students.
- reviewed vertical alignment from the K–8 Technology Applications TEKS to the high school computer science courses.







### Highlights-

Three new courses were developed: Foundations of Energy, Oil and Gas Production III, and Oil and Gas Production IV for the Oil and Gas Exploration and Production program of study.

- In Foundations of Energy, students study a variety of topics that include energy transformation, the law of conservation of energy, energy efficiency, interrelationships among energy resources and society, and sources and flow of energy through the production, transmission, processing, and use of energy.
- In Oil and Gas Production III, students gain knowledge of hydraulic and pneumatic systems and skill requirements to work in oil and gas and related industries.
- In Oil and Gas Production IV, the course is designed to extend training for future petroleum engineering technicians in all areas of down and mid-stream operations.



## **Submitting Questions**

Instructional Materials Help Desk

TEM

## **Next Steps**



## The following CTE courses are included in *Proclamation 2024*:

#### **Education and Training: Health Science:**

- Child Development
- Child Development Associate **Foundations**
- Communications and Technology in Education
- Instructional Practices
- Human Growth and Development Medical Assistant
- Principles of Education and Training

- Anatomy and Physiology\*
- Health Science Theory
- Healthcare Administration and Management
- Leadership and Management in Nursing
- Medical Coding and Billing
- Medical Microbiology\*
- Medical Terminology
- Pathophysiology\*
- Pharmacology
- Pharmacy I

- Pharmacy II
- Respiratory Therapy I
- Respiratory Therapy II

### **Hospitality and Tourism:**

- Food Science\*
- Law and Public Service:
- Forensic Science\*

## The following CTE courses are included in *Proclamation 2024*:

#### **STEM:**

- Biotechnology I\*
- Computer Science I\*\*
- Computer Science II\*\*
- Cybersecurity Capstone\*\*
- Digital Forensics\*\*
- Engineering Design and Presentation I
- Engineering Design and Presentation II
- Fundamentals of Computer Science\*\*
- Foundations of Cybersecurity\*\*
- Principles of Applied Engineering

- Intermediate Computer Aided Design and Drafting
- Introduction to Computer Aided Design and Drafting

\*CTE courses for which a student will earn science credit

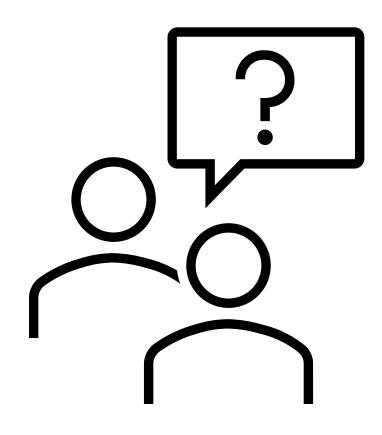
\*\* Courses with TEKS scheduled for adoption in June 2022

#### **Energy:**

- Foundation of Energy
- Introduction to Process
   Technology
- Oil & Gas Production III
- Oil & Gas Production IV
- Petrochemical Safety, Health, and Environment



# TEA will present the *Proclamation 2024 Questions and Answers* to the SBOE in September 2022.



 The Q&A is used to provide official direction and clarification by the SBOE.

 If there are specific questions you have or if you need further clarification on any of the requirements, please submit them to TEA no later than 7/31/2022.



## Statement of Intent to Bid (SOITB)

The SOITB is the first deliverable you must submit. If you fail to submit a SOITB by 12/5/2022, you will not be allowed to participate in the proclamation.

Publishers will submit the SOITB in EMAT. A link to training will be emailed.

#### The SOITB:

- Indicates a publisher's desire to participate
- Is required for each product and course
- Provides the following basic information about materials:
  - Program Title
  - Course or grade level for which materials are intended
  - Estimated TEKS coverage percentage
  - Media format(s)
  - System requirements



# Publishers must follow a specific process to demonstrate alignment to the standards.

- Publishers will be granted access to the standards-alignment dashboard which will be used to provide citations to specific content in the material that cover the standards.
- The complete collection of citations for one course or grade level is called correlations.
- You may begin entering your citations after you submit the SOITB.
- It is crucial that you allocate sufficient time to create your correlations and that you select the best, most closely aligned content.



Provides examples of how information will be presented regarding the specific location in instructional materials where publishers believe the TEKS and ELPS are covered

Allows TEA an opportunity to review and provide feedback before final correlations are due

Are only required for one product and course

## Final correlations are due 4/3/2023\*

Using the feedback you received after submitting your preliminary correlations, you will complete the remaining correlations.

The final correlations

- are required for every product and course,
- are used by state review panels as the primary resource for determining TEKS coverage, and
- should be carefully chosen and constructed and very clear.

\*Final correlations for courses with TEKS adopted in June 2022 are not due until 6/26/2023.



## **Complete descriptions are due 3/6/2023.**

The complete description provides more details about the components that will be used to verify TEKS coverage at the review, including:

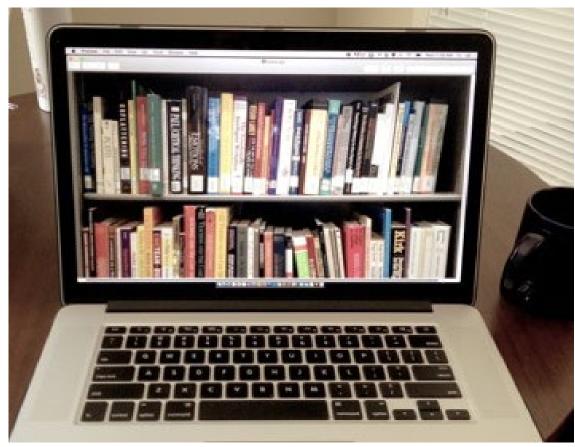
# TEA will provide the complete description form.

- Program and component titles and ISBNs
- Preliminary price for each component
- Number of print pages intended for student use
- System requirements for all digital components
- Is required for each product and course
- Is required for each media format

\*Complete descriptions for courses with TEKS adopted in June 2022 are not due until 5/30/2023.



## **Pre-Adoption Samples**



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# Pre-adoption samples are due 3/6/2023.

 A pre-adoption sample is your fully developed product that will be used by reviewers to determine standards-alignment coverage.

\*Pre-adoption samples for courses with TEKS adopted in June 2022 are not due until 5/30/2023.



## **Pre-Adoption Samples**

- Must be complete electronic versions of the final product
- Will be posted to the TEA website for public review
- Must remain unchanged
- Must have a thorough editorial review prior to the pre-adoption sample due date
- Must be free of sales or marketing materials
- Must allow for multiple, simultaneous user access
- Must be equipped with a word search feature
- Must contain embedded correlations that direct users to the content cited for standards alignment



## **Other Deliverables Due March 6, 2023**

- Report on Interoperability and Ease of Use
  - Publishers must provide information regarding their products' interoperability and ease of use for review by the SBOE and districts. The information from each publisher's report will be posted to the agency website.
- Affidavit of Authorship or Contribution
  - Publishers must list everyone whose name is listed as an author or contributor and include in general terms the involvement of each author or contributor to the development of the material.
  - Publishers cannot submit instructional materials that have been authored or contributed to by a current employee of TEA.



## **Next Steps**

- Review the Proclamation 2024 Publisher Handbook. (coming soon)
- Review the CTE breakouts. (coming soon)
- Submit any *Proclamation 2024* questions to the <u>IM Help Desk</u>.
- Watch for email with SOITB training.
- Submit SOITB.
- Sign up for <u>Review and Adoption listserv</u>.



## **Thank you for attending!**

Submit an Instructional Materials & Implementation Help Desk ticket with any questions.

Your feedback is important to us. Please complete the <u>Exit Ticket</u>!

